Playing with Emotions
A Casual Game for a female target audience

Author: Sjoerd Joosten
Date: 12th June 2009
Foreword

This report is written by Sjoerd Joosten, student at the Fontys Hogescholen in Eindhoven. I study ICT Media Design and completed the minor Game Design & Technology. This report describes my internship period at RealGames in Eindhoven.

My assignment was to develop prototypes in a multidisciplinary team, where I was the Game Designer. We’ve been working on Lost Relics of the Sea and Emily’s Delicious Restaurants.

In short, in this report you can read all about my internship period, from the start (02-02-2009) till the end (12-06-2009).

Besides that I would like to take this opportunity to thank some people who helped me during my internship period. My thanks go to all my colleagues at RealGames, but I would like to thank my counselor Ard Bonewald extra for all his support and feedback during this period. Next to that I would like to thank: Bas van den Berg, Sebastiaan Waardenberg, Michel Maas, Luc Bloom and Jan Castelijns.

Last but not least I would also like to thank Fontys Hogescholen and especially my college counselor Rob van Cooten and 2nd college counselor Ge Helsen.

Sjoerd Joosten 12-06-2009

Prototype-team

During my internship period at RealGames I’ve been part of a multidisciplinary team. Within the studio we have been referred to as the prototype-team, we are responsible to come up with new ideas and develop these into prototypes.

My own function within this team is Game Designer, I am responsible for coming up with the ideas and write these out into game rules and gameplay. Next to that I am considered the product owner and it’s my responsibility to supervise the team and coordinate our work procedure.

In the prototype team I work with Michiel Meesters (Programmer) and Sven Schieman (Graphical Artist).

Sjoerd Joosten
Function: Game Designer
Study: ICT Media Design
Fontys Eindhoven

Michiel Meesters
Function: Programmer
Study: Informatica
Fontys Eindhoven

Sven Schieman
Function: Graphical Artist
Study: Communication & Multimedia Design
Avans Breda
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My internship took place from 1st of February till the 12th of June. My assignment was to develop prototypes in a multidisciplinary team consisting out of 3 people where each had their own field of expertise. The team existed out of a Game Programmer (Michiel Meesters), a Graphical Artist (Sven Schieman) and a Game Designer (me).

I’ve started my internship period by playing casual games and getting known with the people within the studio. After that I’ve came up with an idea for an underwater game where the player has to follow a pattern while avoiding getting hit by objects on the way. This game was later called “Lost Relics of the Sea” and took 2 weeks to develop and was purely made to help me and my team to get more insight in the overall game development process. At the end of the development period for Lost Relics of the Sea we were asked to develop a decorate tool for the hit series Delicious.

This assignment turned out to be our big assignment. The studio had this idea for a long time but never really tried it and they were wondering how we would develop a Delicious game with the option to decorate a restaurant. We’ve setup a work plan based upon the Agile Development method and planned 3 sprints where each had their own user-stories.

We approached the assignment by building upon the existing Delicious gamebuild. Before we started developing right away we all done some research on existing games and the target audience. I have set up a Game Design Document which covers all features, mechanics and controls. Once the Game Design Document was made it indicated the end of the first sprint.

As a follow up on the Game Design Document we started developing the basics of the decoration tool first, being: “buy, sell, move and edit” which were the main objectives of the 2nd sprint. We designed and developed the controls and functionality of these basics which allowed the player to perform the corresponding actions.

Once these were developed I’ve demonstrated the tool to the studio. At the end of the 2nd sprint we had a little evaluation where we got told to make sure we would have to look more into the depth of the basics instead of adding extra features.

So with sprint 3 we started working on making sure the basics of the tool worked fluently and smoothly. Halfway sprint 3 we got told we should make a build at the end of the sprint that is ready for an usability test. This would allow us to test the game with our actual target audience. At the end of the sprint we had a test day where 4 women tested our game. I have analyzed the results of the test and written them down in an advice report on how to improve the tool. This basically was the final step of the internship period which was a great experience.

The director of the studio got enthusiastic and told me they are definitely going to develop a Delicious with the decoration option in the future!
## Definitions and Abbreviations

<table>
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<td>Casual Game</td>
<td>Games that are typically distinguished by their simple approach and rules</td>
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<td>Casual Gamer</td>
<td>A person who only plays casual games</td>
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<td>Prototype</td>
<td>Small working section of a game</td>
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<td>Agile</td>
<td>A software development management method</td>
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<td>SCRUM</td>
<td>A SCRUM meeting is a daily meeting with the development team in which all participants briefly state what they are working on and what is done.</td>
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<td>GameHers</td>
<td>Target audience: Marie and Sophie</td>
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<td>PitchUp</td>
<td>A technique to summarize a concept in a brief document</td>
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<tr>
<td>Game Design Document</td>
<td>A document that has everything written out in it that should help the development team of an game understand the total picture of the game</td>
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<thead>
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<td>Digital Rights Management</td>
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<td>PU</td>
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<td>GDD</td>
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<td>d2p</td>
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This report is written during the internship period at RealGames. In this report is told how the assignment was brought up, the approach of the assignment and the results. Next to that all relevant information in regards to the company, work environment and processes will be mentioned.

The assignment was to develop prototypes for the casual games market, the reason behind this was to help the studio get some insight in new ideas and to see if certain ideas have enough potential for the casual games market. We developed 2 prototypes of which one was Lost Relics of the Sea. Once the Lost Relics of the Sea was done the studio came with a bigger project (however still a prototype). This assignment doesn’t differ to the normal assignment besides the fact that this project has a larger scale and is of direct value to the studio.

The bigger project was to develop a customization tool for the existing hit series Delicious. With this tool the player should be given the option to decorate their own restaurant. The reason for this project is because the studio wants to see if this idea holds potential for a new game in the Delicious series as they released Delicious 4 at the start of June and are already looking ahead what can be done for Delicious 5 and 6.

To realize the assignments I’ve been part of a multidisciplinary team consisting out of a Game Designer (me), Graphical Artist (Sven Schieman) and a programmer (Michiel Meesters). All 3 of us been working on this project as interns where we all had our own field of expertise. However we are responsible for the end result together.

During the internship period we have been working with the Agile Development method which will be described in this report as well as it’s a method applied by many game studios and in my eyes is a great way for any software development projects.

In this report all information and results for the assignment can be found. First there will be some information about the company and where the internship took place. After that there will be something about the assignment which is followed by some of my research results based upon casual games and gamers. Everything in relation to prototyping and a prototype called Lost Relics of the Sea will be explained and written out and after that the main assignment of the Delicious Customization Tool. All this followed by the work approach, problems and a conclusion and advice section.

To finalize the report there is an evaluation and reflection chapter, all used literature and the attachments, which add relevant information regarding the results of this internship period.
The internship takes place at RealGames in Eindhoven. To get known a bit more with the company it’s important to see where it all started and where it’s at right now.

History

Many people know RealGames as Zylom. Roughly a year ago the company was still running under this name. Already back in 2006 the company has been taken over by the American company RealNetwork, but first in 2008 the decision was made to change the name to RealGames.

In the year 2001 Zylom was found in Eindhoven, ever since Zylom was found the company grew from a small Dutch Game Developer Studio into a European market leader on the field of expertise of casual game development.

The year 2006 was a very successful year for Zylom. The company achieved the 2nd place on the list of fastest growing technology companies in the Netherlands (Deloitte Face 50) and the website (www.zylom.nl) achieved the “website of the year 2006” award.

Next to that in 2006 Zylom was bought by the American company RealNetworks (known mostly by their RealPlayer). At start the company kept holding on to the name Zylom but eventually in 2008 they decided to change their name to RealGames.

Except Zylom there are also some other good companies who are active in the casual games market under the name of RealGames.

With locations/settlements all over the world: Seattle, New York, Sao Paulo, London, Eindhoven, Paris, Dusseldorf, Helsinki, Luxemburg and Alicante RealGames is one of the market leaders in developing and publishing casual games in Europe, Latin-American en the United States.

In the current situation RealGames offers work to an average of 450 employees worldwide en has more as 40 million unique players a month. On the location in Eindhoven work about 120 employees.

About RealNetworks

RealGames is part of RealNetworks, the global leader in digital media services and software for consumers and business. Consumers use RealNetworks’ RealPlayer and the content subscription it offers to create and play free and premium digital content. Broadcasters, network operators, media companies and enterprises use RealNetworks’ products and services to deliver digital media to PC’s, mobile phones and consumer electronics devices.

About RealGames

“We are producers of fun. With our word and puzzle games, we bring online fun to millions of people all over the world.”

RealGames is the leading producer and publisher of casual games in Europe, Latin America and the United States. With the best casual games created by their hit-producing studio and worlds top game developers, they deliver to you the games everybody wants to play. From Super Collapse! to Delicious, and from Monopoly™ to Little Shop of Treasures. All high quality, fully localized and most of all: Fun!

In the past years, RealGames family has grown to include RealArcade, Zylom, GameHouse, Atattriva, GameTrust, Trymedia and MrGoodliving. Worldwide, the RealGames network reaches more than 40 million unique players each month.

RealGames has one passion: casual games. But there is so much more to games than the game itself. We do not only produce and publish hit title games. We deliver the whole package. That means we translate every game into nine languages, answer all questions personally, continuously improve our website and offer localized payment options.
Product description

RealGames offers highly entertaining, exclusive casual games content for the PC and mobile, that includes family brands like Trivial Pursuit and Monopoly. These games are localized into 9 languages, either developed by RealGames’ in-house game studio or 2nd or 3rd party game developers.

The RealGames group reaches 40 million players of casual, word and puzzle games worldwide every month, with a core audience of 25-40 year old women. With this content, RealGames offers unparalleled opportunities for advertisers and syndication partners to take advantage of the explosive growth of casual games.

- **Syndication**: For online destinations of all sizes and mobile content providers worldwide and who reach female audiences, RealGames is a casual games company that provides a great leisure experience for women which results in stickiness, retention and monetization. Unlike other game companies, we produce industry leading revenue per user and we produce and localize our content, which allows for best business terms and exclusive content.

- **Advertisement**: For advertisers targeting 25+ women who are looking to reach a large and truly engaged female audience, RealGames is a worldwide company that focuses on women’s online leisure time that helps advertisers combine brand awareness with industry-average direct response. Unlike generic women’s sites, we offer cost effective contact, ensure interaction with the brand and a performance model that goes beyond page impressions alone.

- **Wholesale**: For large internet providers they offer exclusive content, which can be showcased and marketed as the partner requires it and is sold directly to their consumers using their own platform and DRM (Digital Rights Management) and payment system.

Mission

Deliver great casual games experiences to women over 30 whenever, wherever and however they choose.

Goal

Be the preferred experience for women enjoying casual games in the North American, European, and Latin American markets.

Target Audience

Being a corporate brand representing consumer brands and game studios, RealGames’ audience are the corporate stake holders, such as syndication partners, advertising clients, (future) employees, game developers, press and other business partners.

Business model

RealGames employs multiple business models in order to monetize its audience.

- **Game purchase**: selling downloadable games, either through RealGames’ consumer destinations or through syndication partners.
- **Subscription**: offering various subscription models that enable customers to purchase games with discount or play without limits.
- **Advertising**: offering advertising space on consumer destinations
RealGames

Organigram

Imagenr. 1: Organigram
### RealGames

#### Brand Architecture

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<td><img src="image2" alt="GoodHouse" /></td>
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<td>Game studios in Europe and US for PC Games</td>
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<td><img src="image4" alt="Mr.Goodliving" /></td>
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<td>Game Studio for Mobile games</td>
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<td>GameHouse operates in US</td>
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<tr>
<td>Zylom operates in Europe &amp; Latin America</td>
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<td><img src="image7" alt="Atrativa" /></td>
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<tr>
<td>Atrativa operates in Latin America</td>
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<tr>
<td><img src="image8" alt="Gametrust" /></td>
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<tr>
<td>Gametrust operates in Europe &amp; US</td>
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<td><img src="image9" alt="Trymedia" /></td>
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<tr>
<td>Trymedia operates worldwide</td>
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*Image: 2: Brand Architecture*
Project
Project

In this chapter we will have a look at the project and what has relation to it.

Problem definition

As RealGames is a casual games developer and publisher they are always looking for new games to take into development. However there are plenty of ideas but there is no time to prototype (small working versions of an idea/concept) all these ideas and it would be too risky to take these ideas into development blindly risking a loss of time and money if the target audience doesn’t like the game.

Therefore there must be done some research on these ideas by setting up prototypes and test these within the studio by letting people in the studio play the prototypes and review them. This will not only save the studio a lot of time, money and help get more insight on an idea but also the way something gets developed saves time for the studio as certain decisions and problems have been tackled while developing the prototype.

The studio has a game series called Delicious which is really successful and they have been working on Delicious 4 during my internship period, however while they have been working on Delicious 4 new ideas came in for the next titles Delicious 5 and 6 but they lacked the time to work on these ideas. And this is where the assignment kicks in for my internship period; develop a builder for the hit series Delicious in which players are able to build and decorate their own restaurants.

Project Description

Delicious:
 Delicious is a time-management point and click game where the player has to run a restaurant, prepare meals and serve customers. The actual game and its series can be found at www.zylom.nl if you would like to get more familiar with Delicious.

Assignment:

Develop an editor for the hit series Delicious in which players are able to build and decorate their own restaurants (prototype).

To be able to develop a prototype it’s important that you are aware what exactly a prototype is and make sure the development process adds only to the goals of this prototype. Thus the first assignment is to develop a small prototype from scratch this doesn’t only help us get insight in the casual games market but also helps us to get know with the game development process.

So next to the original assignment of developing a builder for Delicious a small prototype must be developed to get known with the engine and game development process.
Project

Starting situation:

The Delicious series are a big hit for RealGames and they are always looking for ways to give this game a new feature(s). One of them they have been thinking about for a long time is an editor/builder in which players can build up their own restaurants. This should get the player more connected to the game and care about how the restaurant is ran, however so far they are not certain if this holds enough potential for the market and therefore they decided we should develop this idea into a prototype.

You could think why they didn’t ask the players themselves to see if they like the idea, but in theory all ideas seem nice if you communicate an idea the right way. But with games its all about how you put an idea into a game, how is it going to communicate with the player and which actions does the player have to take to realize certain steps in a game. And this is where a prototype kicks in and should give the studio better insight on their idea.

As the Delicious series exists already the prototype can be built on top of the newest build “Delicious 4”, this saves time as we can use some of the already existing features and graphics to start of right away with developing the builder.

Goals

The objective of this project is to develop a builder for the game which should give the studio insight if the idea holds enough potential to be developed into another Delicious game, for example: Delicious 5: Emily’s Delicious Restaurants.

While we develop the game we always have to keep in mind that we are developing for a specific target audience and thus have to look at the game through their eyes.

Next to that we have to create an editor in which players can build their own restaurant which influences the customers that visit the restaurant. This should make the gameplay of the series dynamic and should give a higher amount of playtime.

In conclusion this leads to the following goal:

- Develop a builder for the hit series Delicious in which players are able to build and decorate their own restaurant.

Some extra sub-goals that should be kept in mind which add to the overall goal:

- Develop the builder for the direct target audience.
- Set up the builder so that it is capable for the player to influence the gameplay, which results into a higher replay ability factor and overall playtime.

Questionnaire

To be able to start thinking like a casual gamer it’s important I am aware of what casual games and who the casual gamers are. Therefore there should be done some research on both of them and find out which is the direct target audience of RealGames. This gives us the following questions:

- What are Casual Games?
- Who are the Casual Gamers?
- What is the direct target audience of RealGames?

While these question add directly to the idea of thinking like a casual gamer there are some other points that you run into when developing games, for example the graphical user interface (GUI), the controls and the setting of the game. These are constantly researched based upon looking at other games and approaching these matters from a casual gamers view.
Research

In order to be able to work in a casual games market you have to be aware of what casual games are and who the gamers that play casual games are. Therefore I’ve done research on what they both are and what they mean to RealGames. This research is mainly done by using the internet and analyzing survey results of the studio itself directed at their gamers.

The actual research reports can be found in the attachment.

Casual Games

A casual game is a video game or online game targeted at a mass audience of casual gamers. Casual games can have any type of gameplay, and fit in any genre. They are typically distinguished by their simple rules and lack of commitment required in contrast to more complex hardcore games. They require no long-term time commitment or special skills to play, and there are comparatively low production and distribution costs for the producer. Casual games typically are played on a personal computer online in web browsers, although they now are starting to become popular on game consoles and mobile devices, too.

In short: Simplicity is what it’s all about with casual games.

Casual Gamers

Casual gamer is a loosely defined term used to describe a type of video game player whose time or interest in playing games is limited compared with a hardcore gamer. Casual gamers can conceivably consist of any people who show more than a passing interest in video games, therefore it is difficult to categorize them as a group. For this reason, games which attempt to appeal to the casual player tend to strive for simple rules and ease of game play, the goal being to present a pick-up-and-play experience that people from any age group or skill level could enjoy.

Casual Gamers are people who play casual games; however the casual gaming demographics vary greatly from those of traditional computer games, as the typical casual gamer is older and more predominantly female, with over 74% of those purchasing casual games being women.
Marie and Sophie

Based on some intern research to the direct target audience of RealGames I found out that they often refer to Marie and Sophie as a player profile for their target audience.

The catch is, Sophie and Marie are not real people. They’re fictional women who represent two key customer segments for RealGames.

RealGames created Sophie and Marie to better understand – and serve – their growing female customer base. Initial research showed that women ages 20-34 and 35-49 were their strongest targets, with more than 1 million women visiting the site each month. The company could have stopped at those basic stats, but they decided to go deep and carefully profile the women who play their games. They hired two models to represent these segments and began gathering detailed information about their lives, interests and domestic realities.

Marie

Marie loves the good things in life. This open-minded 47-year-old enjoys traveling, shopping and unwinding with her husband and her two children, who are now in their late teens and early twenties. She works part-time and lives outside the bustling city in a comfortable, mid-sized municipality.

Sophie

Sophie is a 32-year-old urbanite with a busy career and a ticking biological clock. She spends her free time connecting with good friends at hip restaurants and relaxing with her partner.

During my internship I’ve noticed that Marie and Sophie are generally accepted and are referred too many times, for example in a situation where people discuss a game mechanic: “Marie and Sophie would prefer to require only 1 click to get their action done”. This really shows that Marie and Sophie became part of the studio and are now the reason why certain games function the way they do.
Prototyping
Prototyping

A prototype is an original type, form, or instance of something serving as a typical example, basis, or standard for other things of the same category.

Description

Initially my assignment was to work on several prototypes. These prototypes could be setup from ideas and concepts from the studio itself and from my own.

The reason the studio wants to work with prototypes is because prototypes save money. With a prototype you can test a game design, artwork and/or technical mechanic, if a prototype proofs to have potential the studio can take it into development. Where if it’s not proofing to be successful the idea can be scrapped and saves the studio a lot of development time and costs.

Prototypes can either be tested within the studio itself by having people play a prototype or by having actual people outside the studio test it, however there are costs involved and it requires time to setup an test with extern people.

So in short prototyping is all about testing new ideas and saving time and money.

Goal

The goal of prototyping is to test the potential of an idea and save time and money.

Besides that there could be a sub-goal being to test ideas in general, a prototype doesn’t necessarily have to be developed as a game itself but could also be done by just pen and paper for example. It helps to visualize an idea and try to play around with it and see what happens.

Work Procedure

Working with prototypes is a creative process, not only you have to come up with the idea but also make it work in a short time. To be able to make a prototype within a short time period you have to be creative in your approach.

On average you get 5 days to finish a prototype, it’s important that you only stick to the goal of the prototype and don’t wander off in making other things work or look better that doesn’t add anything to the primary goal.

We approached our prototypes by starting with a brainstorm session for ideas; these sessions could be short, occurring several times a day or in one long sit. It depends on the amount of ideas coming up and the quality of them to extend the brainstorm session, after all you can’t force ideas.

So at any time of the day or week if someone had an idea he pointed that out and we would sit down and do a little session based on top of that original idea. While thinking of ideas we were told we shouldn’t only look at the total picture but we could also think of a single game design, programming mechanic or artwork.
Prototyping

Concept / PitchUp

Part of the prototype process is coming up with ideas. However if one of these ideas might have potential they need to be written down and communicated with the rest of the team and / or studio. The best way to do this is by writing your idea down into a so called PitchUp document.

In the PitchUp document the idea owner writes down his thoughts of the game based upon the following sections:

- Game Description
- Game Setting
- Story
- Graphics
- Unique Selling Points
- Game Play
- Highlights

It’s important all these sections are thought through and written out briefly. The graphics section is nothing more then some images of other games / artwork which could represent the visual setting of the idea. Maybe the most important of them all are the Unique Selling Points (USP) as these are something that should separate your idea from all the other ones and thus make it unique.

I’ve written out many of my ideas into PitchUp documents which can be found in the attachments section.

Examples of a PitchUp

On the next two pages you can find 2 examples of a PitchUp I’ve made, one being for Lost Relics of the Sea and another for Shrine of the Seasons. For more examples see the attachments section.

If you are wondering why there is no PitchUp document for Emily’s Delicious Restaurants then I can say that the PitchUp for the Delicious series already existed.

Developing a Prototype

After the idea has been written down in an PitchUp document the team reads it through to get an global idea of the game which might lead to some new and fresh ideas which could be integrated and give it a green light or the opposite that people don’t think it will work or already exists.

If an idea gets the green light the prototype enters the development stage. During the development stage I’ve been busy writing out the idea into more details for the programmer and graphical artist, also next to that I made some sketches to visualize the idea at the same time. Once I’ve put the programmer and graphical artist to work I checked in on them regularly to see if they stayed on the right track and didn’t wander of to much of the global idea. While they are busy working on the current prototype I started thinking ahead again and do some research on existing casual games and look ahead for the next prototype and set up some new ideas and settings.

In between I assist the programmer and graphical artist, the programmer I could help think of an idea to solve an issue and / or why a bug is occurring while I could supply the artist with some graphical artwork to save him some time.
Lost Relics of the Sea

Game Description

Explore the bottoms of the seven seas in a submarine and recover the lost relics of the sea. Collect air to build up your oxygen reservoir and shells to sell them at the local harbors to fund your expedition and upgrade your submarine.

Setting

Story

Rene, great sea-explorer, has done a great discovery: <mystery>, but the process of getting older is working against him. His dream is to expose his discovery at the Louvre museum, however they don’t believe his discovery and told him to come back with physical results. Alice, granddaughter of Rene, shares the same passion as Rene for sea-exploring and the mysteries the sea holds. She wants to help her grandpa in making his dream come true.

Will you help Alice acquire the lost relics and help her grandpa’s dream come true? Then hop in the submarine and explore the seas!

Graphics

Unique Selling Points

- Speed boosts in water streams
- Complete patterns by guiding your submarine through them

Game play

Guide your submarine down towards the bottom of the sea by moving your mouse to the desired location. On the way grab air bubbles to build up your oxygen reservoir and collect sea shells to make a small profit at the local harbors where you can sell them.

Down at the bottom jump in your diving suit and clear the relic of anything that blocks its way of being removed.

At the local harbor sell your sea shells and upgrade your submarine and / or diving equipment to help you perform better under water.

Highlights

- Longest completed patterns
- Highest gained speed
- Upgrades of the submarine
Shrine of the Seasons

Game Description

Control the seasons and bring back the 4 crystals representing winter, spring, summer and autumn to restore the shrine of the seasons.

Setting

Story

An evil genius has corrupted the shrine of the seasons and hidden the crystals in the world.
You, daughter of the great professor at the local meteorology station, are asked to recover the crystals while the professor works on a way to control the seasons. Track the crystals by following the tracks created by the power of the crystals. The world is out of shape and the climate changes several times a day. Stop this madness and recover the 4 crystals and place them back in the shrine of seasons.

Graphics

Unique Selling Points

- Switch seasons and see the effects of the season changes
- Solve puzzles by the seasons climate control

Game play

In this point and click game you play a young adventurer in search of the 4 crystals together with your crystal locator. Find your way through the world by solving puzzles controlling the seasons.

Charge your rod with energy from the several shrines found throughout the world. And fire your rod representing one of the seasons to make some changes in the world. (Summer Rod – Heat / Fall Rod – Wind / Winter Rod – Cold / Spring Rod – Life)

Highlights

- Season changes abilities
- Rods/Wands usage
Lost Relics of the Sea
Lost Relics of the Sea

Lost Relics of the Sea was the first idea that got the green light to be prototyped. It was an idea based upon the fact I wanted to do something with a sea environment.

Description

In Lost Relics of the Sea the player plays a granddaughter of a great sea explorer who is immobilized due to the process of getting older. This great Sea Explorer, Rene, has done a major discovery and one of his dreams is to expose his research at the Louvre museum, however the museum doesn’t want to cooperate because he doesn’t have hard evidence to support his research. Thus Alice, granddaughter of Rene, comes in and is ready to save the day. Alice shares the same passion as her grandfather and decides to help out her grandfather. She is ready to explore the seven seas in search for relics to proof Rene’s research so he can fulfill his dream of exposing his research at the museum.

For more details and info about this game see the PitchUp attachment.

Goal

The goal of this prototype is to see if the idea of having players follow patterns in an underwater world is potential enough to be developed into a game.

Next to that there is a subgoal from the studio towards our team to help us get more insight on the general game development process.

Realization

Lost Relics of the Sea took 2 weeks to develop and resulted into a level where the player could dive down in their submarine and pick up a relic after solving a puzzle. Once the game was developed we made the whole studio aware and gave everyone the opportunity to play the game. The feedback we got was great, however we don’t think it has enough potential for the casual games market targeted at the target audience of RealGames. The reason because of this is that it was too much male orientated.

We started out with a brainstorm session for the idea of the game, this session just took place at a meeting room where we sat down and we all threw in ideas which we would write down. Then at some point we started combining some of these ideas and Lost Relics of the Sea was born.

I’ve then written down this idea into a PitchUp document while we all did some research to the idea to see if it wasn’t already done and / or to get more insight in the overall idea. I’ve then wrote everything down into a small Game Design Document, which would help us all understand the overall idea better and to help us getting started on the realization of the game. While Michiel and Sven started working on developing this game I was asked to think of more game ideas and write down some more details in regards to the Lost Relics of the Sea.

Besides that I’ve been working closely with Michiel who set up the mechanics of the game based upon XML sheets which I could use to design the levels of the game. Not only the levels I’ve done this way but also the way the patterns worked. For the XML files see the related attachments.

The reason level design specific elements are setup in XML files is to make it easy for a level designer to tweak the levels. If for example everything would be hard coded it would be really troublesome to tweak certain game values as you would have to rebuild the game all the time where an XML file is easily tweaked and saved directly without having to bother to compile the game which can take up to several minutes.
Lost Relics of the Sea

Results

Lost Relics of the Sea was a success to us as it helped us get more insight on the overall game development process, but on a potential casual game level it failed. Basically because it’s way too much male orientated and the aspect of having to follow and avoid doesn’t seem to work because the player isn’t involved enough to make it exciting. This could however be adjusted but in the setting of Lost Relics of the Sea it’s too complicated, especially since it’s not directly targeted at Marie and Sophie.

For some extra in depth details regarding the realization of Lost Relics of the Sea my blog could be visited at: www.sjoerdjoosten.nl/blog.
Emily’s Delicious Restaurants
Delicious Customization Tool

Delicious is the success series of the RealGames studio and it is time to look ahead and see if the idea of having players customize their restaurant has enough potential.

Description

The idea of having to decorate your restaurant is an idea which has been part of the studio for a long time but they never really thought it through. So they asked us to see how we would implant this idea into the game. One of the main aspects was the fact that the idea of being able to decorate is nice but it needs to add something to the game as well.

Goal

The goal of setting up the Delicious decorate tool is to give the player the option to build and/or decorate their own restaurant.

The goal aimed at the studio is to give them insight on the overall idea of having a decoration option in the game and to see how it could be implemented.

Realization

Before we could start of working on a Delicious game it was important we are known with the series, so at start we had to play the game series and get to know the ins and outs of the Delicious series. Besides that it was really helpful that the studio itself was busy finishing Delicious 4, as we got asked to attend those meetings as well now and then which helped us get some insight in the series which brought up ideas we could think about for our own game.

As this was a project on a bigger scale we started working with the Agile Development method (more about this method can be found in chapter 8), and one of the elements of this method is that you need to set up sprints. So we first written out a work plan and took a look at the time period. We then applied the default work process in the studio as described in the general work plan for the internship period resulting into a work schedule for the tool. In total we end up with 4 sprints, one for the research and design phase, preproduction phase, production phase and tweak phase.
Research and Design Phase

As each sprint in the development process is set up based upon user-stories we had the following user stories for sprint 1 (research and design):

- I want a complete feature list of our customization options
- I want to have a technical set of rules
- I want to have a list of visual elements that are communicating with the player
- I want a description how the editor is in relation to the game
- I want to be able to move objects in the editor
- I want to have a GUI sketch which covers all the features

In the research and design phase I’ve been doing research on the existing Delicious games and written out the GDD (found in the attachments). This GDD was then reviewed by the studio and the main idea got the green light and thus we could start on developing.

An example of a section within the GDD regarding the Move feature:

**Move (Change)**

To give the players more freedom they should always have the option to change the placement of objects.

- Object gets placed under the mouse with an opacity level to let the player see through the object.
- Moving an object in the editor can only be done within the screen, objects can’t go outside the screen or halfway out of the screen.
- Objects that can’t be placed should get a red overlay, including the underneath hitbox. If player does try to place the object, conflicting object highlights.
- Objects that can be placed should get a green overlay, including the underneath squares.
- Hovering over the interface or the RMB will dismiss the object to its original place.
- If a player has an object in move mode and clicks on another button then the object the player wanted to move should be placed back on its original location.
- Some objects like tables should be able to be moved including their decorations on top.

**Moving**

- Click object
- Click move button
- Hover mouse over the restaurant
- Click again to place<if conflict>
- Highlight conflicting object
Preproduction Phase

This was done in the preproduction phase where we wanted to achieve the following user-stories:

- I want to be able to move objects
- I want to be able to buy objects
- I want to be able to sell objects
- I want to see the current state of my objects
- I want to see feedback on my actions
- I want to be able to decorate my restaurant day in day out

During the preproduction phase I’ve been busy setting up and thinking through the many ideas already written down in the GDD. And during development I’ve constantly analyzed and reviewed the game and tweaked some elements to optimize them for the game. It was pretty funny to see what I originally thought of in the game and realize it was either a good or bad decision on a casual gamers’ level. This helped me greatly to get a better idea on how to approach casual games and was a good lesson to me as it made me aware to think about certain decisions on a different way.

Some of the decisions I’ve made for example regarding the moving of objects at start were pretty hard. As the majority of the games approach a move feature within the interface itself while I thought we should give the player the option to move objects without having to click a corresponding button in the interface. Which resulted into a direct click and drag solution, but after some discussion with the studio’s Game Designer, he told me the overall majority of our target audience don’t like the click and drag functionality so I’ve decided to leave it out.

While it may seem easy to decide upon small things like how a player should move an object with the mouse those are actually the most difficult. Then there is also the fact that with your design decisions you always have to keep in mind that certain actions could be caused unintentionally or are vague to the player; these kinds of actions should be prevented or at least be highlighted to the player.

Besides that I’ve been busy to look at the GUI and the elements that are part of it, together with Sven I’ve been busy making the artwork for the GUI so Michiel could implement them into the game. Together we also been working on a paper-prototype to check the steps the player has to take and simulate the steps by having a small piece of paper for each action. This helped us get a better idea of how many clicks a player needed to get their desired action done, as with some actions we saw they required too many clicks and thus we adjusted the amount required by adjusting some of the steps required.

After discussing many different setups (these are only just a few of the numerous ones made) we finally made a decision with the studio’s Art Director (Michiel Maas) and Game Designer (Sebastian Waardenberg).
Another aspect that came up during this session was the fact on how to approach game design decisions. I’ve sat down with the studio director and with him I’ve reviewed some of the decisions made and he gave me advice on how to approach them in the future.

A big step in this phase was the implementation of the shopping catalog, after doing loads of research on existing shopping catalogs and by keeping in mind what opportunities we would like to give to the players I’ve decided on an approach based upon a 3-step route. In which the player decides a category, the style and decoration options for an object before buying the object of choice. However getting to the 3 step route decision I’ve tried out many different setups for the shopping catalog.

Initially the plan was to design a shopping catalog, so I’ve made a first sketch up in Illustrator.

However, while the shopping catalog looks fun it wasn’t that functional for the tool. The reason why it wasn’t so functional is because of the idea of having an overview of your restaurant while shopping so you can look back at which objects you already have and if you have enough space to buy a specific object. The shopping catalog would have been too big to be functional and thus blocking the view on the players restaurant.

So therefore I tried some other approaches where I had the shop menu come out from a button which would cover about 30%-60% of the screen. The first setup was rather dull and simple, we wanted to give the women an experience in shopping and more or less have some fun while doing it. The 2nd setup brought back the more enjoyable view although, but once again the problem was that it took to much space in the screen.
The 2nd setup showed a minimalistic way to approach the shopping catalog within the setup, the small horizontal bars where the objects are lined up. So based on that we took another approach while keeping in mind to keep the catalog as small as possible. I’ve done some research on other games which had a minimalistic interface and even looked at some online room decoration tools from big furniture manufacturers and sales points.

After trying different approaches I checked the different setups and discussed them with many people from the studio and made a decision:

This is just one example of the way how I approached things but many things were done by trying some sketches and eventually checking the different approaches with people from the studio.

The final result of the shopping catalog:
Restaurant

Except being totally focused on the GUI and shop window I had to make sure we had an restaurant available where the player had enough freedom to decorate her restaurant. Therefore I have been designing a background / restaurant setup for the player where the have 90% of the playfield available for decoration.

This background I have been painting in Photoshop on top of an existing background and blend in the extra wall and floor parts. Besides that I made sure the Photoshop file supported the option to design more floors and walls for the next phase which I have been designing from scratch.

In the image below you can see some examples of what I have been designing for the restaurant.

At the end of the sprint we achieved all of our user stories; however we had some tasks in relation to the user stories that were cancelled as they turned out to be of no use or didn’t add any extra element to the game.

The final shop and GUI for the game:

One of the default happenings in the studio at the end of a sprint is that the game gets demonstrated and thus I’ve presented the game to the studio which led to many ideas from others as well which was a good sign.
Production Phase

Initially we had different plans for the production phase but after we evaluated our preproduction phase with our company counselor they made us aware we should look more into the depth of the basics instead of adding more new features. The core has to be fully functional and should feel smooth. So we’ve set up the user-stories based upon that statement from the studio.

In the production phase we had the following user-stories:

- I want to have dynamic feedback from customers on my decoration actions
- I want to place objects on different levels
- I want to be able to hire employees
- I want to be able to build my kitchen with kitchen blocks
- I want to be able to unlock content for my restaurant
- I want to modify the look of my objects
- I want to be able to play 2 restaurants

In the production phase I’ve constantly been busy adding more and more content to the shopping catalog, some of these I had to add by adjusting previous .d2p (Delicious 2 Presets) files or by making them myself. The reason they are called Delicious 2 Presets is because they have been building on the presets since Delicious 2 and they kept the system of the presets in all other series so far, thus including Delicious 3 and 4 as well.

The .d2p files made sure that the correct images and functionality of the preset were applied. For example in the preset we entered locations of worker nodes (position where Emily works), level nodes to indicate if they can be placed on top of a kitchen block or not and a decoration value.

.d2p file example

```xml
<?xml version="1.0" encoding="utf-8" ?>
<root>
  <Table2 id="d2object" image="TABLE_2_0" objectid="Global_Table_2" stylecount="6">
    <Vector id="usenodevec2">
    <UseNode relgridx="-2" relgridy="4" />
    <UseNode relgridx="-2" relgridy="5" />
    <UseNode relgridx="-2" relgridy="6" />
    <UseNode relgridx="6" relgridy="4" />
    <UseNode relgridx="6" relgridy="5" />
    <UseNode relgridx="6" relgridy="6" />
    <UseNode relgridx="6" relgridy="7" />
    <UseNode relgridx="-3" relgridy="4" />
    <UseNode relgridx="-3" relgridy="5" />
    <UseNode relgridx="-3" relgridy="6" />
    </Vector>
    <Vector id="usenodevec3">
    <UseNode relgridx="0" relgridy="3" />
    <UseNode relgridx="0" relgridy="7" />
    </Vector>
    <Vector id="usenodevec7">
    <UseNode relgridx="6" relgridy="7" />
    </Vector>
    <Vector id="extrasprites"><!-- For presets in the builder ;)-->
    <Sprite relgridx="-5" relgridy="-6" image="TABLE_2_0_CHAIR_LEFT"/>
    <Sprite relgridx="2" relgridy="-6" image="TABLE_2_0_CHAIR_RIGHT"/>
    </Vector>
    <Vector id="customerchances"><!-- For presets in the builder ;)-->
    <CustomerChance group="CHILD" value="100"/>
    <CustomerChance group="ELDERLY" value="100"/>
    <CustomerChance group="FARMER" value="100"/>
    </Vector>
  </Table2>
</root>
```
Besides these .d2p files I had to add them into the shopping catalog both visually and functionally, I had to code them into the catalog file which was setup by an XML file. To make sure the objects were visually added into the catalog I’ve been making buttons in Photoshop which consist out of 4 stages: active, hover, pressed and inactive. The trick is to have each stage aligned in the same row or column and have all images snap to each other without having any difference between them when it comes to space between the images. Next to the images for the buttons I had to make sure the actual images of a table for example are setup for in the restaurant. The majority of these objects we’ve taken from existing objects from previous games but some of them I’ve been adjusting in Photoshop by basically painting over them or aligning them better with alpha (blank space / transparency) for within the tool.

One of the main tasks during this phase was to make sure I had 4 different styles to apply for each given object, so I’ve been designing 3 extra options for all kitchen appliances based on top of the default appliances. The Apple Stove image gives an good impression, the top apple stove (blue) was the default apple stove and the other ones I have designed in Photoshop.

Another important aspect that arose during the production phase that we got asked to set up our game for a usability test, so the tasks in relation to the user stories changed a bit to leave space to optimize the game for a usability test. Something that came up with this is that we initially been setting everything up in English as that is the overall approach in the studio, but for the usability test we had to localize the game to Dutch. Luckily the majority of the text was setup in XML files as well which made it really easy to localize but some of them required adjusting images / buttons in Photoshop and required some time.

Once we had the build ready for usability we’ve constantly been testing our game to see if there is any room for improvement and to find any bugs so the usability test would be bug free and bulletproof.
Tweak Phase

The tweak phase was originally planned to be a separate sprint but as the usability test got planned in at a later stage we decided to make the tweak phase part of the production phase, so in the end of the production phase where we’ve been busy making sure the usability build was correct we also been tweaking the money values and going over the level design. Besides that I have been painting over existing objects to make them match the decoration options better.

While setting up the level design I had to keep in mind that I had to plan in a 30mins time schedule and make sure the players are busy in the tool plenty of times. Therefore I’ve setup the level design on an easy level and made sure the level didn’t take long to get through.

Another important aspect with the level design was the fact that I’ve setup the customer flow, for example at day 3 I’ve had 2 groups of customers enter the restaurant existing out of 3 people and if the player didn’t buy any 4-person table for their restaurant these would just walk away again indicating for the player they had to start buying 4-person tables. This way you can put the player in a certain direction and play with the level design to keep giving the player a goal to decorate.

At the end of the tweak phase the build was made and the game is ready for testing!

Level Design XML Example

```xml
<?xml version="1.0" encoding="utf-8" ?>
<root>
  <Integer id="money_target">300</Integer>
  <Integer id="money_target_expert">450</Integer>
  <Integer id="mood_drop_time">10000</Integer>
  <Boolean id="cleaner">true</Boolean>
  <Boolean id="entertainer">true</Boolean>
  <Integer id="tray_size">4</Integer>
  <Vector id="spawn_description">
    <CustomerGroup interval="2500" place="counter" />
    <CustomerGroup interval="12500" place="counter" />
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</root>
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Image: 21: Level Design: Customers
Usability Test

To test our game the studio settled a usability test day together with another game they have in development. The idea of a usability test is having external people from the direct target audience play your games.

RealGames tests some of their games this way by making an appointment with the test centre in Breda (Els Bastiaansen), this is an appointment for 1 day where the test centre makes sure 4 people are available to test our games. The test centre has 2 separated rooms, one where the player is going to play the game (test room) and one where you can “spy” on the player playing the game (observation room).

The reason why you have 2 separated rooms and the fact that you “spy” on the test person is to prevent that the test person is feeling uncomfortable and feels intimidated by having 6 people watch over their shoulders keeping an eye on their every move. Next to that it’s important to let the test persons get the idea you are not the maker of the game but work for the game developer so they aren’t afraid to give criticism and answer questions honestly, because many people feel the urge to show sympathy with the creators and might end up feeling sorry for putting their creation in a bad light.

The test itself took place on a Wednesday and took the whole day at which we had 4 people test our game. For each person we had 1 hour in total and during that hour we had to test 2 games, our game and the other game the studio is working on, so basically we end up with 30mins per person.

During the test one of the four women was present in the test room accompanied by 2 of our colleagues. The rest of us sat down in the observation room. Before they started playing our colleagues gave a short introduction of the game and made them aware of the fact to point out anything both negative and positive, also they got asked to tell what they are thinking. While the women are playing them got asked questions like “how do you like the game so far” and “how do you think the game looks”. We setup a short list of questions ourselves as well and our colleagues tried to ask them while they were playing the game, it was important that these questions were open, so the woman couldn’t answer shortly with a yes or no and actually gives constructive feedback.

While the women were playing and we sat down in the observation room we could control the camera and adjust the volume of the speaker to follow their every move and hear their reactions. While doing this we made notes and were amazed how they approached certain elements in the games. Some of the main findings on each of the 4 persons can be found on the next pages.
Women #1 – 36 years old

Background:
She is familiar with word games and board games. She plays around 30 minutes per day.

Observations:
- She didn’t know how to buy something for her restaurant, this was unclear to her.
- She tries to drag objects in stead of using the mouse button
- She sold something when she tried to move an object

Conclusion:
She liked the game, and also the decorating part. It was a bit complicated but she liked the idea to be able to fully redecorate the restaurant and give it her own touch.

Suggestions:
She suggested adding some animals to wander in the level.

Women #2 – 41 years old

Background:
She is also familiar with word games mostly, and Habbo Hotel (an online chat and decorate game by Sulake corporation)

Observations:
- She ignored any help texts and started playing instantly
- She also tried to drag objects in stead of using the move button
- She enjoys the feedback when somebody sits at the table she just bought
- She had trouble placing appliances she bought on the valid spots

Conclusion:
She liked the decorating though she had a little trouble buying new stuff for her restaurant. She asked if it was downloadable, when they replied "Only without the decorating part" she replied "But that is what makes it so much fun!" which put a smile on our faces.

Women #3 – 39 years old

Background:
She likes playing word games and mahjong.

Observations:
- She felt like it was a game for kids in stead of adults
- She planned on turning all blue objects into red objects, but she didn’t knew how to
- She also tried to drag objects in stead of using the move button
- She found the kitchen blocks were too big too place in the restaurants

Conclusion:
She found the game too childish and she said she didn’t like it. But in her actions and the movie feedback you can tell she enjoys the decorating more and more when she starts to understand how it works and in the end she wanted to add some food to the restaurant while time was already over.

Women #4 – 60 years old

Background:
She likes word games and brain training games. When the weather is bad she plays every day.

Observations:
- She does not like stories and skips the intro
- It is unclear to her what she can or cannot buy
- She found it more of a game for adults not for elderly; she gets nervous because there is too much happening on the screen

Conclusion:
The fact she was a 60 year old women was quite a challenge. Though she found her way around and also managed to buy a few items for the restaurant. Her opinion was it is more of a game for adults or couples that want to build something together.

By the end of the day after all woman have left we did a short review with the people present and finalized some notes and left with a good feeling.
Results

The results of Emily’s Delicious Restaurants are primarily based upon the results of the usability test and purely based upon the test. Based upon the test the following conclusion could be made:

Jan, the quality assurance manager told us that after 3 tests you already have 90% of the feedback you need. After the 4 tests the conclusion was quite clear and it seemed Jan was correct. 3 people tested our game for a total time of 2 hours, and we now exactly know where the game can be improved and whether it holds potential and know if people will like it or not.

My personally conclusion after the test is that we got people motivated about the game and saw the fun they had while playing the game. However, there are some points of interest that require attention, for example the start of the builder can be somewhat confronting as we throw the player in the dark with minimal instructions. Personally I think it’s good to give the player a click-through tutorial where the basics of the tool are demonstrated as some of the test players at start struggled a bit with the tool.

Another aspect which led to some confusion is the shopping catalog in which the player buys her objects, currently there are 3 steps the player has to go through to decide the category, style and decoration. When they arrive at step 3 they are not sure how they actually buy the object which led to some confusion.

When it comes to the reflection of the tool in relation to the game it was clear all 4 women who tested the game were really excited about the direct feedback they got on their decisions. They loved to see customer sit down at their new placed table and the fact that new placed food gets ordered a lot. Currently the customers settle down at a random table and this should get some adjustments so there is a higher chance to sit down at a new table. Basically the general feedback from customers on the players actions are highly appreciated and even call out a state of happiness on the player.

You could really see a connection growing between the women and their restaurant, the more they decorate it, the more they commit to it.

To experience the game see the attached CD-ROM.

Restaurants Results

Except for being responsible for the overall product I have also been busy making sure the player has the option to apply different restaurant styles. To do this I have been making different floor and wall sections in Photoshop. However, just a floor and wall won’t do the trick therefore I have also designed some new tables and kitchen appliances. Basically I have decided on 4 styles, being American Burgershop, Posh, Western and Next Generation.

In the image on this page you can see how a player could make 4 different restaurants by just applying different styles.

For some extra in depth details regarding the realization of Emily’s Delicious Restaurants my blog could be visited at: www.sjoerdjoosten.nl/blog.
Work Procedure
Work Procedure

As I’ve been working in a multidisciplinary team I will write something to give you more insight about the overall group process, however maybe the most important aspect of the work approach will be the Agile Development method.

Agile Development

Agile software development refers to a group of software development methodologies based on iterative development, where requirements and solutions evolve through collaboration between self-organizing cross-functional teams.

Agile methods generally promote a project management process that encourages frequent inspection and adaptation, a leadership philosophy that encourages teamwork, self-organization and accountability, a set of engineering best practices that allow for rapid delivery of high-quality software, and a business approach that aligns development with customer needs and company goals.

Iteration

Iterations in a project context may refer to the technique of developing and delivering incremental components of business functionality, product development or process design. This is most often associated with agile software development, but could potentially be any material. A single iteration results in one or more bite-sized but complete packages of project work that can perform some tangible business function. Multiple iterations recur to create a fully integrated product.

We also liked to call iteration sprints in which we put up certain user stories which all had their own corresponding tasks varying from design, programming and artwork. All these user stories and their related are stickied on a sprint board, where each specialty has its own colored sticky. For example, User-Stories are purple, Game Programmer has green, Designer orange and the graphical artist yellow.

SCRUM

SCRUM is an iterative incremental process of software development commonly used with agile software development. Despite the fact that “SCRUM” is not an acronym, some companies implementing the process have been known to adhere to an all capital letter expression of the word, i.e. SCRUM. This may be due to one of Ken Schwaber’s early papers capitalizing SCRUM in the title.

Each day during the sprint, a project status meeting occurs. This is called a “SCRUM”, or “the daily standup”. The SCRUM has specific guidelines:

- The meeting starts precisely on time
- The meeting is time boxed at 15-20 minutes depending on the team’s size
- All attendees should stand (it helps to keep meeting short)
- The meeting should happen at the same location and same time every day

During the meeting, each team member answers three questions:

- What have you done since yesterday?
- What are you planning to do by today?
- Do you have any problems preventing you from accomplishing your goal?

Personally we’ve made active use of the opportunity to SCRUM, each morning around 9:00 we met with the team at our sprint board and briefly told what we’ve done the last day and are going to do the coming day, also if anyone encountered any problems they will be brought up and shared with the team to see if anyone else has a solution and / or tips.
Group process

As said in the introduction of this chapter I’ve been part of a multidisciplinary team. This team existed out of 3 people, of which we all were having our internship at RealGames.

The team and their functions in relation to the project:

- Sjoerd Joosten  Game Designer
- Michiel Meesters  Game Programmer
- Sven Schieman  Graphical Artist

Each of us has their own area of expertise and together we were responsible for our end product.

As we were a team and working on the same assignment we were always aware of each others work. We’ve daily gone through things besides the daily SCRUM meeting and always assist each other where we could. The fact that all 3 of us were sitting on the same work area helped as well, as we could easily check in on each others work and keep an eye on the overall progress.

Personally it was my job to supervise the project a bit, as I had to communicate my ideas and insight on the game’s settings on to the rest of the team. Also when either the programmer or graphical artist finished some work it was my job to verify it. One thing that came into attention was the fact that most of the times I had to verify something I could still find some bugs and / or glitches which I then noted down and explained to the owner of the related task.

When I sat down with the programmer we went through the technical aspect of the game and talked through possible solutions to approach certain mechanics. While the programmer only looked at the actual code it was my job to make sure it was set up on such a way that it was possible for me to tweak the code to make it better from a game and level designers perspective.

As I wasn’t really busy setting up code and scripts myself but sat down numerous times with the programmer he gave me a good idea why and how he did certain things which helped me realize some certain aspects when it comes to programming.

With the graphical artist I’ve been closely working together when it comes to setting up the graphical settings. We both made sketches all the time which we checked in with each other and scrapped the bad things and combined the good things resulting into good artwork. Mostly the graphical artist was responsible on the artwork but I’ve done my share as well. I’ve learned a lot from the graphical artist and I could teach him some tricks in return as well.

If we look back at the overall process as a group we can say that we have grown. At start we were all pretty unsure on how to approach certain things but in the end we all knew where our own responsibilities were and got more work done in a shorter time period. So I’ve really enjoyed being part of this group.
Problems
Problems

General Problems
During the internship I’ve ran into several problems, here you can read about the major problems I’ve encountered.

Design Decisions
At start I had some trouble making certain design decisions while trying to think from the target audience.

I’ve then asked for some advice and got some useful tips and hints on how to approach certain design decisions. There is always the link of having to make a decision for the target audience and to keep it functional. So one of the tips was to start thinking of what the decision should add for the functionality of the game and then approach it from the target audience view and research on how they would like to see things.

A very important aspect is not to give the casual player too many choices to make, I have to make the choices for them!

Graphical Artwork
We build up graphical artwork on a 400% scale of the 800x600 (the reason why the studio works this way is mainly because of the possibility having to print our artwork for promotonal campaigns) and at the start when we were first confronted with this approach we made the mistake to not keep in mind that we should be able to scale it down again to 100% resulting in 22.333 pixels for example.

Personally I didn’t really have that much trouble because of this however our graphical artist had to re-strip some GUI elements several times which delayed our overall process.

Building on the foundation of Delicious 4
As with the Delicious Tool we operated on top of the foundation of the Delicious 4 game we encountered some problems here and there in regards of our ideas for the tool.

At the start we worked with presets of existing restaurants which all had their own nodes (nodes are single indications for the tool to indicate if a grid is blocked for tables for example) for their related restaurant. But as we have to be able to move/buy/sell these presets we had to change all of them to function.

Another problem was the fact that some way the restaurants were setup it left little room for decoration and thus we had to change the way the restaurant was applied.
Problems

Player Feedback
At start I had many ideas on how to set up the controls and communication to and from the player. But I never thought about the fact that an easy action like a single mouse click would require so many borders to set. For example, you could have players who click and drag at same time, or who almost click twice in a really short time (not an actual double-click) and clicking while holding down the mouse button and first releasing it outside the borders of the button. All these small things we would have never thought of initially and resulted into some small issues while playing.

To give an more direct example of player feedback related issues I decided to use the kitchen blocks. We have been struggling a lot with the kitchen blocks. One of the major features of the kitchen blocks is the option to make round corner by strategic placement of the kitchen blocks.

The corner show up when the player hovers with a kitchen block next to another, however to prevent weird situations I had to think of some priority rules to prevent the game from crashes and / or memory leaks.

Priority rule 1: Never make 2 corners that overlap

Priority rule 2: Straight piece has priority over a corner

This is just one of the player feedback related problems but should give a good indication on the problems we encountered during the development of the game.
Conclusion

Conclusion and Advice

To conclude the internship and the realized products (Lost Relics of the Sea and Emily’s Delicious Restaurants) it’s pretty obvious that the red line of the internship was all about the development of Emily’s Delicious Restaurants. Therefore I shall give my conclusion and advice in reflection of Emily’s Delicious Restaurants.

If we look at the usability test for our tool I am very satisfied. The women were enthusiastic and were having fun playing and that’s what it is all about.

But just like I said at the results section of the tool there were some points which require attention. However if we purely look at the main aspect of games which is all about “having fun” then it’s the most important to have the direct feedback on the players their chosen actions in the tool. As we saw during the usability test where a group of customers sat down at a new placed table resulted into a cheer of joy by one of our test persons. Another aspect to support that statement and definitely the best compliment we could get was the fact that one of them liked the game so much she asked where she could download the game, which resulted into the fact that she got told she could download the game at www.zylom.nl but without the decoration part on which she responded “But that is what makes it so much fun!”.

In overall the controls and actions required to (re)decorate your restaurant was clear but first after they experienced it once after struggling, therefore a good click-through tutorial should be implemented the same way it’s done for the default gameplay as this really seems to be an effective way of getting players familiar with the way a game is played.

Personally I would advice to try to see if this can be done for other games as well, as this way the player can learn by watching, listening and taking action. Basically every single person prefers their own way of learning, and by this method you cover all 3 major aspects of learning.

When it comes to the options given to the player I would say the option to colorize and decorate are 2 major aspects and both should be implanted on their own specific way where the player can decide herself if she would like to decorate and colorize a table for example.

So personally my advice is to make sure to keep the strong element of giving in game feedback on the player’s action, setting up a click-through tutorial and as always with casual games strive to keep it simple!
Conclusion

Evaluation / Reflection

During my internship at RealGames I’ve learned a lot, not only about the fact how to develop a game but also about the other aspects that are in relation to it. For example I’ve witnessed the launch of Delicious 4: Emily’s Taste of Fame and saw the whole marketing behind it come to shape.

Personally I’ve learned a lot about the development process, but especially on how to approach games on a game designer’s level. Especially the fact that my RealGames counselor pointed out to me to have a look at the “Paradox of Choice” of Barry Schwartz made me realize there is much more to it. As a game designer it’s important to place yourself into your target audience and try to get in touch with their emotions. Next to that you have to grab their attention in the first few seconds to a maximum of 5 minutes, if you can’t do that players will let your game be and close it down.

You could more or less state that there is a lot of psychology involved as you need to be aware of how people think and would respond to certain aspects. Based upon the “Paradox of Choice” where Barry Schwartz points out that for example you have 20 jeans to choose from and buy one which in the end turns out to be not as comfortable as you hoped makes you feel bad about your choice. However, if there would only be 1 pair of jeans to choose from and you end up with uncomfortable jeans then you just accept that as you didn’t have any choice. Especially this example helped me make some design decisions in Emily’s Delicious Restaurants.

When looking at the general game development process I think the Agile Development method works really well, especially the daily SCRUM meetings that took place each day made sure everyone is aware of each others tasks and problems which resulted into an good overall group coordination.

I’ve also learned a lot when it comes to artwork, the studio has many great graphical artists and all of them were always willing to help out and give tips on how to approach certain aspects in Photoshop and / or Illustrator. For example the way they make buttons in Photoshop where the images get placed in a strip to indicate the different states a button could apply is something I’ve never seen before but works very effective. Also the fact on how to use brushes effectively and how to paint over existing objects to make them blend together really opened my eyes and definitely changed my work approach within Photoshop.

For the coding related issues we had great assistance from the game engine programmer, he didn’t only tell us directly how to solve it but also explained the way he thought of the solution so we know how he would approach a problem and how to get to a good solution. Also our own team’s programmer Michiel helped me get some great insight as with many mechanics I’ve sat down next to him to think together of an solution and just by watching at his code I’ve learned some things here and there.

So all in all I’ve learned a lot and had a great experience working at RealGames!
Literature

Software

- Microsoft Office
- Microsoft Visual Studio 2008 Express Edition
- Adobe Creative Suite 4

Literature

- Projectmanagement
  Roel Grit
- Control-Oline Magazine
  Magazine about Game Development
- Casual Connect Magazine
  Casual Games Association
- Paradox of choice
  Barry Schwartz

People

A. Bonewald
B. van den Berg
S. Waardenberg
M. Maas
L. Bloom
J. Castelijns

Websites

- www.wikipedia.nl
- www.google.nl
- www.jayisgames.com
- www.gamezebo.com
- www.gamasutra.com
- Roger Callois’ Patterns of Play, Chris Bateman
  http://onlyagame.typepad.com/only_a_game/2006/05/roger_caillois_.html
- The Basics of Rewards, William Willing
  http://www.casualgamedesign.com/?p=42
- I Have No Words & I Must Design, Greg Costikyan
  http://www.costik.com/nowords.html
- Rockets, Cars and Gardens: Visualizing waterfall, agile and stage gate, Daniel Cook
- Substance and Style in Game Design, Tynan Sylvester
  http://www.gamasutra.com/features/20051004/sylvester_01.shtml
You can find the documentation related attachments in the attachments document enclosed with this report. In the documentation the following can be found:

I. Work Plan
II. Research Report Studio
III. Research Report Casual Games
IV. Research Report Casual Gamers (*in Dutch!)
V. PitchUp
VI. Work Plan: Emily’s Delicious Restaurants
VII. GDD: Emily’s Delicious Restaurants

The reason the research report Casual Gamers is in Dutch is because it was one of the first research reports I have made and the fact that previous reports in relation to the target audience have been setup in Dutch aswell.

For extra details on a weekly basis you can find my blog at:

“www.sjoerdoosten.nl/blog”

On the enclosed DVD you can find the following attachments:

I. Documentation
II. Lost Relics of the Sea
III. Emily’s Delicious Restaurants
IV. Usability Videos

To play the Lost Relics of the Sea prototype you have to run the:

"Lost Relics of the Sea/bin/win32/prototype_LRS.exe"

In order to play Emily’s Delicious Restaurants you have to run the:

"Emily’s Delicious Restaurants/bin/win32/deliciousrestaurants.exe"