THESIS: ADVENTURERS' CLUB

Multi-Platform Game For Players With Fragmented Play-Time

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MFADT Thesis

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ABSTRACT

Adventurers' Club is a computer game where game-play is situated over 3 different gaming platforms: Desktop, Handheld, and Web. This solves the problem of fragmented nature of play-time of grown up gamers, and allows the player to be engaged in the game-play at any point throughout the day.

Adventurers' Club is a game about world travel and collection of interesting and useful items. It is set in the year of 1875, two years after Phileas Fogg has completed his journey of 80 days around the world. The game content is filled with the historical references of the time, as well as fictional historical events and characters based on Jules Verne, Robert Louis Stevenson, and Henry Rider Haggard.

Players can enjoy different aspects of the game by playing on 3 different gaming platforms. At the desktop player will be able to engage in a more direct game-play. The handheld becomes the player's news and clues collection. And the web is a meta-world of all the members of the Adventurers' Club.

INTRODUCTION

My interest in games goes way back to my childhood. I was fascinated with chess from the time I was 5 years old. Then came other board/table games and, of course, arcade machines. Being born and raised in St. Petersburg, Russia, during my childhood I didn't get the chance to experience the gaming industry's "golden years". In Russia the industry wasn't as developed as in the US. I didn't have an Atari, but I had a "Telesport" – a Russian very primitive game console, and I loved every minute of playing that thing. My interest in games grew with time, and I got very much involved in computer games. I enjoy all sorts of gaming genre; "adventure games", though, being my favorite. I'm 27, I still want to play, however I cannot indulge myself in playing games at the same rate that I used to. Some friends of mine are in a similar situation; they grew up and now have to worry about "real grown-up" things such as a real job and a family. The major force that is driving me to create a game targeted to the "grown-up" players is a strong wish to have such a game created for myself and for my friends.

In the past 30 years computer games have grown to be a huge part of the entertainment industry. However, the first generation of "gamers" recently seems to be falling out of the game world. The generation in question covers people that are in their late 20s - early 30s, or whose childhood or early teens came upon the "Golden Age of Gaming". One of the reasons for the decline in their game play is the simple problem of growing up, getting a real job, having a family and not having enough time to play. This problem is occurring across the gaming industries and not only with the computer games.

For gamers that don't have 7 hours a day to dedicate to the continuous play, but who really love games there needs to be created a gaming environment that is adjustable to the player's life style. The problem of creating such an environment can be tackled by creating a gaming experience that consists of different self-sufficient modules, where each module is designed for a certain game-playing timeslot of the player, and at the same time, in the game design sense, all modules fit together to create a metagame.

CURRENT MARKET SITUATION

In US there is a big community of people over the age of 25 who grew up playing games and don't really want to let go of play any time soon. Those grown-up gamers don't often have the same freedom to play games that they had in their high school and college years. The gaming industry recognizes that large population of grown-up gamers is departing from the gaming world, and I've noted some trends that are taking place in order to resolve this problem.

The first trend pertains more to non-digital games that are also losing grown-up players. The card game Magic The Gathering[1] at one point started losing a large population of gamers. Richard Garfield, the creator of Magic, in his *Magic Design: A Decade Later* essay stresses that the game was losing players, who loved the game but simply didn't have time to play it anymore (Fullerton, Swain and Hoffman 195). For R. Garfield the answer to the quickly growing problem was - Magic Online. Some studies of the player's demographics have shown that a large percentage of people who are playing the online version of Magic were old players of the "real" game. Once they were given an opportunity to play from home and during the time that they wanted, probably once kids went to bed, they were back in the game.

The second trend in the fight for the grown-up gamers is the change of themes of the games and the drive for the ultra-realistic environments. The first console game targeted specifically to the "grown-up" audience was Grand Theft Auto III[2]. The game character is a thug, whose main activity is to steal cars and beat people up.

"As many gamers already know, *GTA3* sold like wildfire and was applauded for many reasons. Everything about *GTA3* was excellent and new (and yet based on the same framework that the first games were based upon): The open-ended game design, the phenomenal level of detail, its huge worlds, the closer, third-person perspective camera, the sophisticated AI, the sexy and sometimes dirty cutscenes, and moreover, the way in which the game aimed itself at a sophisticated gamer who wanted more than just to save a princess from a cranky dragon"(Perry).

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[1] Published by Wizards of the Coast, 1993

[2] Published by Rockstar Games, 2001

Games such as Max Payne[3] were also targeted mostly towards "sophisticated gamer". The visual realism, as well as the freedom of actions a player can take, have a magnetic quality; making it hard for the players to stop playing (see App. A: Fig. 1 and Fig. 2).

Today's game market pays high level of attention to the "non-commitment games". This makes the online internet games to be the third trend on my list. Games of this category usually are hosted by large game portals; such as www.popcap.com and www.yahoo.com. Players don't even have to download those games to play. The genre covered is mostly action arcade or puzzle games (see App. A: Fig.2 and Fig. 3). It is interesting that the players of "non-commitment" games have a very different demography from the rest of the gaming community. Compared to other sections of the industry a much larger population of women play "non-commitment games". An interesting study of online gamers' demographics was done by America Online (AOL) in January of 2004. America Online (AOL) has found that females over 40 years old spend the most time per week playing online games at 9.1 hours, which accounts for 41 percent of their connection time (Greenspan). The reason I'm categorizing online puzzle/arcade games into "non-commitment games" is that generally speaking those games don't require the same amount of investments as action/adventure games, or as MMORPGs[4]. Not only the price differs tremendously, most of "non-commitment games" can be played for free, but also the time a gamer needs to spend with the online puzzle/arcade game in order to get the best immersion into the game is much smaller than that with the action/adventure games, or with MMORPGs.

A very strong trend in the industry's wish to conquer back the grown up gamers can be seen in the tremendous growth of the mobile gaming. People play games using their cell phones, SMS messaging, and PDAs[5]. Nokia's N-Gage and Tapwave Zodiac are the strongest platforms that are turning a phone or a PDA into a full functioning gaming platform. Tapwave Zodiac is a Palm-based gaming platform, and it is positioning itself as "a PDA for the Grown-Up Gamer"(Tapwave Zodiac Advertisement). The position of the

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[3] Published by Rockstar Games, 2001

[4] MMORPG – Massive(ly) multiplayer online role-playing games

[5] PDA – personal digital assistant

large gaming corporations is that older people don't have time to play, and that is why they should be provided with the technology to play on the go.

THREE GAME MODULES

All of the earlier discussed trends expend on the idea that grown-up players don't have time to play. And the gaming industry creates a variety of solutions to the problem based on that assumption. My hypothesis is that grown up player's game time is not only decreasing, but it is actually very fragmented. For those players every second of their game time is valuable. They can spare for gameplay maybe half an hour in the morning, 40 minutes during the morning commute, 30 minutes during lunch, 30 minutes when the boss is not watching, 40 minutes during the evening commute, and maybe 2 hours at night. Currently games do not account for the fragmented play time that a player has. Most of the games rely on spending long hours of continuous play time in order to get the full immersion into the game. I would like to propose a creation of a game that can solve that problem of fragmented playtime for grown up gamers. The game environment for such a game should include several "game modules" that differ in game play, but together create a metagame experience for the player.

The game will be playable over three different gaming platforms: desktop, PDA, and Internet. Each of those platforms adheres to a certain "time slot" that a person has available for play during the day. Desktop, being a stationary system, will be used for game play at home, PDA is all about playing on the go, and Internet, with its' great availability, can be accessed throughout the day from different devices. I'm planning for all the platforms to be interconnected through the central database, so that all devices constantly know the player's status in the game.

CREATING THE GAME

SELECTION OF CONTENT

The gaming industry is ever-growing, yet each project is extremely costly, this results in the industry's reluctance to take chances in developing a new game. The growth of the generation of video gamers, the average age of whom being 29, makes it clear that the games, also, have to grow up. The first, and the most safe, reaction of the

industry to this reality of life is making the games adhere to the cliché descriptions of adulthood: sex, violence, sports. There is a tendency in making games full of nudity, explicit language, blood, and whatever else that constitutes adulthood.

"Several mainstream game publishers are releasing bawdy games containing nudity and explicit sexual content. The Guy Game and Leisure Suit Larry: Magna Cum Laude are already out. An adults-only Singles: Flirt Up Your Life is being sold online, with a toned-down M-rated version on the way. November will bring Playboy: The Mansion and Rumble Roses, the first all-women's-wrestling game, featuring unquestionably dirty moves"(The New Paper).

Nobody would argue the fact that "sex sells", and it sells really well. Porno industry has been a powerful driving force in the Internet development process. Those games (some of them by the way can have a really great game-play) will definitely find the place in the players' hearts. Yet, it is not necessarily that type of content that a well formed adult gamer, ex-arcade video games player, is looking for. There is a small paradox that the adult games will really turn the heads of the "wannabe" adults, and they might turn the real adults off.

To get a grown-up player to play a game, game designer doesn't have to come up with the game that is all about sex, violence or sports. There always will be Leisure Suit Larry, Grand Theft Auto, or NHL FaceOff but at the same time there are successful games that don't exploit those themes and still successfully engage the player. Simulations, strategy and adventure games also have their lion share of the gaming market. So what constitutes a great gaming content for the grown-up gamers?

Looking at popular movies and fiction books might clarify the important aspects of content that my target audience (25 – 35 year olds) finds satisfying. The DaVinchi Code, by Dan Brown is a great example of pop fiction that appeals to a wide adult audience, yet its' focus is not on the "adult" theme, but on adventures, mystery, intrigue, and a somewhat historical setting.

History as the fictional setting is full of possibilities for creating an engaging content. People tend to romanticize the past, and as a result there is an ever-present nostalgia for that past. I find that romanticism that surrounds the end of the 19th century has great potential for being the base for the game setting. It was the world of great

technological breakthroughs, yet from today's point of view, it was also the era of innocence. It was the time just before the world became very small. And it was the time when traveling was an adventure in itself. The readers during that period in history were heavily influenced by works of authors such as Jules Verne, Robert Louis Stevenson, and many more. For richer game-play the game content will be filled with the historical references of the time, as well as fictional historical events and characters based on the above authors.

SELECTION OF GAME MODULES

To design a game different parts of which are playable on different platforms, it is important to recognize the strengths and shortcomings of those platforms. Analysis of the specific aspects of my chosen platforms (Desktop, Handheld, and Web) helps to formalize as to which parts of the game-play would correspond to which platform. Strengths of *desktop games* today encompass in themselves great visual and audio impact, allowing for the better immersion of the player in the game world. Because of the stationary nature of this type of gaming, players usually engage in playing those systems at home. Though many games on those systems allow for multiplayer mode of play via the internet, this differs from what I will later define as the *internet games*. *Desktop games* that allow for internet access still have to be played from that one computer where they have been installed, while *internet games* provide players with the ability to play a game from virtually any computer without the installation process. Time factor is also very important to the *desktop games*. The more time the player has invested the stronger immersion is taking place. For example, when extensively playing *EverQuest*[6] – a great example of a MMORPG game, some people start living their real life on the time schedule of their gaming environment.

Internet games, in some ways, are more accessible for playing, than the *desktop games*. Players can play from home, school, or even work. Those games are considered to be the prerogative of casual players with the high percentage of women players. The most successful games in this category tend to be puzzles, or arcade games, for example *Bejeweled* by PopCap. However games of the MMORPG genre, although also internet

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[6] Published by Sony Online Entertainment 1999

based, in no way can be considered to be "highly accessibly", "cheap", or "casual". MMORPG-like games use Internet in a different aspect. Internet facilitated the creation and development of metagames for many such games. The economic system of the game often leaps out into the real world with the use of Internet. Games such as EverQuest, There.com extensively capitalize on those Internet metagames. In some MMORPGs players can buy "virtual game objects" from other players, or from the game's management by paying real money for them. There.com even has the rate at which it sells "therebucks" for US dollars.

In Adventurers' Club the Internet metagame is initially built in into the system, and it is a vital part of the game. Players will be able to trade "game objects" with each other on the Internet, they will have to strategize as to which "game objects" they should keep and which ones they should trade in.

Mobile games, hence the name, provide the best solution for playing on the go. They lack the social factor of game play, for they mostly tend to be played as a single player games. Yet they allow for playing virtually anywhere at any given moment. Some *mobile systems* (cell phone games, games for handhelds) because of their lack of need for additional hardware attract a new category of gamers – non gamers, who all of a sudden spend a lot of time playing a cell phone game. What is important for the Adventurers' Club is the ability to play anywhere, and the secrecy of that play. Often a thirty year old business man might not want his co-workers seeing him play, even if on his lunch break. The fact that he is doing something on his handheld is much more accepted in the "real world" than him playing games.

GAME DESIGN

The discussion of game design as a discipline in its own merit is a new one. For ages games were examined through the filters of other disciplines. Fields of philosophy, psychology, physiology, mathematics, cultural studies all have discussed games in their own contexts and terms. It seems that it is the boom in the digital gaming that sprang up a want and a need for theoretical plus instructional framework around the process of creating games.

GAME AS A SYSTEM

Important concept in the development of the game is looking at games in terms of systems. Following Salen and Zimmerman's definition "a system is a set of parts that interrelate to form a complex whole", a game can be framed as a mathematical, social or representational system. In Rules of Play Salen and Zimmerman draw their ideas on systems from Stephen W.Littlejohn's textbook Theories of Human Communication, where he describes the elements of the system. Those being: objects, attributes, internal relationships and environment (Salen and Zimmerman 50 - 51).

The main "object" of the Adventurers' Club is the player. The player associates himself with the virtual protagonist of the game – the adventurer of the 1875 whose goal is competing with other adventurers for game points. Obviously all of the opponents of the player are also important "objects" of the game system. The cities, the collectable items and even the NPCs are all part of the system, and are also considered to be the "objects" of the game.

The second element of the system is attributes – "the qualities or properties of the system and its objects" (Salen and Zimmerman 51). In the analysis of the Adventurers' Club attributes would be the rules of traveling, collecting, discovering and trading in the game world. Attributes will be the rules of moving from one city to another, rules of trading collectable items with other players, rules of collectable sets having specific prices based on the "fullness" of that set.

The third element of the system is the internal relationships that exist among objects. Strategic relationships in the game are determined by the location of the player at any given moment. All actions the player does, such as buying a collectable item, agreeing to take a "special" NPC as a party member, deciding to go to a specific city, and the like, constitute the internal relationships of the game.

The environment of the game world provides the context for the formal elements of the game. The narrative of the Adventurers' Club is driven by the actions that players take during the game-play.

Describing a game in terms of a system helps to see how the game system adds up to a larger experience of play. And it leads to understanding games as "emergent systems". Emergence in a game is something very crucial to the successful game play.

In the end game has to be fun, and player has to come back to it time after time. The concept of emergent system is greatly summed up by Jeremy Campbell in his Grammatical Man "A modest number of rules applied again and again to a limited collection of objects leads to variety, novelty, and surprise. One can describe all the rules, but not necessarily all the products of the rules…"(Salen and Zimmerman 158). And that is precisely what one has to strive for when developing a game. A system with definite rules, but a variety of possibilities for game-play that comes out of those rules. The mastering of the rules shouldn't stop the player from playing, but make it ever more interesting to play.

When working on the game design of the Adventurers' Club special attention was paid to the concept of games as emergent systems. It was important for me to come up with a game, where by learning the rules of the game the player wouldn't loose interest in game play. Hence, the emphasis on the variety of meaningful choices that a player has through out the game. Should he choose the role of a "fast traveler", "discoverer", or a "collector"? Also the relationships between certain objects in the game will regenerate anew in every game session, the player will have to figure some parts of the game each time he plays.

CORE MECHANIC

The building block of a successful game is the notion of the *Core Mechanic.* As defined in Salen and Zimmerman's Rules of Play "a core mechanic is the essential play activity players perform again and again in a game"(Salen and Zimmerman 316) . One or several activities that a player is involved in during a game create the actual gaming experience for that player. There is a basic level of core mechanic in a game, and a more conceptualized level. In digital games describing core mechanic as hitting the keyboard key LEFT, RIGHT, UP and DOWN (as in TETRIS[7]) would constitute the basic level of core mechanic. However, in the initial stage of game design it is useful to go that far into analysis of core mechanic of the game.

When working on the Adventurers' Club, I found it useful to start with that "basic" core mechanic and then, rather quickly, to move on to more of a conceptual form

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[7] TETRIS – created by Alexey Pajitnov 1984

of a second level of core mechanic. At that level, questions such "what does the avatar in the game does?" come to mind, rather than "which button does the player hit?". The second level core mechanic of the Adventurer's Club can be described as follows:

The adventurer chooses mode of transportation, buys a ticket and travels from one city to another. In the city the adventurer can buy and sell the collectable items, get a quest, or learn some news. On the handheld the adventurer also learns where rare collectables are located. And on the web the adventurer is able to trade the collectables with other "real life" adventurers.

For any game to be successful there needs to be tension involved between different aspects of what the player can do. There needs to be two axis of conflict (Fortugno). Player would want to follow one axis, but then the second axis would also provide some kind of benefit. For example, in Civilisation series, a player is often faced with the decision of using his resources for one thing and sacrificing something else in the process (i.e.: building a "wonder" instead of an army).

To understand what is fun in the game when the core mechanic is traveling from one city to another, I researched a great deal of games. One in particular stands out as highly relevant to my design process. It is a board game "Ticket To Ride"[8] by Alan R. Moon. It is set in 1900 and plays off Jules Vern's Around The World in 80 days. The historical content in this game comes into play only in so far as illustration on the box. *"Ticket to Ride* is a cross-country train adventure where players collect cards of various types of train cars that enable them to claim railway routes connecting cities throughout North America"(Moon).

I found this game when I was well into the development of my thesis project. Once I learned that the game is supposed to be a play of Around The World in 80 days and knowing Alan R. Moon as a master of game design, at first I got disillusioned in the making of my game. I played *Ticket to Ride* a great number of times; I absolutely fell in love with the simplicity of game play. And I also understood that even though Adventurers' Club is also based around the idea of Jules Vern's Around The World in 80 days, the game play of Adventurers' Club is much different from the *Ticket to Ride*. At

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[8] Published by Days of Wonder 2004

that point I was able to rationalize better and I started learning from the incredibly simple and at the same time addictive core mechanic of the *Ticket to Ride.* Players try to claim railway routes by collecting cards, and the tension comes in when players are faced with the decision which route to claim, and how long of a travel route to create.

Another game, core mechanic of which I found to be influencing some of my thinking in regards to core mechanic of the Adventurer's Club is Oasis[9]. Oasis is a fast-paced strategy game, designed to be played in minutes instead of hours (Mind Control Video Games). The game world of Oasis is dynamically generated each time one plays the game. However, there are some constants in that world that help the game to be a strategy game rather than just a guessing game. The player has to find an *oasis* and an *obelisk*, while finding cities and building the infrastructure between them. This has to be done in a set number of turns, before the barbarians will start their attack. What is appealing in this game is the dilemma that the player is faced against, should he try to find the *obelisk* and risk the underdevelopment of his cities, or should he play more carefully and get less points?

THE DEVELOPMENT OF THE IDEA

The inventing of the game started after the main concept – having different platforms covering different time segments – was finalized. Before the development of the game design, I formulated the following requirements for the game:

1. The game should have different activities suitable for each of the platforms. Though the desktop platform could support any type of activity, the handheld and the web had more specialized capabilities.

2. The game should have a clearly defined and reachable in a reasonable time ending. This also implies that the game should have high replay value.

3. The success in the game should not depend on the time spent online. This is a common trait of most modern multiplayer games, and it is absolutely unacceptable in the game targeted on the grown up audience with highly fragmented time.

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[9] Beta Version, by Mind Control Video Games 2004

Keeping these requirements in mind, I've started inventing the game.

The first concept was dealing with adventures in a sci-fi setting. The idea was to create a game about "post-informational" society, where the protagonist will try to find a solution to the consequences of "informational explosion". However, though the idea seemed quite promising, after some considerations I had to give it up. The reason for this was the fact that the game was driven mostly by the plot, and depended heavily on the narrative, which significantly reduced the replayability.

Then a concept of following the steps of Jules Verne's characters appeared, and became a base for the "Adventurers' Club". Initial idea was that the players just race against each other, and the first draft included such elements as arcade mini-games and trading of information on the web (telling each other details about visited cities for some fee). The idea of mini-games was sacked pretty soon, due to the fact that it would be next to impossible to create arcade sequences random and diverse enough to maintain replayability, and well-designed to be interesting at the same time. The information trading also did not survived, because of the difficulty to keep players' game time in sync.

The game clearly required some other dimension besides racing around the world to be fun and enjoyable – otherwise all players' activities were limited to selecting next destination from the list of available cities.

Then the idea of collectable items came up, and the game began to take shape. Player had several choices now that he could make during the game play, as well as the choice of which way to end the game. The game design is still evolving, and just recently after the play-testing of the paper prototype the idea of special "party members" also came to life. Now, I think that I have a general structure of the game in place, and further play-testing is needed to balance the game better.

RULES OF ADVENTURER'S CLUB

Adventurer's Club is a hybrid single/multi – player game. Each player plays in a single player mode on both the desktop and the handheld device, however on the web, where adventurers trade, he is now actively involved in a multi-player dynamics.

Starting the game

Before starting the game each player needs to set up the account. It is done at the Adventurer's Club Web headquarters. Once the player got a login name, downloaded the desktop module of the game and set up his "game channel" on the handheld, he/she is ready to play.

Things to do on the desktop

(see App.B: fig 5)

1. On the large map, player is able to:
   a. Select mode of transportation available in the current city (see App. B: fig 7).
   b. Compare the ticket prices between different cities that are available with the above chosen transportation mode (see App. B: fig 8).
   c. View information about any of the cities.
2. Inside the city, player is able to:
   a. Choose an area to visit (see App. B: fig 9).
   b. Talk to the NPC (see App. B: fig 10).
   c. Get a quest
   d. Buy/Sell collectible item to the NPC
3. Collectable Sets
   a. Buying/Selling

      Collectable items are sold in the stores of the cities. Collectable items can be sold at those stores. Every item is part of a certain set (for example guns), and if a player has a set he can sell it at a much higher price than an individual item would cost on its own.
   b. Trading

      Adventurers are able to log in to the web module of the game, and trade their collectable items, or sets, with other adventurers online.
   c. Special Abilities

Some collectible sets also have special abilities. Different NPCs[10] might want to join the adventurer's party depending on the sets of collectibles that a player has. *For example, if a player has a full set of "guns", then an NPC "colonel" will offer the player to join his/her party. Colonel adds to the adventurer the ability to use military railway system.*

Things to do on a handheld

1. Adventurer receives news from the near by towns.
2. Adventurer receives puzzles that when solved reveal the location of some of the rare items. (see App. B: fig.11 and fig. 12)

Things to do on a web

1. Table of high scores
2. Trading post

This is where players can trade their collectables

Game Score

Adventurers get score for different things that they do:

    a. Traveling around the world (this also finishes the game)
    b. The speed of the adventure (in game time)
    c. Visiting Cities
    d. Solving quests
    e. Collecting rare sets of items
    f. Discovering lost cities

PAPER PROTOTYPE

To truly work on the game design one has to be able to start play-testing the game at the earliest possible moment. With digital games this can be a little bit problematic, for the creation of the software prototype can often take up a really long time. Thus, it is

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[10] NPC – Non Player Character

important to create a "paper prototype" of the game. Game designer can even create several game prototypes that correspond to different parts of the game. "Physically prototyping allows you to build a structure for the game, think through how the various elements interact, and formulate a systemic approach to how the game will function" (Fullerton, Swain and Hoffman 163).

In the development process of the Adventurers' Club I started with a strong impulse to start building a fully functioning software prototype. I stopped when I saw myself programming the game before actually designing the game play and that same evening I made a paper prototype of the part of the game. It's a prototype of a "desktop" module (see App. C: fig. 13). For the first iteration of the paper prototype I've simplified the game-play, leaving just the most important objects and actions of the game in place. The very first play-test provided a big insight into the game play of Adventurer's Club. First of all, on the very basic level, it was fun to go from one city to another and try to collect different items. However, what was not fun is being stuck in a city with no money and unable to go anywhere else. The following is the list of major things learned from that session:

- better balance is needed between the prices of different modes of transportation, as well as the time that it takes to travel by steamer vs. the railway.
- each city needs to have a travel way to at least two (better three) other cities.
- The initial amount of money that a player gets should be enough for the player to be able to start his travel right away, as well as experience the process of collecting. Yet, the amount shouldn't allow the player to travel around the world without ever collecting, selling, or trading game objects.

The paper prototype became the integral part of the game design of the Adventurer's Club, and it is constantly being used and updated.

RESEARCH OF THE TIME PERIOD

HISTORY

       The second half of the 19th century was an exciting time. The map of the world still had some white spots, but at the same time the known part of the world was becoming more and more easily accessible. Getting from London to India was just a matter of purchasing a ticket to the right ship. Here and there were happening important developments in the transportation systems. In 1853 first railway was built in India, and in 1869 transcontinental Rail Service started in the United States. And the completion of Suez channel brought oriental countries almost 5000 miles closer to Europe.

       The technical and scientific progress was happening at a remarkable speed. In 1870s several inventions were made that shaped the modern world, as we know it: telephone by Bell, phonograph and light bulb by Edison, cathode ray tube by Crookes. At that time were made such important scientific discoveries as theory of evolution by Darwin (1859) and laws of inheritance by Mendel (1865), periodic table by Mendeleev (1869) and theory of electromagnetism by Maxwell (1873). Many other inventions were not that important, but still made a significant impact – for example, invention of sleeping car by Pullman in 1864 heavily influenced the way people traveled by railroads (Stearns and Langer V.A.1.b).

       The second part of 19th century was far from being an idyllic time though. "Late in the 19th century, the expanding empires engaged in major competitions for influence and control throughout the world. This global struggle was part of the partition and disintegration of some older major empires, like those of the Ottomans and the Chinese"(Stearns and Langer V.A.1.b). Multiple wars raged all over the world: Franco-Prussian war in Europe (1870-71), Civil war in United States (together with Indian frontier wars), Second Anglo-Afghan war (1878-1880), Second opium war (1856-1860), Muslim rebellion in China (1868-1873) (timelines.info) – just to name few.

LITERATURE

       The game that takes place in the late 19th century should not be based on the historical facts alone. Most gamers know the time period mostly not from the history lessons or serious scientific volumes, but from the literature. Fortunately, the literature of

the late 19th century goes very well with the selected game genre. Adventure novels are very popular at that time. Of course, one of the most famous adventure writers of that time was Jules Verne. He was one of the people who created the image of the 19th century adventurer. His works published in the 1860s-1880s:

1863:   "Five Weeks in a Balloon"

1864:   "Journey to the Centre of the Earth"

1870:   "20,000 Leagues Under the Sea"

1875:   "The Mysterious Island"

1886:   "Robur the Conquerer"

Other important adventure novel writers of the period were Robert Louis Stevenson ("Treasure Island", 1881), Henry Rider Haggard (" King Solomon's Mines",1885) and Louis Bussenard ("Diamond Thieves").

GRAPHIC LOOK AND FEEL

Overview

Victorian period starts roughly in 1830s and lasts to the early 1900's. The period is divided into three styles. Early part of the period was highly interested in a medieval or Gothic Revival in all aspects of architecture and design, the mid- and late-Victorian period was a time of the lush, abundant, cluttered look. The look that nowadays is commonly associated with the term "Victorian" (Landow). Since the game Adventurers' Club takes place in 1875, the graphic style of the game corresponds to this "High Victorian" style.

The Victorian Era is characterized by romanticism in all areas of the arts. Visual arts, music and literature all showed a strong concern filled with emotion. Victorian designs are typically highly ornamental (Victorian Bazaar). The print world is saturated with the use of borders, corners and decorative alphabets. The "sixties" of the Victorian Era (the years 1855-1880) were also highlighted by finest and most significant contributions to the wood-engraved book and magazine illustration in England. To capture the romanticism of the period the visual style of the Adventurers' Club has to

adhere to the style of the times, be it in typography and design, or illustration and photography.

Illustration

Illustration was particularly important to the Victorian Era. The industry of illustrated books, newspaper articles and postcards is thriving at that period in time. I would like the look of NPCs in Adventurer's Club to be based on colored illustrations of the people of the times. In 1888 Racinet published full color pictorial history of the western costume; this work was technologically and esthetically very important to the period, and I would like some of my NPC characters to be based on Racinet's illustrations.

Typography

During the "High Victorian" period there is a mixture of the "transitional" and "modern" typographic styles in print design. One of the best examples of the "transitional" style in typography is Baskerville type family. ""Transitional" type is called so because of its intermediate position between old style and modern. The distinguishing features of transitional typefaces include vertical stress and slightly higher contrast than old style typefaces, combined with horizontal serifs"(Phinney).

Baskerville is particularly strong when it comes to legibility of paragraph text. The almost horizontal serifs make it easy to read. In Adventurer's Club Baskerville is used for most of the "body" type of the game (see App. D: fig. 18). To add some romantic notions of the times, some of the titles in the game will be using Old English typeface. Old English has a decorative feel, that adds greatly to the atmosphere of the late 19^(th) century England (see App. D: fig. 19).

Photography

For the 1870's photography was still new and exiting. It was romanticized mixture of art and science, and at the same time it began to unravel its' social importance. John Thompson was one of the first photographers to document the street life of London of 1870's. His book, that he developed together with a journalist Adolphe Smith is the first photographic social documentary work (Marshall). A lot of photographers of the period made it their priority to travel and photograph the world. Photography was a very important part of the periods' aesthetics, and not to include it in the game's world would be a mistake. Photographs in Adventurer's Club serve as illustrations to each of the

many places that a player can visit. There are some online resources that have great collections of photographs from the High Victorian period.

DEVELOPMENT

The prototype system will consist of 3 game modules. The platforms for those modules are as follows: (1)Desktop, (2)Handheld,(3)Web. For all modules, information about the game state is collected in a persistent storage system (relational database) on the game server.

DESKTOP

The desktop part of the game is developed using Macromedia Director MX. This development platform was chosen because of the fact that Director provides powerful tools for working with multimedia, and at the same time is a solid programming platform.

Since Director programming language Lingo has some object-oriented features (though, unfortunately, a very rudimentary set), it was decided that the desktop part should be developed using OO[11] methodology. This methodology gives me several important benefits, such as:

- improved code structure;
- higher flexibility and reusability;
- easier debugging.

To perform design, I've started with use case analysis. By creating several scenarios of user interacting with the system, I was able to identify candidates for classes (see App. C: Fig. 14 and Fig. 15). As the next stage, I've started designing classes, using class diagram and object interaction diagrams (see App C. Fig. 16) as handy tools to help me organize my thoughts.

The classes used in the desktop module can be separated in two groups: domain model classes, which represent certain objects in the game – player, cities, collectible items, transportation routes etc. – and visual representation classes, which are responsible for user interface. The later were implemented using Director's behaviors, which are modular pieces of code attached to visual objects (sprites).

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[11] Object Oriented

The question of data exchange with the server is very important. Since the game world is highly dynamic and is generated anew for each game, the client would need to receive from the server complete world description, and to receive regular updates later in the game. The client would also need to update the server with fresh information each time a player's status changes significantly.

The data transfer happens over HTTP protocol, as it is easy to implement, and with highest probability will be available for most users. For the data format, I chose XML. Its structured nature makes it easy to retrieve objects information. The client will obtain data from the server by calling a server-side script, which will return XML file.

HANDHELD

Handheld will be used as a "magnifying glass in the hands of a detective". A player will have to deal with images and hyper-linked text for the most part (see App. B: Fig. 11 and Fig. 12). A player will have to come up with "answers" and after the sync with the desktop those "answers" would affect the game status of other modules.

AvantGo[12] will be used to submit information to the player and to get back solutions from the player. AvantGo is a web-based technology that allows a user to get specially formatted web sites ("channels") on his/her PDA or smartphone. Adventurers' Club will set up a "channel" on the AvantGo server, and players before starting the game will have to sign up for that channel.

AvantGo supports HTML Forms[13] and JavaScript[14]; those will be the tools for creating content for Handhelds in Adventurer's Club.

WEB

Web module of the game will serve as an online community of adventurers'. Here players can compare their scores, and it is also the place where players can trade their collectable items during the game.

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[12] www.avantGo.com

[13] HTML - mark up language

[14] JavaScript – scripting language

GAME SERVER

The server plays a very important role in the game system – it acts as a link between all game modules. The responsibilities of the server include:

- Acting as a persistent storage for game data and player status;
- Generating new game world for a new game;
- Providing data to different game modules;
- Performing different game housekeeping tasks, such as watching for the end of the game conditions, accepting new players etc.

Many parts of the game system will run on the server side; it is necessary to split the server code into several functional modules:

- Core system. This module is responsible for data storage and retrieval (interacting with database), game housekeeping, user management etc.
- Handheld support. This module is responsible for interacting with handheld – providing new data (specific for each player), accepting and processing players' responses.
- Web module. This module is responsible for supporting game website and running trading system
- Desktop support module. This module is responsible for data exchange between server and desktop part.

The modules that will be accessible from outside through HTTP will be implemented using PHP[15]. PHP is an extremely powerful scripting language, which can be used for dynamic generation of HTML web pages and XML[16] files. As a database I will use MySQL[17] server. MySQL works very well with PHP.

The modules that will not be accessible from outside will be implemented in Perl. Perl also works well together with MySQL, so database access will not be a problem.

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[15] PHP -Hypertext Preprocessor (HTML embedded scripting language)

[16] XML – extensible markup language

[17] MySQL - open source database technology

EVALUATION

The system will be evaluated based on the multitude of play-tests, which will be held throughout the development process. Play testers will need to belong to the target audience for the product. Only in evaluating the responses of play testers will I have more or less objective criticisms of the system's victories and failures. It is important for this particular product to start play testing it as soon as possible, and I've already started by play-testing my paper prototype. In the beginning of the development process the play test should deal with the game's interaction system more than with the actual game play. After each play test a questionnaire, focusing on the specific problems of that particular play test, will be distributed among the play testers.

CONCLUSION

The grown up gamers are a unique group of people that is yet to be studied more closely. There is a great opportunity of creating a specific product that answers grown up gamers' needs more closely than what's available on the market right now.

My thesis encompasses a goal of creating a game that is playable over fragmented periods of time. Adventurers' Club is a prototype that attempts to solve that problem. It is a computer game where game-play is situated over 3 different gaming platforms: Desktop, Handheld, and Web. This system allows the player to be engaged in the game-play at any point throughout the day, thus strengthening the immersion.

The development process is well on the way. I have created a project development schedule that helps me to keep on track (see App. E). I'm continuing my visual and historical research, and what is most important I'm constantly evaluating the game-play of the Adventurer's Club.

APPENDIX A: SCREENSHOTS OF GAMES SITED

Figure 1. Grand Theft Auto III

Figure 2. Max Payne

Figure 3. Cubis

Figure 4. Zuma

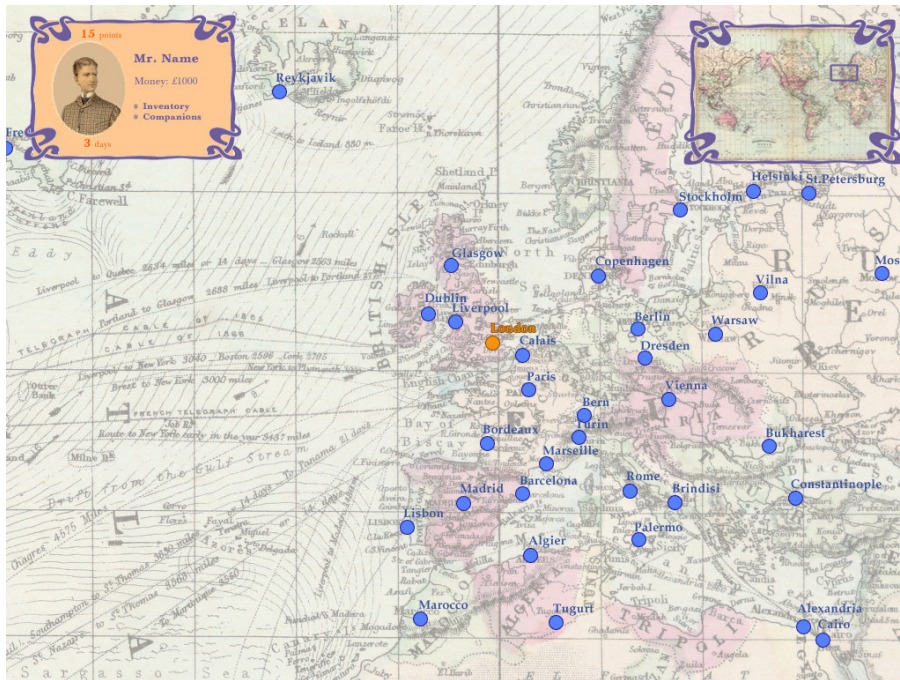# APPENDIX B: ADVENTURER'S CLUB SCREENSHOTS
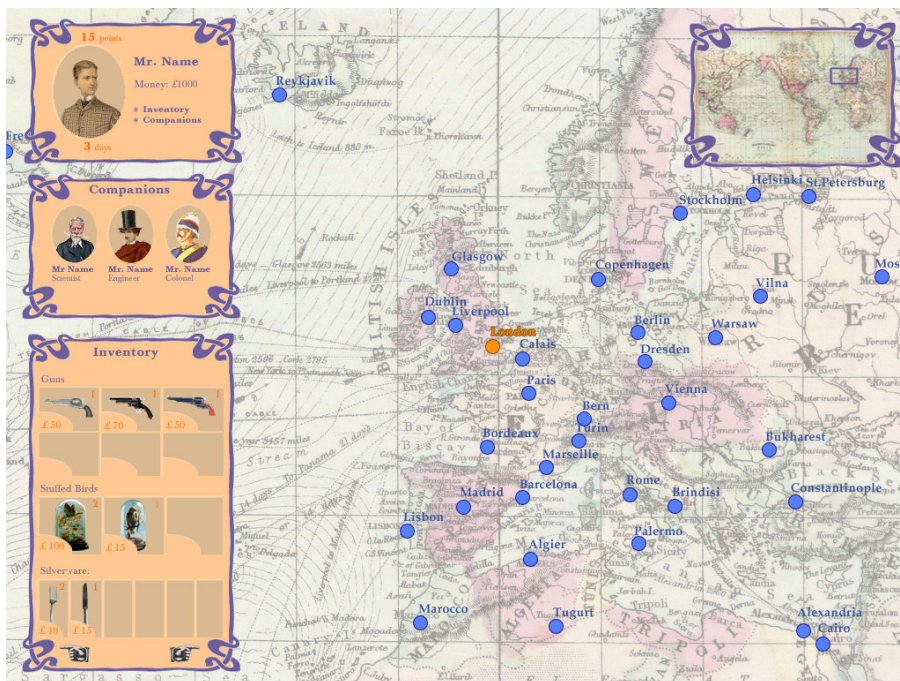

Figure 5. Adventurer's Club Desktop Layout

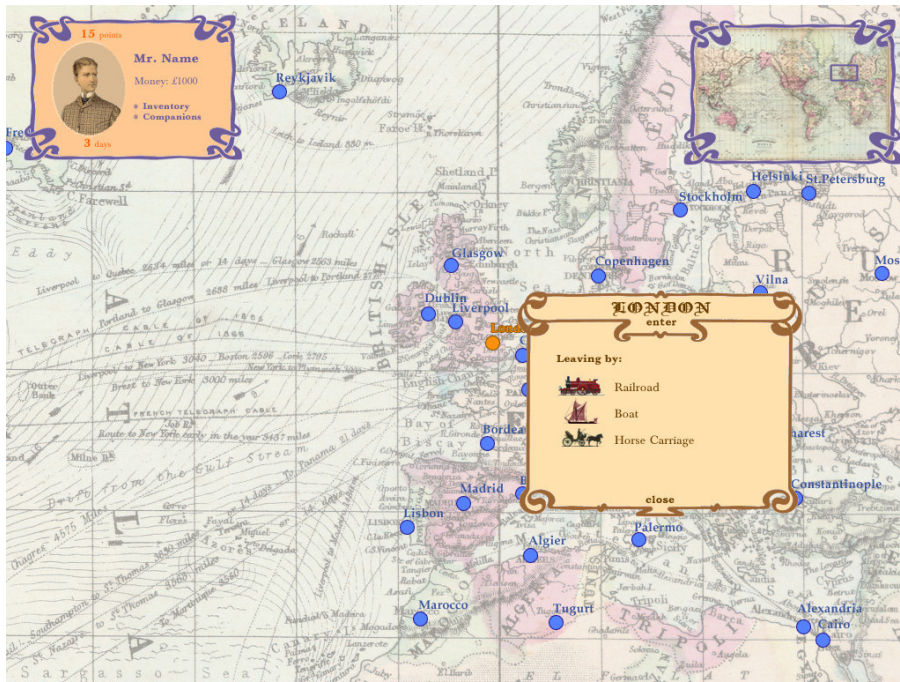Figure 6. Companions and Inventory screens
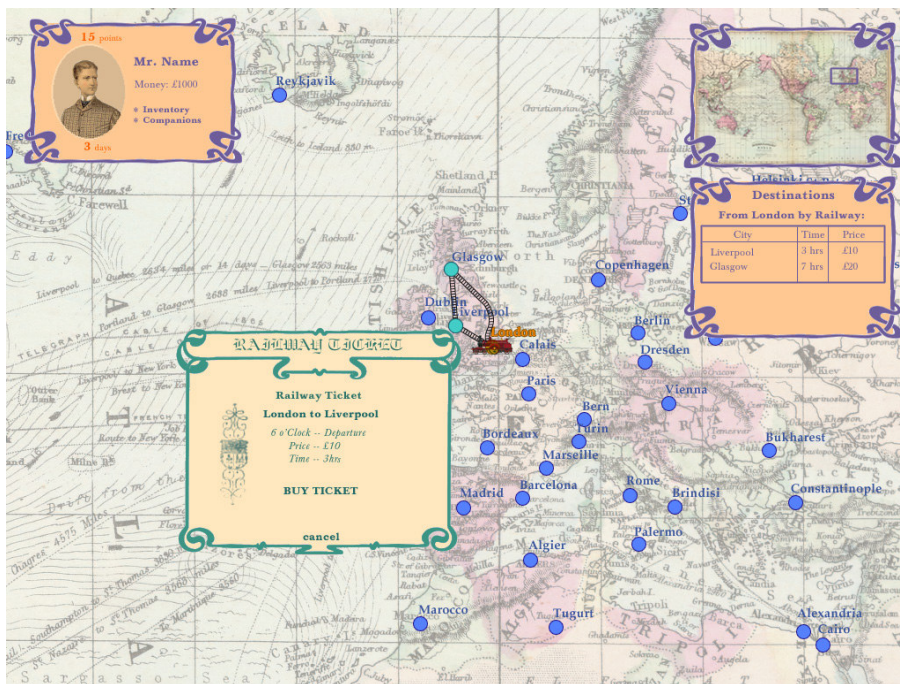
Figure 7. Selecting available mode of transportation

Figure 8. Comparing ticket prices, and buying a ticket

Figure 9. Inside a city

Figure 10. Talking to an NPC

Figure 11. Puzzle on a handheld (screen 1)

Figure 12. Puzzle on a handheld (screen 2)

APPENDIX C: GAME DESIGN AND DEVELOPMENT
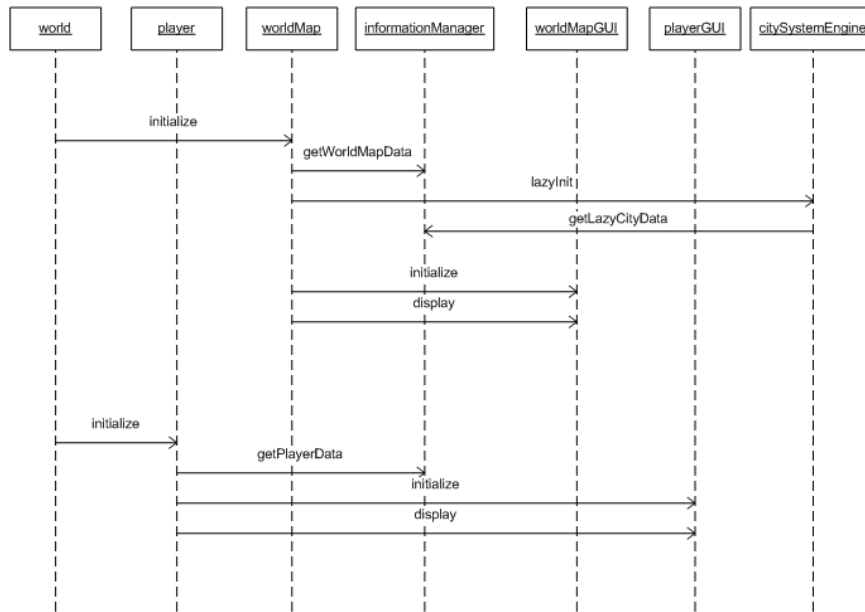

Figure 13. Adventurer's Club: Paper Prototype
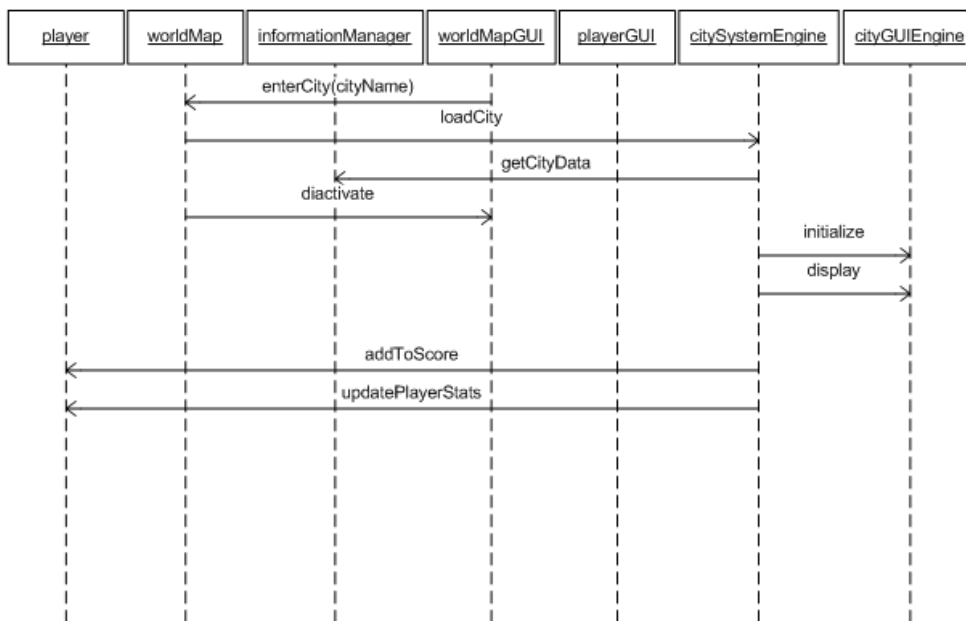
Figure 14. Objects Interaction Diagram - game start

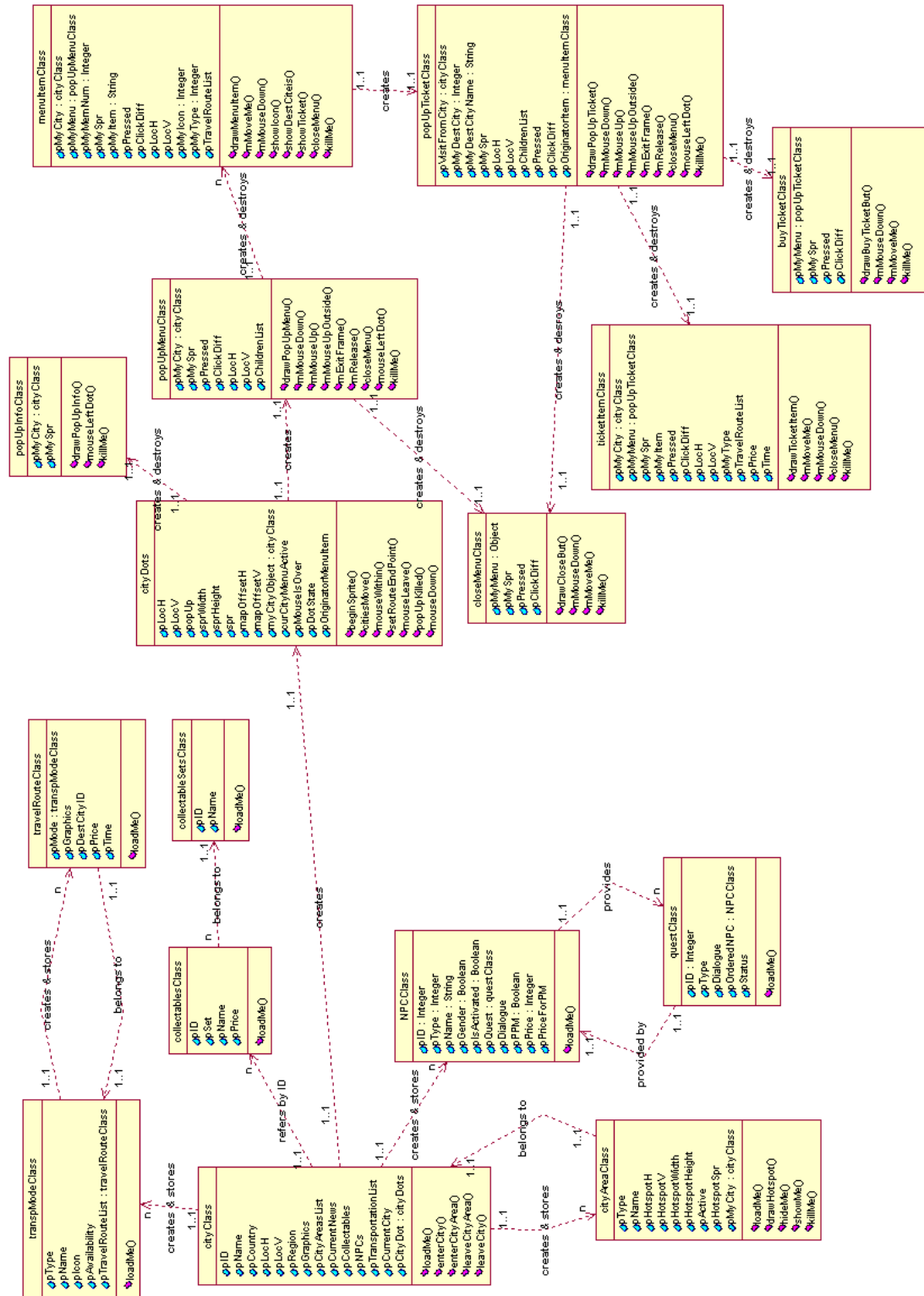Figure 15. Objects Interaction Diagram - player enters the city

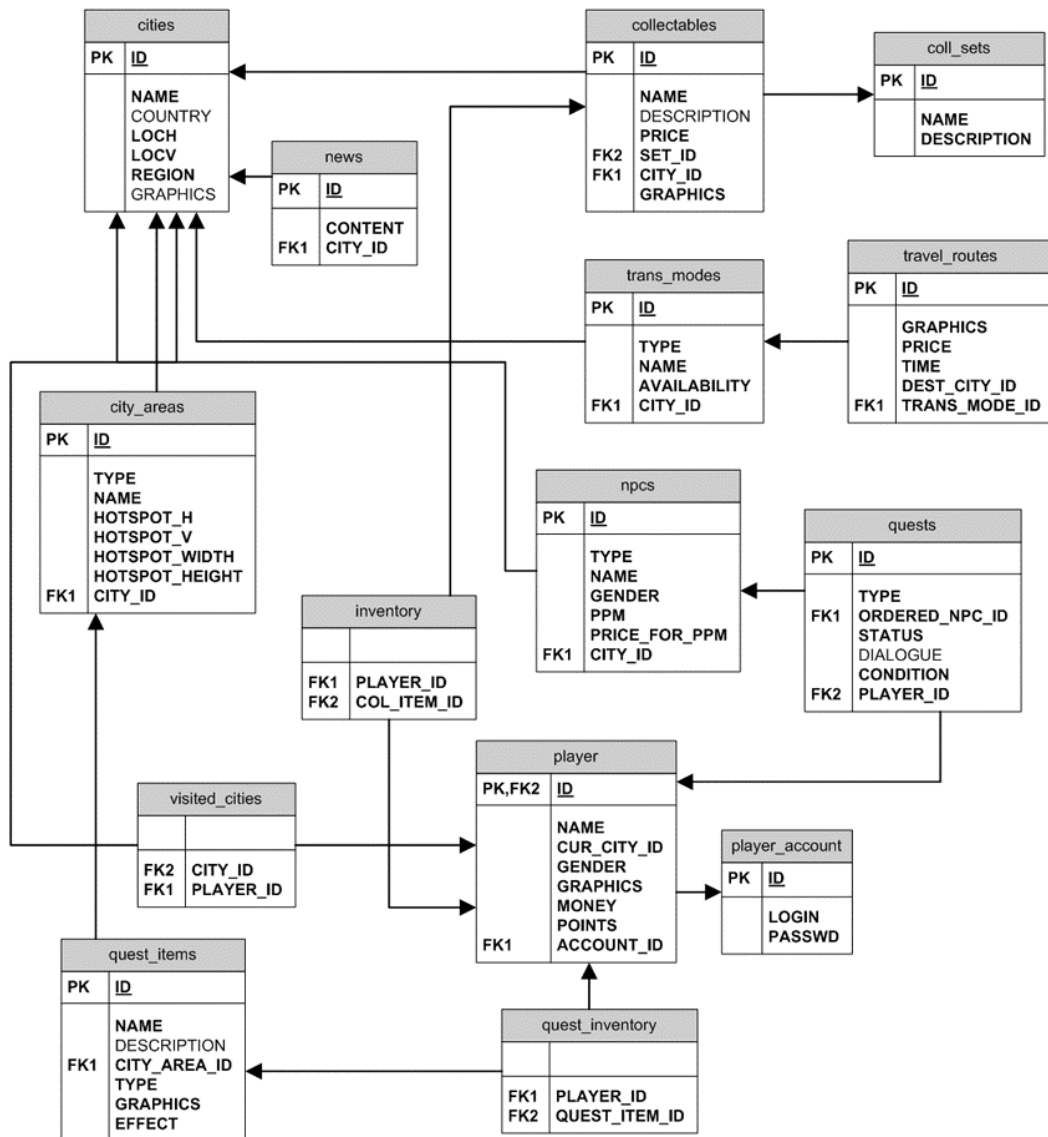Figure 16. Desktop Development: Class Diagram

Figure 17. Database Design

APPENDIX D: VISUAL ESTHETICS OF THE TIME PERIOD

Figure 18. Baskerville typeface

Figure 19. Old English typeface

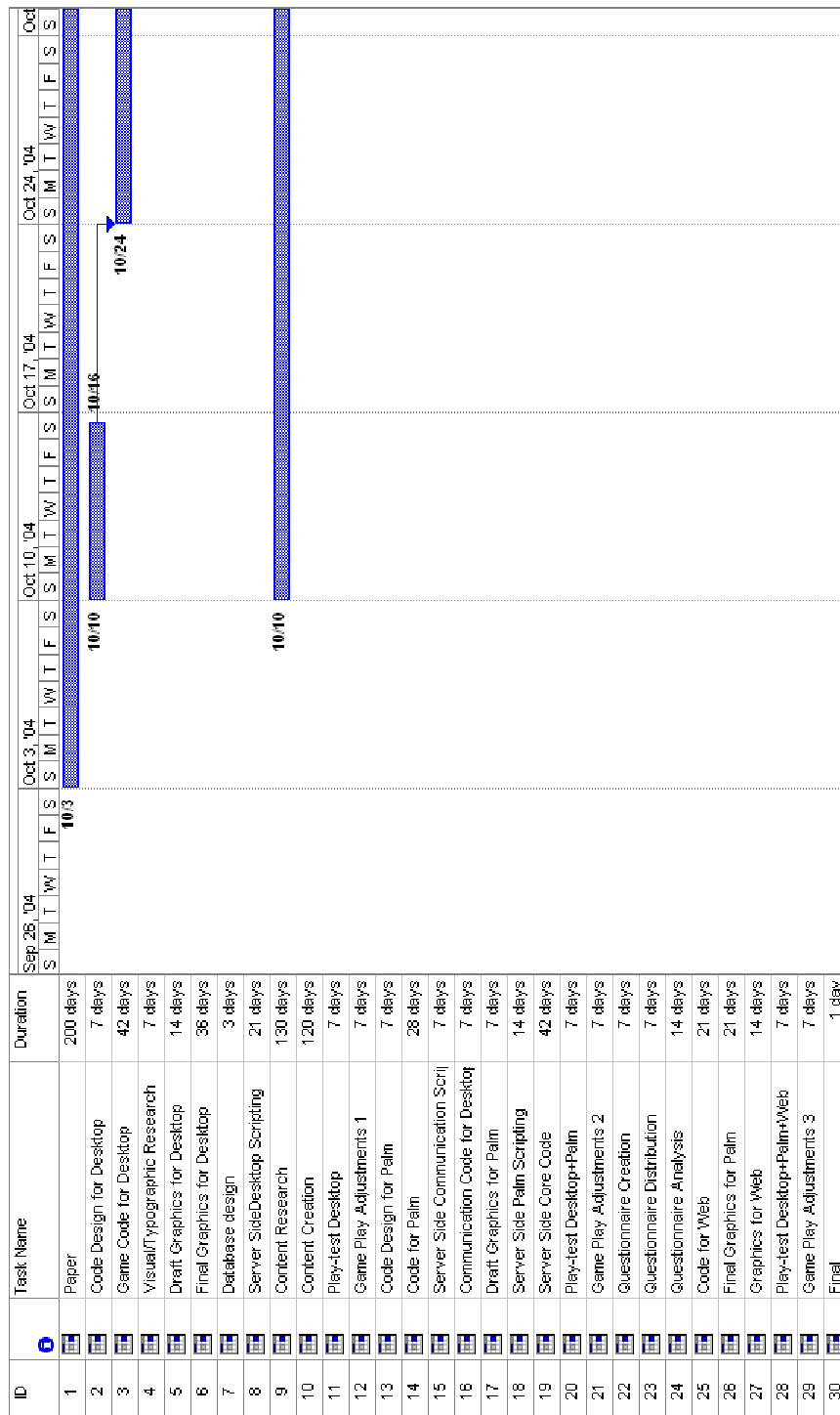# APPENDIX E: PRODUCTION SCHEDULE

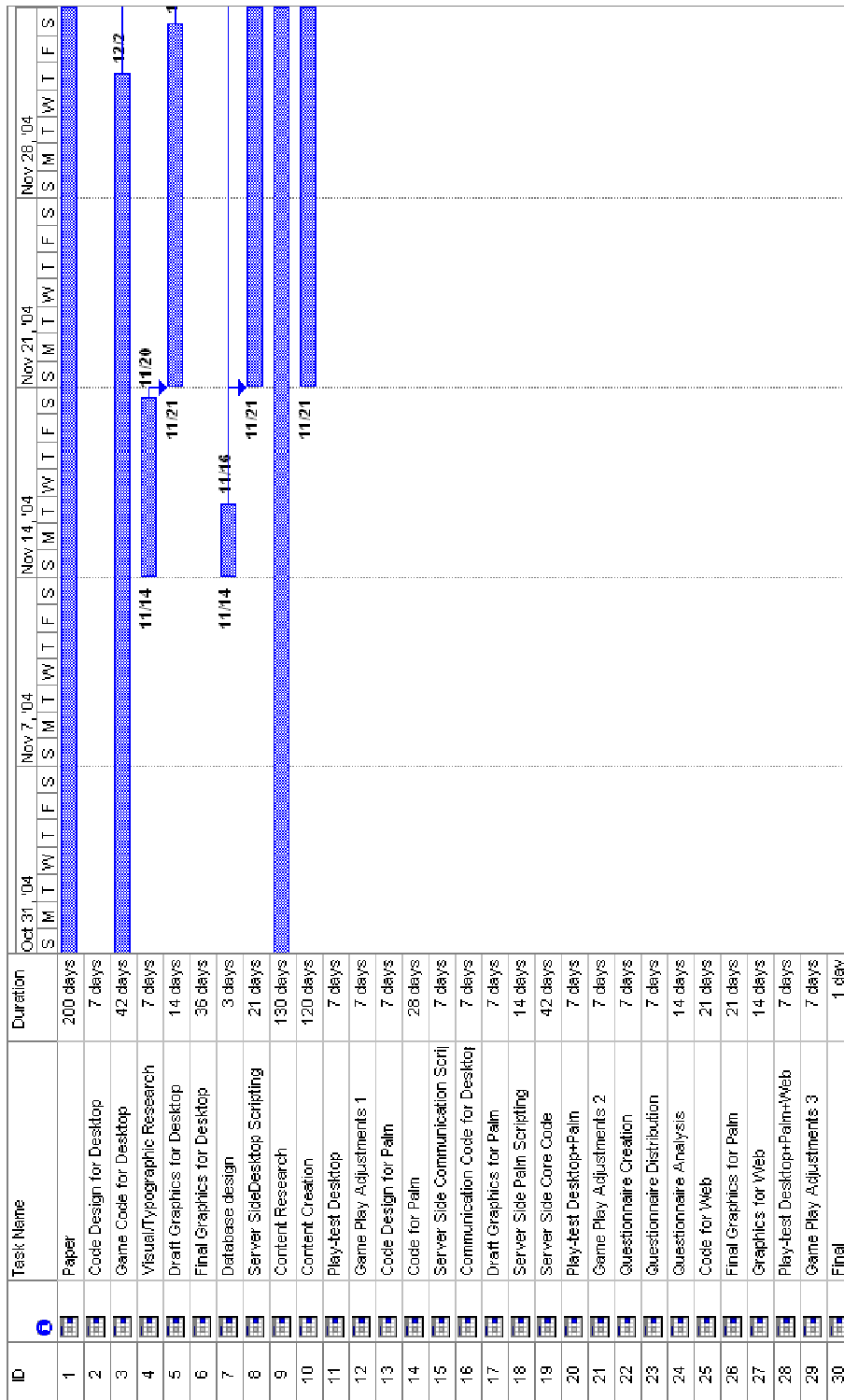Figure 20. Production Schedule: Sept 26, 2004 - Oct 31, 2004

Figure 21. Production Schedule: Oct 31, 2004 - Dec 4, 2004
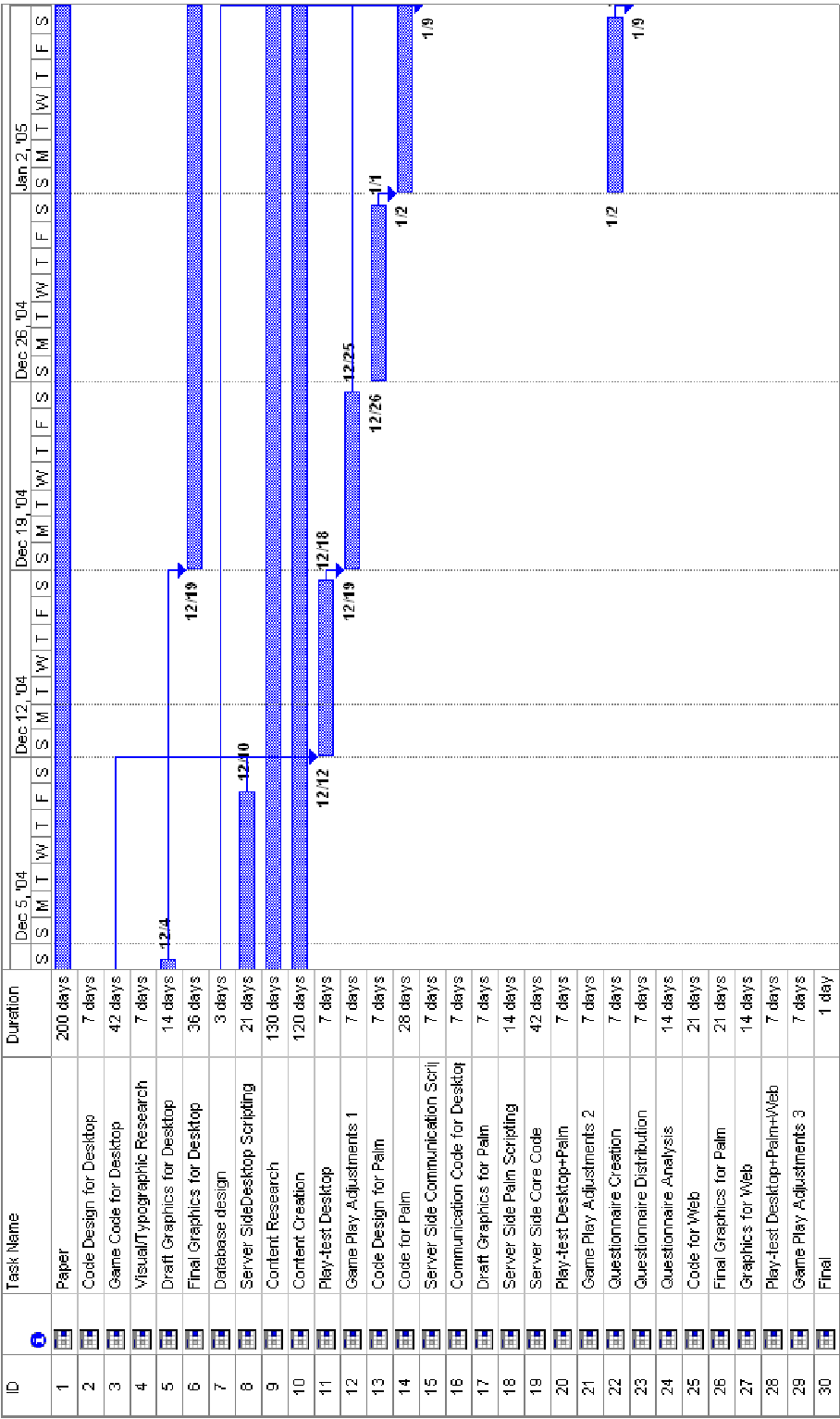
Figure 22. Production Schedule: Dec 4, 2004 - Jan 8, 2005
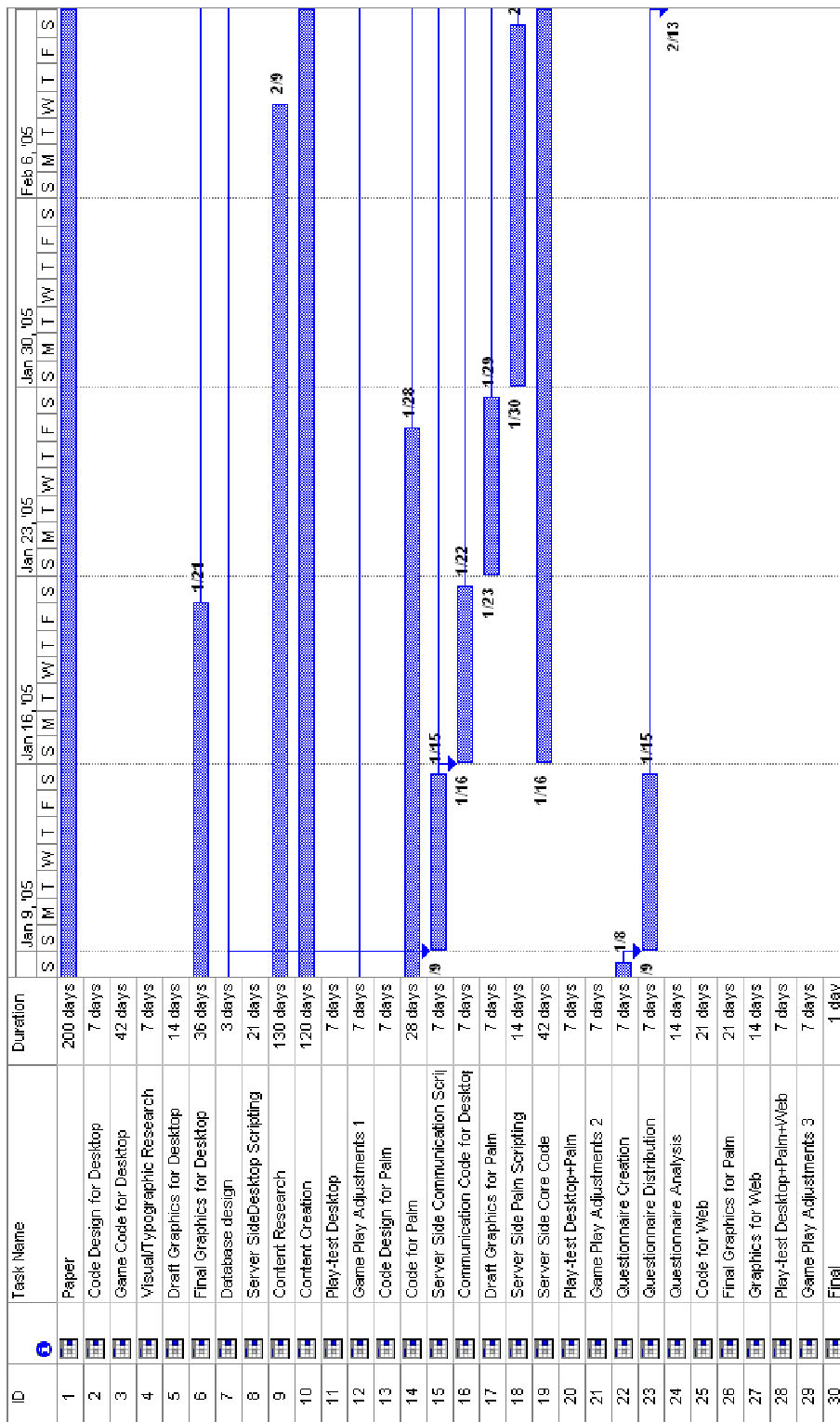
Figure 23. Production Schedule: Jan 8, 2005 - Feb 12, 2005
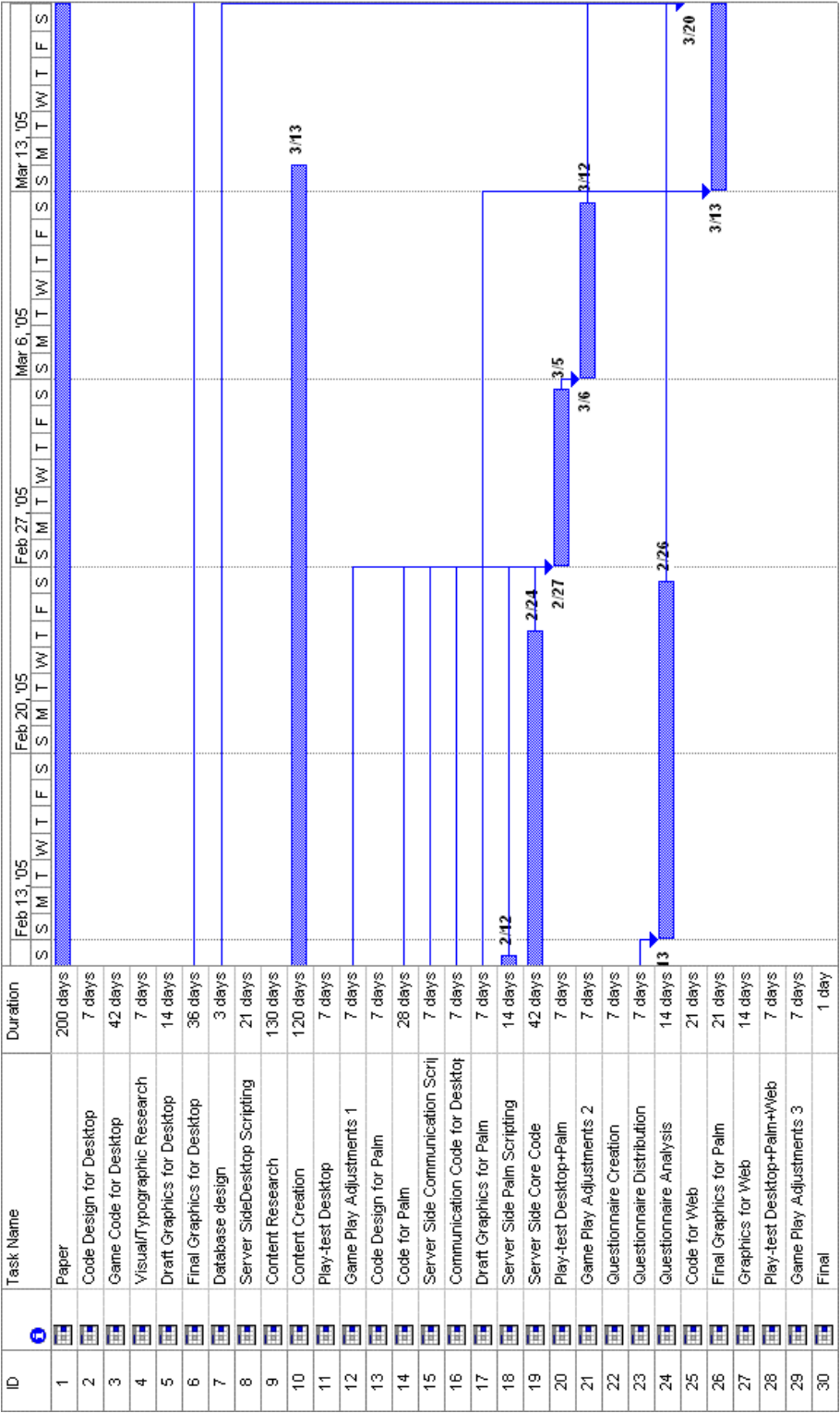
Figure 24. Production Schedule: Feb 12, 2005 - Mar 19, 2005

ID		Task Name	Duration
1		Paper	200 days
2		Code Design for Desktop	7 days
3		Game Code for Desktop	42 days
4		Visual/Typographic Research	7 days
5		Draft Graphics for Desktop	14 days
6		Final Graphics for Desktop	36 days
7		Database design	3 days
8		Server SideDesktop Scripting	21 days
9		Content Research	130 days
10		Content Creation	120 days
11		Play-test Desktop	7 days
12		Game Play Adjustments 1	7 days
13		Code Design for Palm	7 days
14		Code for Palm	28 days
15		Server Side Communication Scri	7 days
16		Communication Code for Desktop	7 days
17		Draft Graphics for Palm	7 days
18		Server Side Palm Scripting	14 days
19		Server Side Core Code	42 days
20		Play-test Desktop+Palm	7 days
21		Game Play Adjustments 2	7 days
22		Questionnaire Creation	7 days
23		Questionnaire Distribution	7 days
24		Questionnaire Analysis	14 days
25		Code for Web	21 days
26		Final Graphics for Palm	21 days
27		Graphics for Web	14 days
28		Play-test Desktop+Palm+Web	7 days
29		Game Play Adjustments 3	7 days
30		Final	1 day

Figure Production Schedule: Mar 19, 2005 – Apr 25, 2005

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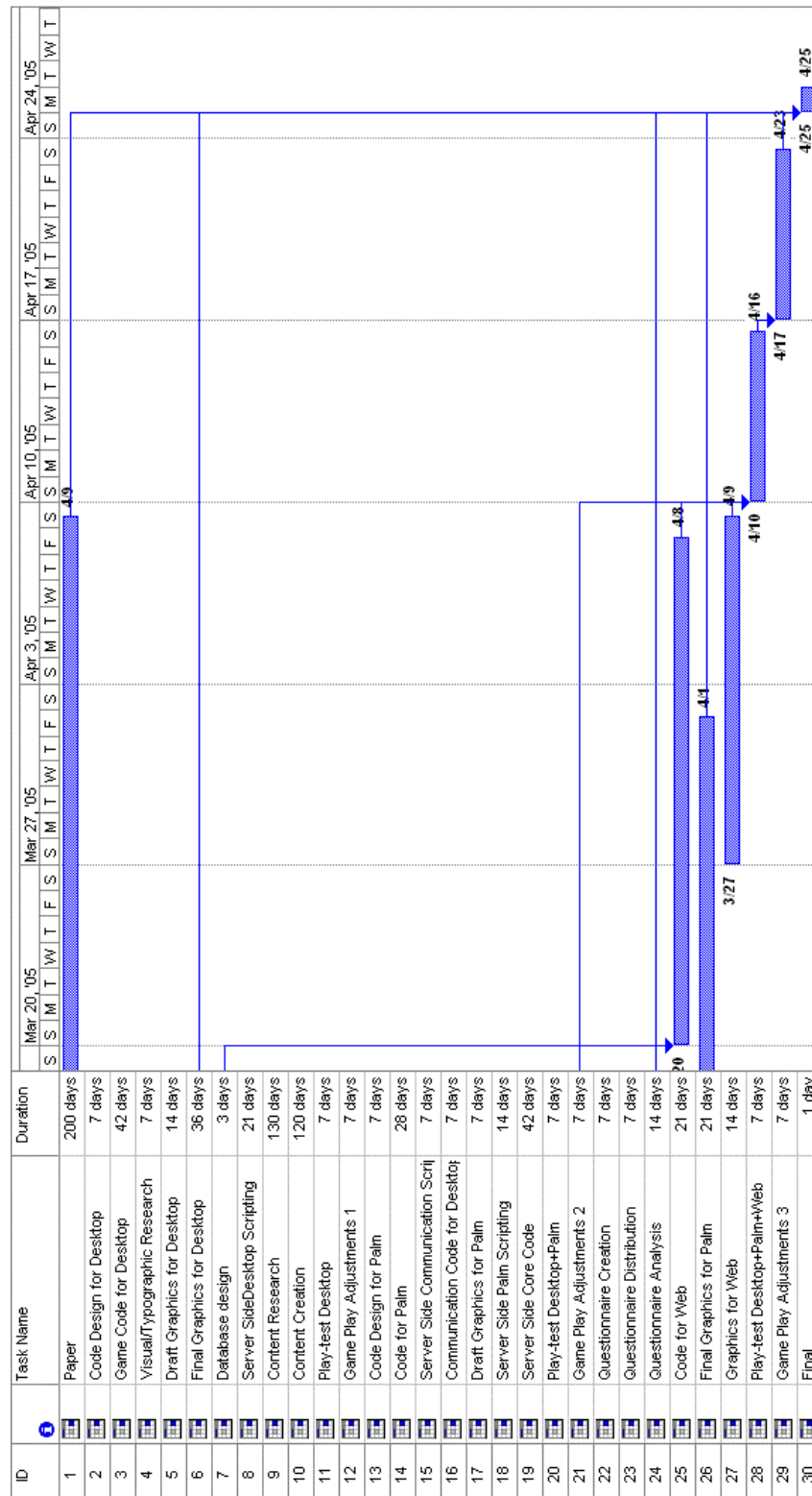
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LUDOGRAPHY

MULTI-PLATFORM GAMES

A.I. Web Game

Puppet Master / Microsoft, 2001

A massive, web-based scavenger-hunt.

> Developed for the movie A.I.
>
> The game was played as if was not a game. Players were searching the web, calling on the phone, interacting with the actors from the game.

Lemonade Tycoon

Publisher: Airborne

Developer: JAMDAT Mobile Canada

Business simulation game

> Players start with a small lemonade stand, and are aspiring to become multi-millioners. The same game is playable on both PC and Palm. So players are able to transfer data from their home computer, play on the go, and then at night transfer the data back to the desktop. Another aspect of the game is that the high scores of all the players in the "career mode" are displayed on the Lemonade Tycoon Stock Exchange:
>
> http://www.lemonade-tycoon.com/
>
> The game is an example of an attempt to make a multi-platform game, which will allow continuing playing the same game session on multiple platforms.
>
> "Lemonade Tycoon" provides the same gameplay on both desktop and handheld.

Majestic

Anim-X (published by Electronic Arts), 2001

Pushed the boundaries of a computer game with additional interaction.

> "Majestic" attempts to achieve greater immersion by using real-world means of delivering information to the player, such as: e-mails, IMs, phone calls etc.
>
> This game is another example of using several "platforms" (in this case – means of communication) to increase immersion.

DIGITAL GAMES

Bejeweled

Popcap Games, 2001

       "Bejeweled" is an extremely popular and addictive puzzle game, in which the player should assemble colored gems in groups of the same color.

Grand Theft Auto III

Rockstar North, 2001

       "GTA 3" is an adult-oriented action game. All elements of the game were tailored to please adult gamers – the plot, revolving around criminal activities, graphical gore and blood, situations involving drugs and prostitution, sexual innuendoes and language.

Max Payne

3D Realms, 2001

       Being an adult-themed FPS, the game is a good example of a "standard" way to make a game targeted on mature audience. The game is full of blood and gore, drugs and violence, all depicted in a very detailed and realistic manner.

There.com

       "There.com" is a modern MUSH (Multi User Shared Hallucination). It is a place where people can hang out, chat and socialize with other participants.

Civilization (series)

MicroProse, 1991

Sid Meier

       "Civilization" is one of the best turn based simulations/strategies. This game makes player to keep on playing by constantly providing new abilities and rewards. The game also serves as an example of making gameplay interesting by providing player with several axes of development and giving the player several different ways to win.

EverQuest

Verant Interactive, 1999

       One of the most popular MMORPGs, the game also is an interesting example of an underground economy spawned by the game in real world. The players at one

point were selling different game objects (items, avatars etc) on online auction
sites for real money.

Oasis

Master Mind Video Games, 2004

Fast strategy gaming.

Oasis is an example of a strategy game with randomly generated "levels" and
high replay value.

Sid Meier's Pirates

Firaxis, 2004

This game was the most serious obstacle, which almost prevented me from
completing my paper on time. It is an example of strategy game set in a historical
setting, with an emergent gameplay and several axes of conflict.

BOARD/CARD GAMES

Magic The Gathering

Publisher: Wizards of the Cost, 1983

Game Designer: Richard Garfield

This game started the genre of collectable cards gaming. Besides being a great
game, for me it was especially interesting because the designers of "Magic" were
among the first who realized the problem of grown-up gamers departing from the
game, and attempted to solve it by introducing an online version of the game.

Ticket to Ride

Publisher: Days of Wonder Inc., 2004

Game Designer: Alan R. Moon

http://www.ticket2ridegame.com/

This game is set in 19th century and also is loosely based on <u>Around The World in
80 days</u>. This board game exemplifies the gameplay based on cross-country
travel.

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from the very first electronic game to what we have today. It has many

interesting insights on the creation and development of great electronic games.

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San Francisco, Calif.: CMP, 2004.

This book features analysis of the formal and dramatic systems of game design.

Authors focus in on important aspects of game design, as well as, prototyping and

playtesting.

The paper prototype of the Adventurers' Club was developed in accordance with

this books explanation of the development of physical prototypes for the

computer games.

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"Written for game scholars, game developers, and interactive designers, Rules of

Play is a textbook, reference book, and conceptual guide. It is the first

comprehensive attempt to establish a solid theoretical framework for the emerging

discipline of game design" (Rules of Play back cover).

This book is a great resource for a game designer. The theoretical framework,

described in Rules of Play, had a major influence on the process of creating rule-

set for the Adventurers' Club. "Emergent behavior", "meaningful play" are just a few of the terms from this book that were paid high attention to during the game design process.

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    "PDA for the Grown-Up Gamers".

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PERSONAL INTERVIEWS

Fortugno, Nick. Personal Conversation. Game designer. October 2004.

Nick is an established game designer and educator. He also agreed to be my

thesis advisor for next term.

We had a discussion on the importance of having the conflict in any game system,

and on the need of having several "axis" of resolving that conflict.

Mersov, Tim. Personal Conversation. Gamer. December 2004.

Tim is a hard core gamer. He has been playing MMORPG games for the past 6

years. The discussion that we had focused in on the game of EverQuest and on

the market of EverQuests' game objects.