Context Project Group 8

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Game Design

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1 Introduction

For each project that follows the Scrum methodology it is essential to have a clear vision about purpose of the project. This document will provide a draft of the overall goals and requirements for the game **Taxi Trouble** that is created for the Computer Games project. This is essential as it helps the project team members to stay focussed on the most important aspects of the project, even while the details keep changing continously during the development. It will do so by assessing who will be the target customers for the project and for which of their needs the product will be developed. Also what will be the most crucial elements of the project to serve the customers needs as well as possible will be defined. With these and other points it will be described how the final product will distinguish itself from the other (already existing) competing products. Finally a concise description will be given with which budget and in what timeframe the project will be developed.

2 Target Customer

First of all an analysis will be given of the target market of the game. The game Taxi Trouble is focussed on entertaining large groups of people waiting together on large events like festivals. Players of the game are supposed to form pairs each competing against all other pairs that are joining the game. In the game verbal communication and the ability to see each other is essential as teamplay is the key to winning the game. Further the game is targeted on players equipped with a smart device such as a smartphone or tablet-pc with *Android* as operating system or players that are at least familiar with the use of a smart device.
The target audience of the game consists of relatively young people with a well-developed responsiveness and insight. This means that in a game the pair of persons for which these skills are developed the best will have the best chances of winning the game. The age category for people that are most suited to like the game the most is therefore estimated to consist of people between the age of 12 and 40 years. Further the target customers consist of both men and women, so the game is enjoyable for both genders. Also the cultural and educational background of the players is not of major influence on the capability to play the game, though it might be helpfull to have a basic knowledge of the English language.

3 Customer Needs

In this section explanation is given for the costumer needs that this game product will fulfill. The Game is designed to entertain the group of people, large or small, who are waiting for a short period of time in a common place. When Costumer plays a Game often participants are looking forward to experience sense of competitiveness, interaction and collaboration. This game has been designed to consider all these needs but moreover to make costumer be totally engaged while playing the game. The product ensures that the users can start playing the game without a time-consuming setup or a long time to learn the rules of the game. It as well does not require more than a smart device that most people own nowadays.

3.1 Basic Needs

Costumer can fulfill some of the basic needs by playing this interactive multi-player game, These basic needs are as follows:

- Gaining knowledge of map reading and navigation
- Gaining and Improving their skills
- Feeling competent
- Preserving through hard times
- Managing danger

- Competing for rewards
- Cooperating for rewards
- Satisfying the senses with pleasant inputs such as sights ,sounds ,etc
- sense of responsibility towards their partner

4 Essential Elements

This next section describes the elements of the game that are essential for fulfilling the user needs by giving a description of the most vital elements of the game. The Game takes place in a city. Because of the low amount of people using a taxi, this city has a lot of rivaling taxi companies. The situation has gone so bad, that taxi's actually chase each other to steal passengers. The game is played in teams. Every team has one taxi. The goal of each team is to serve as many passengers as possible.

4.1 Competitive Elements

There is always only one passenger in the game. This means that, if you want to drive the passenger, you have to get your taxi to him before all other taxis. Once one taxi has reached the passenger, it has to bring the passenger to his destination. However, other cabs can try to steal the passenger by bumping into the taxi in which the passanger is sitting. The cab that eventually gets the passanger to the destination on time, earns points. This gameplay element results in all empty taxis chasing the one taxi with the customer. This chase is essential because of it competitive nature. It fulfils the customers' need for competition.

4.2 Random Elements

Allong the way of chasing and being chased, taxis can collect power-ups on the road. These power-ups will enable the taxi to perform a special action once activated. A simple example of a power-up would be a speed boost, temporarily increasing the speed of the taxi. An other example could be temporary invisibility, which could be used to escape a car chase or to sneak up on a taxi that has a passenger on board. These power-ups are randomly distributed throughout city. This fulfils the customers' need for a unknown factor in the game.

4.3 Co-operative Elements

The game fulfils the customers' need for co-operation through the emphasis on communication in the teams. Each team consists of two players: one Driver and one Navigator. The Driver controlls the taxi. It is his job to manouvre through the traffic to bring passengers to their destination. The Driver can only see the direct vicinity of the taxi. This means he can travel down roads, but he has no way of knowing where he is going. This is where the Navigator comes in. The Navigator has a live map of the city that displays the current location of the taxi, the location of power-ups and the location (or destination) of the passenger. It is the Navigator's job to guide the Driver to the right locations. This leads to a need to communicate. The Navigator is also the only player in the team that can activate power-ups. For a power-up like a speed boost, for which the time of activation can be crucial, it is essential that the Navigator and the Driver are co-operating. As a consequence of the aforementioned game mechanics, each pair is forced to communicate as well as possible to win from the pairs they are competing with.

5 Primary Deifferentiation

5.1 Introduction

The product that we are developing has a number of properties that differentiates it from alternatives already on the market. This differentiation takes place on various levels, from a very conceptual level to a technical level. The following passage will serve to highlight the most differentiating aspects of our product, to explain what exactly makes these aspects different from existing products and why this is significant.

5.2 Comparison to non-computer games

Before making the obvious comparison between the product and other computer games, it is worth considering that the product can also be compared to non-computer games. A very important aspect of the game design is that the game will be played by a group of people that have to be in the same room and have to interact verbally. This aspect of the game design makes the game setting and the game dynamics very similar to traditional games, such as board games. The main point of differentiation from traditional games is that while the human interaction is similar, the gameplay possibilities are virtually endless due to the virtually endless capabilities of computers. The gampeplay of our game would simply be impossible to implement in a non-computer game.

5.3 Comparison to computer games

There are two computer games that share some features with our game. The first is *Taxi Driver. 2*[1]. *Taxi Driver 2* is mainly similar because our game shares the same premise, namely: the player controls a taxi and has to pick up and drop off passengers. There are quite a few points of differentiation: our game will support multiplayer, feature much more fast-paced gameplay, and will have a driver and a navigator working together.

The second game that shows similarities to our game is *Spaceteam*[2]. *Spaceteam* is similar because the game shares an important gameplay mechanic with our game. Both games have two players in a team that cannot win without communicating verbally with each other. In *Spaceteam* this comes in the form of shouting Startrek-like commands to each other, and in our game this consists of the navigator shouting directions to the driver. Where the games differ is in basically all other aspects. Apart from the mentioned similarity there is no overlap in gameplay, nor is there in theme.

5.4 Technical aspects that differentiate

Taxi Trouble differs from most other Android games in the way that it handles multiplayer. There are very few real-time multiplayer games for mobile, and even less that support 4 or more players. Implementing the multiplayer of our game will be one of the most difficult technical challenges of the project. At the same time, the fast-paced real-time multiplayer is perhaps the best differentiation point of the game, offering a gameplay experience that is usually only offered on non-mobile gaming platforms.

[1] `https://play.google.com/store/apps/details?id=manastone.game.Taxi.GG`
[2] `https://play.google.com/store/apps/details?id=com.sleepingbeastgames.spaceteam`

6 Timeframe & Budget

In this section it is described what the Timeframe and the budget for our project is.
The time frame that we are given for this project is 10 weeks. This is basically 28 hours (1 EC) per week. The next table is the timetable [3] given for the deliverables of our project:

08.05.2014	Product vision - Draft
15.05.2014	Product planning - Draft Emergent architecture design - Draft 1 ...
16.05.2014	Product vision - Final
23.05.2014	Product planning - Final
30.05.2014	Input for software quality evaluation by SIG - First version
19.06.2014	Emergent architecture design - Draft 2 Final report - Draft ...
20.06.2014	Input for software quality evaluation by SIG - Final version
20.06.2014	Emergent architecture design - Final Final report - Final ...

The table shows how many days we have to finish every deliverable. After every week we should deliver a prototype of our game.

There is no financial budget for the project. The only things that can fall under this subject is the Android devices that we have and the ones that we can borrow to test our product and all the man hours we are going to put in the project to achieve our end product.

[3] Planning Games Project V2.1