**Game Design Document**

**Esports Simulator**

By Wesley Cats

**Synopsis  
Storyline & Goal**The player has 1 goal in life, becoming the best in esports. Because the player just started to live on his/her own, managing needs and finances became a reality and a challenge on the road to be number 1 in the world.

**Target Audience**The game is mainly focused on males between the age of 16 and 34 that want to experience the life of a professional gamer.

The statistics and demographics of the Esports Trend Report by GlobalWebIndex show that this group is 73% of all esports audience. This is important since the game is made while on an internship at Virtuocity, a gaming hub in Qatar. Virtuocity hosts esports tournaments for a variety of games which attracts many gamers.

Most of the audience that comes to Virtuocity fits in the target group as well. This is concluded by surveys I conducted on customers at Virtuocity.

**Game World**Every location represents the action the player is performing at the moment as well as the progress of the player. By keeping money value in mind when choosing locations, the player can easily recognize his current progress.

**Areas  
*Accommodations***   
Accommodations ensures that the player has a resting and training area. The higher level accommodation the player has, the more expensive the accommodation looks and the higher training results the player gets.

**Garage**  
The garage is the starting accommodation of the game.

A garage represents an unnatural living and gaming area. The area is the opposite of luxury if looked upon from a gaming and living perspective. This is one of the reasons why the player will want to move towards a better accommodation even if it has a higher rent price.

The second reason why the player will want to move out of the garage is, that the garage has no influence on the player’s growth in game.

The player will feel that he has to invest a lot of time till he finished the game and that he is at the start of the game.

**Apartment**The apartment is the least expensive accommodation for the player to move to.

An apartment represents a natural living and gaming area. It is not luxurious in comparison with other accommodations that are available (in real life), but affordable.

The player will feel okay that he can afford this accommodation and is stimulated to be able to afford the other accommodations as well. He will feel that he makes some progress, but still has a long way to go to complete the game.

The apartment has little influence on the player’s growth in game.

**House**The house is the second most expensive accommodation for the player to move to.

A house represents a standard accommodation to live and game in. It is more luxurious in comparison to the garage and apartment, but is not a high-end accommodation. It is only affordable for the players that have a reliable source of high income.

The player will feel good that he can afford the house and will want to keep playing be able to complete the game. He will feel that he makes good progress and starts to come closer to the end-game stage.

The house has reasonable influence on the player’s growth in game.

**Luxury Apartment**The luxury apartment is the most expensive accommodation for the player to move to.

A luxury apartment represents a high-end accommodation to live and game in. It is only affordable for the players that have a reliable source of very high income.

The player will feel very good about himself and the choices he made to be in the position he is in at this moment of the game. He will feel that he made very good progress and is at the end-game stage.

The luxury apartment has high influence on the player’s growth in game.

***Workplaces***  
There are different levels of workplaces the player can work at. A higher level workplace gives higher salary. A higher level workplace can be achieved by working a certain amount of hours at the current workplace.

**Fast food restaurant**Working as cook at a fast food restaurant gives the lowest salary.

Working at a fast food restaurant doesn’t result in high salaries (managers excluded) and that is why this is the first level workplace of the game.

The player will not feel important and doesn’t earn much while working here, so he will want to be promoted as soon as possible.

**Game store**Working as clerk in a game store earns the player a medium salary. Working at this workplace also improves game knowledge.

Knowledge of games is required when working in a game store, but you don’t have to be an expert. That is why it has a higher salary than working at a fast food restaurant.

Even though the player will feels good about this workplace, because it relates to games and he will be payed a decent salary, he will start looking for different ways to make money.

**Game studio**Working as game tester earns the player a high salary. Working at this workplace increases game knowledge and mechanics.

A game tester needs to know how to explain certain aspects of game design and mechanics. This is not an easy task and that is why it has the highest salary.

The player feels really good about this work place because of the skills and salary gained by working, but already has found an extra way to earn potentially more money at this moment of the game.

**At home**Working as game coach results in the player working at home. The job earns the player the highest salary and increases game knowledge, mechanics and team play.

***Tournaments***Tournaments are being held at a gaming hub called Catscity. Catscity has a futuristic design.

***Training***When performing the training courses, the player will be in a class room.

**Gameplay**The core gameplay consists out of managing different variables including but not limited to, hunger, thirst, money and skills, to become the best esports player in the world and be able to pay rent every month.

**Mechanics  
*Actions***  
Within the game the player can perform different actions in a *turn-based style gameplay*. When an action is performed, the player needs to wait till that certain action is completed or can stop the current action by pressing the action bar that shows what the player is doing at the moment.

**Sleep**   
If you don’t have enough energy in real life, you don’t perform well. That is why **tiredness** works the same in this game. Tiredness will get debuffed when it is at or above 100%.

The reason why tiredness in the game, is to limit the options that the player can take every month. Because of that the player needs to make choices with more thought and strategy to be able to keep paying rent every month, whilst still developing his skills to get the highest rank in the game.

Results  
per 2 hours -> **-25% tiredness**

**Every action (except sleep, eat, drink and contest) increases tiredness. When tiredness is at 100%, all actions will be debuffed by getting 50% of the original results from *work (money & skills), training (skills), streaming (money) and battles (fame & skills).***

So for example if you want to work:   
*tiredness = 80%  
thirst = 15%  
hunger = 20%  
work level = 1 (+10% tiredness, +$10 per hour)*

*You start working for 8 hours, which will raise tiredness level above 100% (80% + 10% x 8 hours = 160%). At 2 hours of work the tiredness level is already at 100% (80%+ 10% x 2 hours = 100%), so every working hour after the 2nd, will get the 50% results debuff. Working (level 1) normally results in +$10/hour, but will now result in +$5/hour.*

**Eat**There are multiple qualities of food, that have different results in the decrease of **hunger**, for the player to choose from.

The reason there are multiple qualities of food to choose from, is to give the player a chance to take a choice depending on his situation. Hunger is added to create a bigger challenge around money (especially in the beginning of the game).

Results  
bad quality -> **-25% hunger, -$25**standard quality -> **-50% hunger, -$50**  
good quality -> **-75% hunger, -$75**  
excellent quality -> **-100% hunger, -$100**

**If hunger is 100% or above, every action that increases tiredness, will increase its original producing amount of tiredness by 50%. So where work (level 1) would normally require 10% energy, it requires 15% energy when hunger is 100% or above. This effect is doubled when thirst also reaches 100% or above, resulting in work (level 1) requiring 20%. This rule is applicable to work, training, streaming and battles.**

**Drink**There are multiple qualities of drinks, which have different results in the decrease of **thirst**, for the player to choose from. Thirst is added to create a bigger challenge around money (especially in the beginning of the game).

The reason there are multiple qualities of drinks to choose from, is to give the player a chance to take a choice depending on his situation.

Results  
bad quality -> **-25% thirst, -$25**standard quality -> **-50% thirst, -$50**  
good quality -> **-75% thirst, -$75**  
excellent quality -> **-100% thirst, -$100**

**If thirst is 100% or above, every action that increases tiredness, will increase its original producing amount of tiredness by 50%. So where *streaming* would normally require 15% energy, it requires 23% energy (decimals under 0.5 are rounded down, others up) when thirst is 100% or above. This effect is doubled when hunger also reaches 100% or above, resulting in *streaming* requiring 30%. This rule is applicable to *work, training, streaming and battles.***

**Work**   
At the start of the game, work is the only way to earn **money**. While the player works, he is getting *work experience* which is used to unlock higher earning work levels with additional skill points.

The reason there are multiple levels of work for the player to unlock, is the sense of progress for the player and to help the player forwards in the progress of the game.

Results ***Level 1.*** *Fast food restaurant, cook* (default workplace)   
per hour -> **+$10, +1 work experience, +10% tiredness**

***Level 2.*** *Game store, sell* (requires 50 work experience) per hour -> **+$30, +1 work experience, +1 game knowledge, +10% tiredness**

***Level 3.*** *Game studio, test* (requires 150 work experience)   
per hour -> **+$60, +1 work experience, +3 game knowledge, +3 mechanics, +10% tiredness**

***Level 4.*** *Game coach, coach* (requires 350 work experience)   
per hour -> **+$120, +1 work experience, +5 game knowledge, +3 mechanics, +3 team play, +10% tiredness**

**Train**One of the ways to improve your **skills**, is to train. With different levels of training that give you different results and have different requirements, the player can choose how he wants to train depending on his situation.

The skills that currently used in the game are:   
**Mechanics**, used to determine win chance in 1 vs 1 and 5 vs 5 battles and tournaments.

**Team play**, used to determine win chance in 3vs 3 and 5 vs 5 battles and tournaments.

**Game Knowledge**, used to determine win chance in all types of battles and tournaments.

The results of training will be increased by the currently owned house level.

Results

**House level 1**   
***Watching***  
per hour -> **+1 chosen skill, +5% tiredness**

***Course***per hour -> **+3 chosen skill, +10% tiredness, -$30**

***Course+***per hour -> **+10 chosen skill, +20% tiredness, -$100**

**House level 2**   
***Watching***  
per hour -> **+1 chosen skill, +5% tiredness**

***Course***per hour -> **+4 chosen skill, +10% tiredness, -$30**

***Course+***per hour -> **+12 chosen skill, +20% tiredness, -$100**

**House level 3**   
***Watching***  
per hour -> **+2 chosen skill, +5% tiredness**

***Course***per hour -> **+5 chosen skill, +10% tiredness, -$30**

***Course+***per hour -> **+15 chosen skill, +20% tiredness, -$100**

**House level 4**   
***Watching***  
per hour -> **+3 chosen skill, +5% tiredness**

***Course***per hour -> **+6 chosen skill, +10% tiredness, -$30**

***Course+***per hour -> **+20 chosen skill, +20% tiredness, -$100**

**Battle**Battling can be used to improve **skills, rank and fame**. There are multiple game modes to choose from depending on the player’s situation. Battling can be done as soon as the player has acquired skills.

**Result calculation**  
The way the winning percentage is calculated, is by taking in the rank (**elo-rating**) and skills of the player and compare these with an opponent. The rank will tell in which division the player is located in, which will decide the “random” opponent (of that same division) of the battle. Then the skills of the opponent are being compared to the player to calculate the winning percentage. ~~At last a customizable bias will be taken in the calculation and a winning percentage is created.~~

The rewards the player gets by battling, depend on the division he is in at that moment.

Results  
***1 vs 1*** (winning percentage based on **game knowledge** **and** **mechanics**)   
per game -> **+5 mechanics, +2 game knowledge, +15% tiredness, +1 hour**win -> **+10 fame, +25 elo**lose -> **-10 fame, -25 elo**

***3 vs 3*** (winning percentage based on **game knowledge** **and** **team play**)  
per game -> **+3 mechanics, +2 game knowledge, +2 team play, +20% tiredness, +1 hour**win -> **+15 fame, +30 elo**  
lose -> **-15 fame, -30 elo**

***5 vs 5*** (winning percentage based on **game knowledge, team play and** **mechanics**)  
per game -> +**4 team play, +3 game knowledge, + 2 mechanics, +25% tiredness, +1 hour**win -> **+20 fame, +40 elo**  
lose -> **-20 fame, -40 elo**

**Stream**Instead of working, streaming is another way to get **money**. When the player has enough **fame** to get a certain amount of views (which determine the income), streaming is more efficient and profitable than working (depending on the work level).

The results of streaming are all calculated as followed:  
per **50 fame** -> between +**10 – 20** **views per hour**  
per **50 views** -> between +**$1 - $5 per hour**per hour -> **+$depends on views, +15% tiredness**

**Contest**Participating in a contest can be done to increase **fame and** **money**. There are multiple game modes to choose from depending on the player’s situation. Contesting can be done as soon as the player has acquired **100** fame.

**Result calculation**At the start of the tournament a group of participants are “randomly” calculated. The calculation takes in “random” opponents from different divisions. The player will be battling the opponents from lowest skilled to highest skilled with the use of the same calculation from battling. When the player loses a battle, he will be placed at the rank he became in the tournament.

Results  
Every participation -> **-**  
***1 vs 1*** (winning percentage based on **game knowledge** **and** **mechanics**)   
1st -> **+$750, +750 fame**2nd -> **+$500, +500 fame**3rd -> **+$250, +250 fame**4th - 10th -> **+100 fame**11th - 24th -> **-100 fame**

***3 vs 3*** (winning percentage based on **game knowledge** **and** **team play**)  
1st -> **+$800, +800 fame**2nd -> **+$600, +600 fame**3rd -> **+$300, +300 fame**4th - 10th -> **+200 fame**11th - 24th -> **-150 fame**

***5 vs 5*** (winning percentage based on **game knowledge, team play and** **mechanics**)  
1st -> **+$1000, +1000 fame**2nd -> **+$750, +750 fame**3rd -> **+$500, +500 fame**4th - 10th -> **+300 fame**11th - 24th -> **-200 fame**

***Other features***   
**Save game**There are 3 slots for the player to save the game in, which can also be cleared whenever the player wants to. The game is only savable, when the player is not performing any action in-game on that moment.

**Leaderboard**The game has **50 opponents** in the game, with each their own **name, elo-rating and skills**. The skill of an opponent will determine its rank and how difficult it is to take over his rank.

The player starts at the bottom of the leaderboards with **0 elo-rating** and needs to work his way to **rank 1** by winning battles and contests. When the player reaches rank 1, he wins the game. The maximum amount of elo-rating an opponent can have is **5000 elo.**

The ranking system is divided in **5 divisions** with each **10 opponents.** Higher divisions give higher rewards, but are harder to get and stay in:

**Bronze (rank 50 – 39)**Opponent skill reach (per skill)  
minimum = 20  
maximum = 100 **Results x1.**

**Silver (rank 40 – 29)**Opponent skill reach (per skill)  
minimum = 100  
maximum = 200 **Results x1.2.**

**Gold (rank 30 – 19)**Opponent skill reach (per skill)  
minimum = 200  
maximum = 400 **Results x1.5.**

**Diamond (rank 20 – 9)**Opponent skill reach (per skill)  
minimum = 400  
maximum = 600 **Results x2.**

**Champion (rank 10 – 1)**Opponent skills reach  
minimum = 600  
maximum = 800 **Results x2.5.**

**Shop  
Items**  
There are different items with multiple qualities for the player to buy. These items help the player increase their **skills** with the use of **money**,as an alternative to the other methods to increase skill. Some items will appear in the game, so the player gets some feedback on his progress.

The different items consists of:  
**Game guide**   
bad quality -> **+10 game knowledge, -$50**standard quality -> **+30 game knowledge, -$150**  
good quality -> **+60 game knowledge, -$300**  
excellent quality -> **+120 game knowledge, -$600**

**Headset**   
bad quality -> **+10 team play, -$50**standard quality -> **+30 team play, -$150**  
good quality -> **+60 team play, -$300**  
excellent quality -> **+120 team play, -$600**

**Keyboard**   
bad quality -> **+20 mechanics, -$100**standard quality -> **+30 mechanics, -$200**  
good quality -> **+60 mechanics, -$400**  
excellent quality -> **+120 mechanics, -$700**

**Mouse**  
bad quality -> **+5 mechanics, -$25**standard quality -> **+15 mechanics, -$75**  
good quality -> **+30 mechanics, -$150**  
excellent quality -> **+60 mechanics, -$300**

**Screen**   
bad quality -> **+10 team play, +10 game knowledge, -$100**standard quality -> **+15 team play, +15 game knowledge, -$200**  
good quality -> **+30 team play, +30 game knowledge, -$400**  
excellent quality -> **+60 team play, +60 game knowledge, -$700**

**~~Computer~~** ~~bad quality ->~~ ~~standard quality ->   
good quality ->   
excellent quality ->~~

**Accommodations**The different available accommodations that the player can buy in the shop, help the player with **training1** more efficiently. Higher level accommodations cost more **rent** per month, so the player needs to have a reliable source of income to be able to pay those accommodations. ~~The player can only advance in accommodation levels.~~

The different accommodations consists of:  
**Garage**Cost -> $200  
Rent -> $50

**Apartment**Cost -> $500  
Rent -> $200

**House**Cost -> $2000  
Rent -> $500

**Luxury apartment**Cost -> $5000  
Rent -> $1500

***1 The training results per accommodation level, can be found under the training section***

**Game Flow**For the player to understand the game a tutorial is being played at the start of a new game. When the tutorial is finished, the player will be in control of the game.

The start will be the hardest since the player has a relative small amount of money. Working for money is required in the early- / mid-game to survive, since getting consistently enough viewers to be able to pay rent, needs around 400 fame.

With the money that the player has saved, he can choose to either buy items, keep the, money as buffer, ~~invest money, put it in the back for interest,~~ or to upgrade his accommodation. However, a new accommodation will cost more rent, which thus requires a higher money flow.

When the player has reached a high enough amount of skill points, he can also choose to attend contests to earn fame more efficiently. Around the time when the player can consistently win prizes in tournaments, his fame will also be high enough to start streaming.

Because streaming is potential to earn money really efficiently, the player will be able to afford higher quality items, training sessions and accommodations. This stage will be the end-game.

**Platform**Since the development team consisted of only 1 developer with very limited artistic skills and the available PC to develop the game didn’t have gaming hardware, the chosen platform is mobile. Mobile doesn’t require a lot of art when working with many UI elements because of the relative small screen sizes.

**Controls**Because the platform of the game is mobile, the controls are limited to touch and swipe, where touch is used to navigate through the menus to perform actions and swipe is used to set the duration of some actions, scroll the event bar and scroll the leaderboard.

Because of the controls being so limited, the game can be controlled by anyone.