

Interactive Student Life

Project Description And Software Requirements Specification

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Version History:

Version	Changes	Date
1.00	First Draft Version	26/02/2018
2.01	Front page, More detailed explanation of the project. Testing strategies	13/03/2018
2.02	Choice of model and method, Problem Formulation, Delimitation, Time schedule	05/04/2018
2.03	Detailed time schedule, Include milestone. Story improved	10/04/2018

Background description

As we can see the movie industry is growing significantly every day, new movies with amazing special effects are being released every month, but all of them are traditional videos-linear. Those type of videos are what people are most used to. In linear videos users have options like play, pause, restart and rewind, but aside from them, little can be done to interact with them. In the movie industry there is visible lack of interactive movies. An interactive video, gives viewers ability to interact with its content using various instruments, it is a mix between a movie and a video game that presents its gameplay in a cinematic, scripted manner, often through the use of full-motion video of either animated or live-action footage.

Since the popularity of Virtual Reality is growing significantly, many companies are focusing on creating VR games, but almost no one is willing to make an interactive movie on the platform.

At the end of 2018 Netflix has created a unique interactive movie called Bandersnatch. It has broken many records, because of its uncommonness.

In the project the user will take interactive decisions which will affect the storyline of the main character. Main character is a first year student in the university and has a whole student life ahead of him. Whenever the viewer has to take the decisions there would be points which are not going to be visible for the viewer but those points will affect the end of the story.

The game will be single player only since it is story based interactive movie.

In some cases, the same story can be reached by different ways, but will present the viewer with different choices based on their decisions till this moment. Some endings may become impossible to reach based on choices made by the viewer.

The mixture between movie, game and virtual environment makes the game stunning. No one has brought that kind of interactive movie on the market yet, so we are going to be the first one with the courage to do it.

Purpose

The purpose of this document is to provide a detailed description for the project “*Interactive Student Life*”.

The target audience of this document is the development team and the supervisor.

The intended audience of the SRS document is the development team or any person who would help or be a part of the development process, as well as the users of the system interested in its functionality. This document is an important part of the developing process because it leads to a better understanding of the system

The purpose of this project is to create an interactive video that will increase viewer's engagement in the movie, creating an experience which has been never made before and bringing new, unique and entertaining product on the market.

Problem Formulation

1. Are there any restrictions on how many points are to collect?
2. Does the game reward the gamer during the game or everything is calculated in the end?
3. What will happen when the viewer chooses one of the “paths”?
4. Is there a possibility to make a wrong or right decision?

5. What will happen if the viewer makes the wrong or right decision?
6. How many decisions are to make during the whole game?
7. How many different endings will the game have?
8. Will it be age restricted?

Delimitation

The following points will not be included in the project to make sure that it will be finished before the final deadline and that it will match the skills of project team.

1. The game won't have too many different outcomes.
2. Most of the time during the choosing of the path, the viewer won't have more than two choices.
3. The project won't have professional actors for the scenes.
4. The project won't have professional film director and script writer.

Sequence Diagram

Instead of sequence diagram we are going to have a huge script which will play the role of Sequence Diagram. This script will contain all scenarios and all possible endings together with the amount of points that player can take from each chapter.

Choice of model and method

Throughout the project period SCRUM methodology will be used for controlling the development process. Moreover, AUP will be utilized to guarantee straightforwardness, agility and structure. Through the combination of iterations and sprints a more structured and organized development process will be ensured. Furthermore, the usage of SCRUM and AUP will shield the project group an organized overview of the development process.

What Problem	Why Why study this problem?
Problems in your Problem formulation	From an analytical point of view: why is this interesting?
Are there any restrictions on how many points are to collect?	After the script is finished, it can be seen how many points the game will have.
Does the game reward the gamer during the game or everything is calculated in the end?	The points will be added throughout the game, but the “reward” will come at the end.
What will happen when the viewer chooses one of the “paths”?	It depends on level the decision. If it is a minor path like “ what food to eat “ , it won’t affect the game, if the decision is major, like whether “to study “or “to drink alcohol”, it will add and deduct some points.
Is there a possibility to make a wrong or right decision?	Each decision have different continuation of the story.
What will happen if the viewer makes the wrong or right decision?	The final amount of points will differ.
How many decisions are to make during the whole game?	At this point , it is impossible to say how many decisions player will make.
How many different endings will the game have?	There will be likely 3 or 4 different endings which can be reached in different ways.
Will it be age restricted?	Since it is about students life, some scenes will be inappropriate more minors to view, so the game will be age restricted.

Test strategies

Different testing techniques will be used at different point in time of making the project, as

C# will be used as main language and Unity as cross-platform real-time engine, the project will have two levels of testing: unit and black-box. Whole project team will be responsible for each level.

Time schedule

The estimated time for the project is total of 1650 working hours – 550 for each person, because the project will be developed using AUP, the time schedule will be based on phase plan as a project structure. The framework for controlling the project and each sprint will be SCRUM.

4 phases consist of:

- Inception
- Elaboration
- Construction
- Transition

The Inception Phase is being carried out in the 6th semester - Spring of 2019 - and is estimated around 150 working hours of the total amount. The estimated start time for the Elaboration phase is the end of August 2019.

DESCRIPTION	START DATE	END DATE
Inception Phase	3/1/19	4/28/19
Elaboration Phase	8/26/19	9/18/19
Construction Phase	9/18/19	11/22/19
Transition Phase	11/22/19	12/19/19

The Elaboration, Construction and Transition Phases will be executed during remaining 1500 working hours.

Each of the phase will end with a milestone to present. The activities that were planned at the beginning of their timelines will be reviewed. It will also give the opportunity to check the progress of the project.

Inception Phase milestones:

- define project scope,
- estimate schedule,
- define risks and delimitations,

Elaboration Phase milestones:

- identify architecture,
- evolve project environment,

Construction Phase milestones:

- model and build the project,
- start developing supporting documentation,

Transition Phase Milestones:

- system testing,
- user testing,
- finish developing supporting documentation,
- project deployment,

References

En.wikipedia.org. (2019). *Black Mirror: Bandersnatch*. [online] Available at: https://en.wikipedia.org/wiki/Black_Mirror:_Bandersnatch.

Techterms.com. (2019). *Interactive Video Definition*. [online] Available at: https://techterms.com/definition/interactive_video.

Majchrzyk, Ł. (2019). *Objaśnienie, jak dojść do wszystkich zakończeń w „Bandersnatchu”?* - *mobiRANK.pl*. [online] mobiRANK.pl. Available at: <https://mobirank.pl/2018/12/29/objasnienie-jak-dojsc-do-wszystkich-zakonczen-w-bandersnatchu/>.

En.wikipedia.org. (2019). *Milestone (project management)*. [online] Available at: [https://en.wikipedia.org/wiki/Milestone_\(project_management\)](https://en.wikipedia.org/wiki/Milestone_(project_management)).

En.wikipedia.org. (2019). *Test strategy*. [online] Available at: https://en.wikipedia.org/wiki/Test_strategy.