Project Vision Statement document – VR Navigation Game

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Project goals:

Find how much does signboards help people operate in certain situations.

Using the data the app collects we can determine the influence of the sign on people's behavior and modify these signs to improve their usage.

Possible situations :

- A tourist in a foreign country trying to reach a certain destination.
- In case of a disaster, how do people use signs to get to a safe place.

We are planning to create a virtual tour, using VR, that will simulate these situations and let the user navigate using the signboards.

The game will allow us to predict what will people do when they are in a situation of stress or uncertainty.

Project scope:

The project will include a VR game(tour) where the player has a mission to get to a specific checkpoint.

The game will collect statistic information about the user's path.

We have a block of images where every image is a scene and every cross-section is a legitimate option. the goal is to travel between the scenes and be aware of the environment until you made the checkpoint.

High-level features

- Build a generic game that will work with different pictures and data.
- Set automatic hot-spots using the input data.
- Support for google cardboard.

Major milestones and deliverables

- Learning to work with unity.
- Learning about VR and how to make VR games.
- Find the optimal way to connect between the images such that the player will be able to travel between scenes.
- Create a demo game with 3 or 4 pictures.
- Finish the project on time.

My goals :

- Learn more about the world of game development.
- Contributing to society by making a product that helps peoples in need.
- Work alone and be familiar with all of the details.
- Take a vision and make it a reality.

About the project

The game based on a graph where each picture is a node and every possible cross-section is an edge.

When the player goes from one scene to another we want him to look in the next scene to the same azimuth he was looking before the change.

The player's path will be saved and could be analyzed later.

The game is for everyone who has an android device and a googles cardboard headset but is directed at psychologists that can make use of the collected statistic data.

The idea was provided by my project instructor, Prof. Boaz Ben-Moshe.

The schedule

1. Learning the basics of VR. Making VR apps and working with them.
2. Figuring out what is the best workspace for a project of this scale.
3. Starting the app development by implementing the infrastructure (the graph).
4. By the end of the semester/the beginning of the next one, publishing a demo using about 3 to 4 photos.
5. Understanding what statistics we are interested in.
6. Combining all the research into the final project.

Example of one possible scene.