

Product planning

Thijs Boumans
Patrick Kramer
Alexander Overvoorde
Tim van Rossum

1 Game concept

uitleg van spiegel game idee, precieze rollen van remote en local spelers, basis concept en hoe het later uitgebreid kan worden

name: Mirror puzzle (cooperative puzzle game) short description: Players need to solve puzzles involving laser beams. The goal is to hit a predefined target with the laser beam, using mirrors to direct the laser beams. Laser beams can be blocked or manipulated by objects that exist purely in virtual space, which are made visible to the local players using AR technology. The local players can move blocks/cards (representing mirror bases) to manipulate the location of the mirrors, while the remote players can rotate these mirrors. To complete the goal, the local and remote players have to work together to get the mirrors in the right locations and with the right orientation so that the laser beams hit the target(s). Various puzzles can be presented with increasing complexity.

remote goal: Rotate mirrors to have the laser beams hit the goal. remote perspective: birds-eye view remote gameplay abilities: Rotate mirrors

local goal: Place mirrors local gameplay abilities: Placing mirrors to have the laser beams hit the goal local perspective: birds-eye view

preventing "puppetmaster": Local players can only place mirrors. Remote players can only rotate them. The puzzles require the location as well as the orientation of the mirrors to be correct. As such, continued communication is required between local and remote players. technical challenges: Rendering lasers for local in the right position.

2 Approach

This section covers development details that aren't directly related to the gameplay itself, such as software engineering practices and guidelines about client meetings.

2.1 Technical details

technische details, zoals gebruik van ar toolkit en oculus rift + camera's

2.2 Software engineering

test coverage, scrum, UML, testen met gebruikers

2.3 Guidelines

Here is a list of rules that help prevent problems during development.

NOTE: These are just ideas right now

- bla

ook belangrijk zijn de afspraken, bijv. 1x per week een meeting/email met de coach

3 Planning

The first two weeks represent the research phase. In this phase we will find a suitable augmented reality (AR) library for Unity and prepare an Oculus Rift for AR use with cameras. We'll also design an architecture for the game that covers the marker detection, networking and gameplay mechanics. All of this information will be described in the research report handed in on May 1st.

Main development commences after this phase and is organized in two week sprints. The table below describes the goals per sprint, which will serve as a helpful reference to stay on schedule during development.

Weeks	Deadline	Goal
4.1 + 4.2	May 1st	Research report described above
4.3 + 4.4	May 15th	???
4.5 + 4.6	May 29th	???
4.7 + 4.8	June 12th	???
4.9 + 4.10	June 26th	???