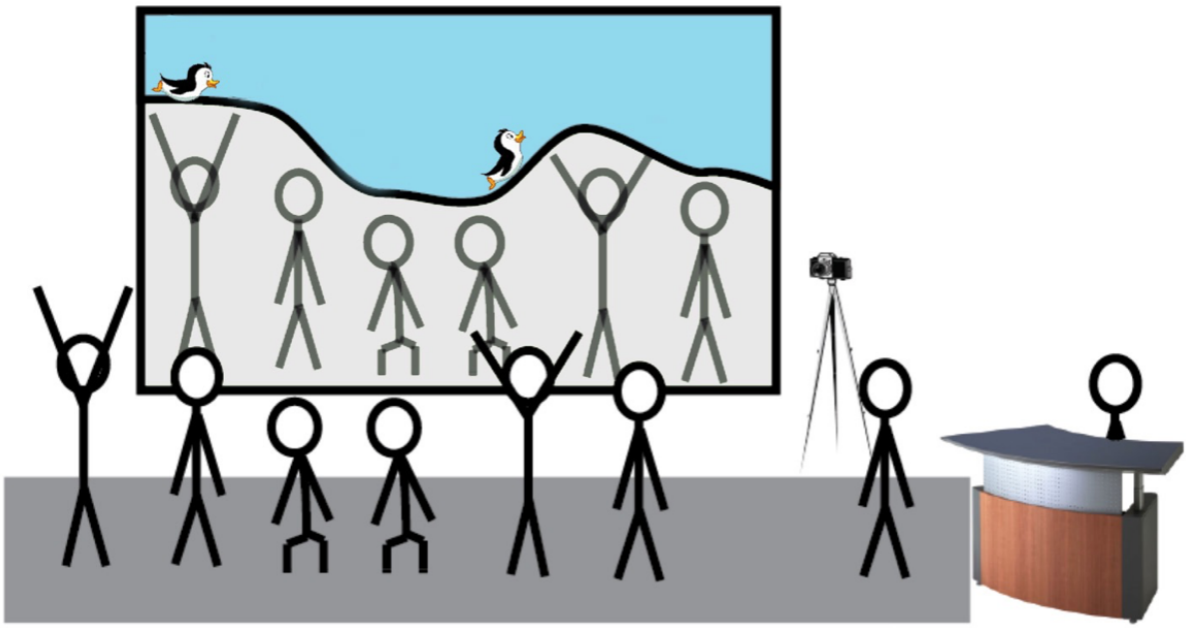
Test plan

In this document we will describe how we are going to test our game. This document will include our testing process from start to end. We will divide the document in several sections containing our testing setup, testing group, testing environment and the features that require testing.

Setup
In order to fully test our game we require certain hardware. Of course we need a computer to execute our game. Our game is already operational if this computer has a built-in webcam but to use our game to its full extent we also require an external camera and a projector. The image below shows how the setup will roughly look like.



Who is going to test our game?
Before we invite people to test our game we must ensure that our game does not contain serious game-breaking bugs. To this end just the four of us will be testing until the beta to remove these bugs. When we think that our game can be played without too many disturbances we are ready to start some serious tests using random test groups. We will visit a public area where a queue can be formed. After we let the group play our game for a few minutes we will interview the testers and ask their feedback on various aspects of our game which will be mentioned in the ‘What are we going to test?’ section. We will clearly document this feedback and use it to improve and fine tune our game.

Where are we going to test?
At first we will be testing our game in an ‘optimal’ environment. This means that we are going to test our game indoors with a unicolor background. When we are satisfied with the

performance, stability and adaptability our game displays through these tests we will change the environment a bit, testing the camera detection's stability and trying its limitations. Setups with light illuminating from numerous directions for example, and also low-light environments. Appropriate places where we can perform the tests are for instance inside the meeting rooms at EWI or at our houses/yards.

We can then start testing on random test groups. These tests could be performed in the Mekelpark at the TU Delft where we can approach a lot of people. There are a lot of walls which we could point a camera to here, and optionally we could also build our own with for example cloth.

What are we going to test?
There are many aspects of our game that we can and will test. Below a list of aspects that we will test:

- The difficulty of the game
- The engagement of the participants in our game
- If the controls of the game are easy to understand
- If the goal of the game is easy to understand
- If the mapping from the player to what part of the wave they are controlling is sufficiently easy to understand

Acquiring Feedback
Realizing that our test groups will consist of small groups, questionnaires will not be necessary. We will acquire feedback through two methods:

- Observation
- Individual/Group Interviews

We feel all of these methods have pros and cons, and combining them in our testing process will yield the best results. Observing the test groups will yield a study on the engagement and simplicity of our game, answering questions like whether the controls and the purpose of the game are easy to understand. Assessments of difficulty and whether the game is fun to play on the other hand are best left to interviews, where we can converse with the people after they have played our game, and have freshly experienced its mechanics and controls.

When are we going to test?
We will make sure to incorporate at least two Mekelpark studies, and numerous friends/family tests as soon as the beta is out. Sunny days will be marked in our schedules.