Team Dynamics
Project Skills Essay

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1 Project and team description

The project we were working on consisted of hardware integration in virtual reality. A great way of increasing realism and immersion in virtual reality is to let the user see his or her own body, and move this virtual body according to his or her real body. In order to accomplish this, we had to integrate three body-tracking devices: Firstly, a Microsoft Kinect, a camera made originally for the Xbox 360, to track the rough body movements. Secondly, a Leap Motion, a usb-stick sized device with similar properties as the Kinect, to track the forearms of the user. Next, a pair of ManusVR gloves, which can precisely track the position of each individual finger. Together they should make sure that a user of our software can see his or her own body in a virtual world, move this body, and pick up virtual items.

Our team consisted of five people. We are all second-year computer science students, between 19 and 24 years old. We all did some earlier projects together, so we knew what we could expect of each other, and who had what skills.

We tried to all work on all parts of the projects, so nobody would miss out on the fun parts, and everyone had to do some of the annoying parts. I did a lot of level design and modeling, so we had an environment to operate in, and objects to try and pick up.

2 Process Loss

We experienced very little process loss during this project. This was mainly because our tasks were very easily divisible. Some persons worked on the integration of a certain piece of hardware, while others worked on the other pieces of hardware, and others worked on the objects and the environment. In the end, one optimal solution was the target (Quality over quantity). Luckily, we managed to split the tasks every week in such a way, that when merging each individuals work together at the end of the week, that weeks product worked without too much conflicts.

In general, our project tasks interdependence can be described as a mix between additive and conjunctive. Additive, because some tasks require other tasks to be completed. For example, we cannot test the behavior of the virtual body before we actually have a virtual body model. Conjunctive, because there were several different parts of the project to work on, as mentioned before, that could be finished separately, then added together to make up the final product. On one occasion, we used a disjunctive method. We had to find a solution to the hands glitching through objects, and some group members had different ideas on how to do this. We implemented them all, then tried them all within the group, and decided which one was te best.

3 Social Value Orientation

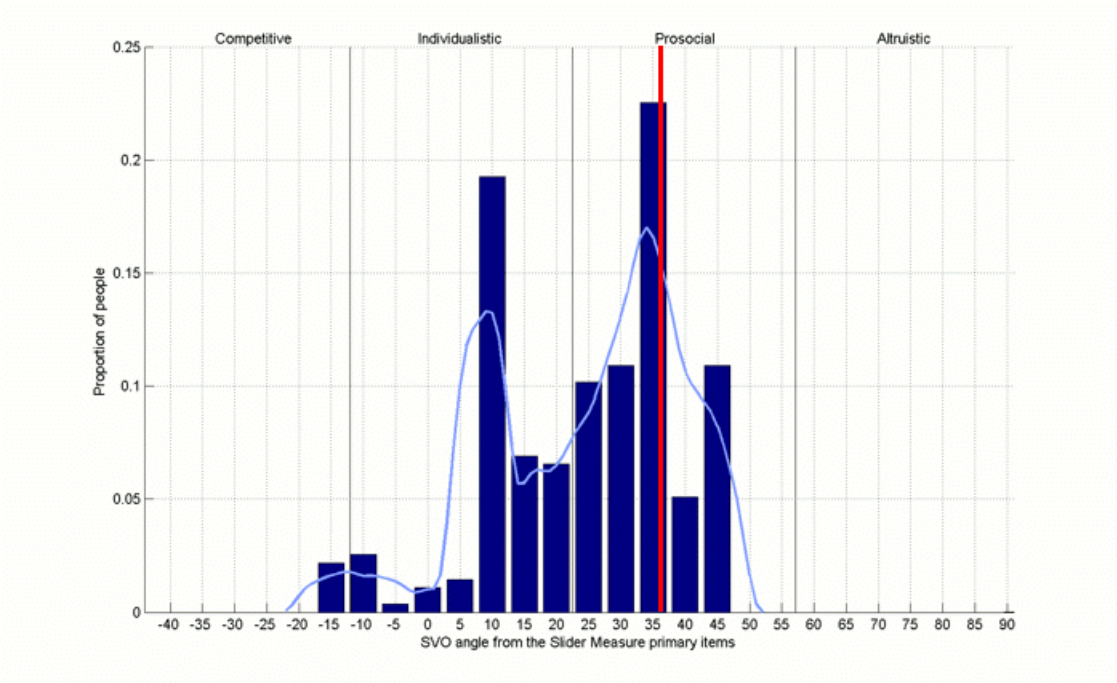

Figure 1: The outcome of the SVO test

During the test, I tried to find the best solution for both me and the 'other person'. That means either maximizing the profit, if moving the slider one way meant that both of us would get higher profit, or aim for an equal payoff, if moving the slider meant more money for one of us, and less money for the other.

The result to this test did not surprise me. Firstly because I had seen the graph before, and I knew that this was (one of) the biggest groups. Secondly, because I know that I am more of a social person than an individualistic or competitive one. Most of the times I will try to divide tasks, money or anything as equal as possible, simply because my conscience and common sense tells me so.

4 Group SVO distribution

Our group consisted of five members, four of which, including myself, were classified as prosocial. In fact, the score of three of these members were within 0.4 range of each other. We had one member who was more social, with a score of around 45, and one member who was classified as individualistic, with a score of around 16. In general, during this project, our group was pretty social. We filled in for each other when there were problems, and we never had any type of serious conflict, other than who had to get coffee. Therefore, these results do not surprise me. The one person who had a score of 16 surprised me a bit, as he is not a noticeably individualistic person during a project. This might be due to a different interpretation of the test, where most of us saw it as a real life situation, and this one person saw it more as if it was a game.