3D room mapping with a hand-held ToF camera
Reflection document

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2017-12-15

1 Project Reflections

This document aims at presenting the group's reflections regarding the project. We will specifically focus on what went well and the things that did not go as planned. We will also consider what previous knowledge we've had use of, any knowledge we were lacking and finishing up with some ideas of what could've been done differently to improve the process and the outcome of the project.

In the beginning phases of the project a rigorous planning was made with e.g. goals, how meetings were to be held and a time plan. During the course of the project this plan has been kept in mind and followed. At some point revisions to the meetings were made and a half-week SCRUM report was introduced on top of the ordinary SCRUM meeting to improve communication and optimize the work-flow. The half-week report was written individually and made available to the entire group. The ability to contemplate our work process and to make improvements accordingly has gone well and had a positive impact on the final results of the project since the work became more efficient in the long run. We've also had a routine of sharing relevant references and knowledge to increase the competence of the team, which has given us a more efficient way of both communicating and working. By having a problem solving mindset from the early stages of the project, we managed to have a process of first working with a problem individually and later on working in groups if the problem could not be solved by a single team member. This lead to positive effects in the form of pushing the project forward which in turn kept the team motivation high.

Previous knowledge, within the technical area of the project, of the group's members has been of great use and shared between members of the team. Since the project has involved both hardware and software, previous knowledge in cameras & image sensors, image processing, programming and computer vision has been applied. On top of this a big part of competence in project management has helped immensely. We felt that this background was sufficient to help the team to assimilate the theory and methods needed to solve the problem at hand.

In the early stages of the project some things did not go as planned. Some problems appeared as other projects and the entrepreneurial work had to be prioritized and lead to less time spent on this work. Delayed hardware and code dependencies being complicated to install on campus computers where we had no administrator rights delayed the project even further. These issues lead to more focus on the working environment than on producing results, but helped to fulfill several product criteria when they were finally resolved.

To conclude these reflections we have two topics that could have been done differently to help our work. Firstly we should have set up a initial meeting with a company contact to get an introduction to the hardware. Secondly, to early on in the project get more information on what software functionality the camera had, to be able to utilize it in

our work instead of implementing our own solutions to already solved problems.