1   Review of Sprint 3

Period: 2013-11-04 – 2013-11-18
Est. time: 474 (or not) hours. (Roughly 42 hours per person, meetings (6 hours per person) not included.)

1.1   Sprint backlog

The main focus of this sprint is to get a minimal case implementation that meet all requirements in the specification of requirements. The initials of the person responsible for each specific sprint item is shown in boldface in the rightmost column of the table.

1.2   Backlog items from previous sprints

These are the items created in the previous sprint that were carried over directly to this one

1.2.1   Program architecture image

Item number 1 in this sprint. Added to the backlog and is required to provide a good overview of the system to allow for easy continued development after the project is finished.

1.2.2   Queue detection

Needs to be tested and integrated into the project as soon as the requirements to do so are met (stable tracker/segmentation).

1.2.3   Human detector

A high priority item for the next sprint.

1.2.4   Improved foreground segmentation

This item will probably be a direct result of the foreground segmentation.

1.2.5   Better tracker

The tracker needs to be tested and tuned once the people detection performs adequately.

1.2.6   More specific information about project goal and requirements

Also a high priority item. Specification of requirements need to be revised and updated.

1.2.7   Assume that all cameras belong to the same room

This needs to be added to the specification of requirements.

1.2.8 Collect 3D data set

A Microsoft Kinect is now available, and will be used to collect a 3D data set (item number **4**).

1.3   Sprint plan table

Item	Description	Est. time	People
1	Implementation of circular Hough-based classifier.	24	**NW**, MS
2	Tuning of circular Hough-based classifier.	32	**NW**, MS
3	Tracking using optical flow.	10	**EF**, GH
4	Simple segmentation using optical flow.	16	**EF**, GH
5	Segmentation using optical flow and super-pixels.	20	**EF**, GH
6	Remove debugging from raw-image into a debug image	2	**GH**
7	Collect a top-down view data set with depth using the Microsoft Kinect.	10	**AS**, MT, MR
8	Calibrate a stereo camera. **Cancelled because of the Kinect-sensor.**	20	**AS**, MT
9	Use height information from stereo cameras to segment and classify humans.	32	**AS**, MT, MR
10	Collect a new data set using a camera with focus at head level rather than ground level.	4	**MS**, NW
11	Integrate evaluation of in/out people count from ground truth.	16	**MR**
12	Collect an RGBD data set using the Kinect sensor mounted above a room entrance.	10	**AS**
13	Tuning and merging of integrated parts in the system as well as tuning the entire pipeline.	16	**All**
14	Handle one camera over each door to hte same room and keep a consistent count of the number of people in the room. (Same as item number 4 in previous sprint, but this time with several cameras.)	8	**EF**, MR
15	Finalize this document and the review of hte previous sprint.	4	**MS**
16	Do a complete overhaul of the entire specification of requirements to fit the new, changed, circumstances.	16	**MS**, MT

1.4   Result

The results from this sprint are eventually presented here

1.4.1   Solutions we ended up using

1.4.2   What did we do well?

1.4.3   What improvements are necessary?

Item	Result	Time Spent	People
1	Status after the sprint (Done, not finished etc.)	estimated time	Involved members

1.5   New Backlog Items

Several new backlog items were created as a result of this sprint.

1.5.1   New backlog item 1

Info aboutthis backlog item.