The first Software Engineering Group 2 (PG) Project weekly meeting will be held in BCS Software Lab,

Room 462, Ingkarni Wardli at 2:30pm on Monday 12 August 2013.

Agenda

Chair: Yifei Pei (a1611648)

**Presentation** 

Yifei Pei (a1611648) will introduce the group and present the group poster.

**Requirements Elicitation** 2

2.1 **Elicitation of Functional Requirements** 

1. Is the robot intended for use in one specific site, or will it be a more general solution that should

be able to handle a range of sites?

2. To what extent should the robot's operation be automated? Does the robot need to move with or

without the operator's control? Does the robot need operator's command to mark road closures?

3. What kind of controller interface - for example, a graphical user interface (GUI) - will be required

for the operator? What should the GUI look like? To what extent will operators be able to be

trained in the use of the robot and its controls?

4. Will the operator be on site with the robot, or will the robot be operated remotely?

5. How does the robot identify whether the area is dangerous or not? What are the representatives of

dangerous areas? Normally what's the size or shape of dangerous area?

2.2 Elicitation of Design Requirements

1. Representation of site

Followed the question of last section, what are the representatives of dangerous areas?

Roads: What is the narrowest/widest expected width? How about the length?

Obstacles: What are the shapes of obstacles? Are obstacles going to be on roads or not? What's the

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height/length/thickness of obstacles? What's the reflection of robot when it reaches an obstacle?

Except for roads and obstacles, what else can be found in the city? Are there walls? Buried buildings? Are there any other features that the robot will need to recognise and plot?

- If there are above-ground walls: How does the robot identify walls? What will be the height and thickness of the above-ground walls? (minimum and maximum)
- If there are buried walls/foundations: How will buried walls/foundations be represented? Is there a guaranteed weight or thickness of this representation?
- Distinction of different structures?

#### 2. Hardware

- What kind of hardware will the controller be run on?
- What's the permitted communication instantness for the hardware?

#### 3. Safety

- What action should the robot take when power is low or lost?
- What action should the robot take when communication between robot and controller is lost?
- What is a 'safe' force for the robot to make contact with external objects? Are there any other factors that need to be considered in order to protect the city?
- How do you define a 'safe starting position' for the robot?

### 2.3 Elicitation of Implementation Requirements

1. Construction of map in 'real time'

How critical is the immediacy of the map feed? What sort of delay or lag will be acceptable?

## 2.4 Any other requirements/queries that arise during discussion.

# 3 Any Other Issues

### 3.1 Organisational issues

### 1. Other timing considerations

When will the group have access to the SVN repository?

When will the group have access to the robot?

When will the DTD (Document Type Definition) for the XML markup be available?

### 2. Communications

It is proposed that the group maintain contact with the clients via weekly half-hour meetings. Any other media for communication?

# 4 Date of Next Meeting

Next meeting to be held on Monday 19 August 2013 at 2:30pm.