

# The University of Birmingham

School of Computer Science

## First Semester Mini-Project: Declaration

### 1. Project Details

**Name:** Karthikeya Udupa Kuppar Manjunath

**Student number:** 1393456

**Mini-project title:** *Designing Location Based Context-Aware Systems: Approach, Models and Implementations.*

**Mini-project supervisor:** **Professor Russell Beale**

### 2. Project Description

The following questions should be answered in conjunction with a reading of your programme handbook.

<b>Aim of mini-project</b>	<i>To understand the various aspects involved in designing and implementation of location based context-aware systems.</i>
<b>Objectives to be achieved</b>	<ul style="list-style-type: none"><li>• <i>Understanding in-depth the concept of context-aware systems.</i></li><li>• <i>Understanding the emergence and the need for location based context-aware systems.</i></li><li>• <i>Study of the anatomy of location based context aware systems.</i><ul style="list-style-type: none"><li>• <i>Various models for storing of information and their comparison.</i></li><li>• <i>Recognition of the context and processing of the information.</i></li><li>• <i>Adaption of the systems based on user's preferences.</i></li><li>• <i>Privacy and security concerns</i></li></ul></li><li>• <i>Review of the existing systems that implement location based context awareness.</i></li><li>• <i>Possible future applications of these systems system.</i></li><li>• <i>A practical implementation based on the conclusion of the review in a location aware transport centric application.</i></li></ul>

<b>Project management skills</b>  <b>Briefly explain how you will devise a management plan to allow your supervisor to evaluate your progress</b>	<p><i>The project involves a significant amount of literature work. In the initial 4 weeks of the provided time period I would be reviewing the available literature to systematically analyse the systems and their implementations to draw comparison between approaches and draw conclusions.</i></p> <p><i>I would spend the next 3 weeks in development of the practical implementation based on the research and its conclusion.</i></p> <p><i>The last couple of weeks would be spent in formulating and finalisation of the report.</i></p> <p><i>To Summarise the plan.</i></p> <ul style="list-style-type: none"> <li>• <b>Week 1-4:</b> Study of the available literature work available.</li> <li>• <b>Week 5:</b> Creating the first draft of the report along with comparisons.</li> <li>• <b>Week 6-9:</b> Development of a practical implementation of a location based context aware system.</li> <li>• <b>Week 9 Onwards:</b> Formulating and finalising a report.</li> </ul>
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<b>Systematic literature skills</b>  <b>Briefly explain how you will find previous relevant work</b>	<p><i>The primary source of the previously done relevant work would be through the library and the online research/conference paper archives.</i></p> <p><i>Further information would also be gained by interacting with the various people working in the related fields.</i></p>
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<b>Communication skills</b>  <b>What communication skills will you practise during this mini-project?</b>	<p><i>A bi-weekly meeting with the mini-project supervisor to discuss and update the progress of the project with intermediate updates through email.</i></p> <p><i>Email would be used as a primary means to contact the supervisor in case of any requirement of assistance.</i></p>
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**Karthikeya Udupa K M**  
**16 October 2013**