**B. Software Project Management Plan**

**1. Problem Definition**

**1.1 Name of this Capstone Project**

The roll system using mobile device (RSM)

**1.2 Problem Abstract**

Roll system was known with HPLite32, SimplePass of HP fingerpint system; roll system with ID card using by almost corp or com around the world; the system face identify by Uniqul – Finland publish on 7/15/2013 or LogonSmart by Asus. Today, the trend machines replace humans in the hard work or the work does not require high intelligence became popular. So roll system face recognition becomes ever more necessary. The number of students in a university as well as the number of employees in large corporations in Vietnam is increasing dramatically, which means that the system should have professional roll with accuracy high.

**1.3 Project Overview**

**1.3.3 The Current System**

**1.3.2 The Proposed System**

The system needs to support capture, send image to server and checking with data. The system will help management, add course, detected new stranger. The system will be hosted on webservices, which provides easy access for admin and client to using on any device. In detail, the system will enable following functions:

**1.3.2.1 Web**

- Admin can control who can use this system by set role, course, subject …

- The system help admin or user insert course (subject, date, time, human …), update course (set date, time, add new stranger …), delete a course or user when out off day.

- The system check attendance by using result from user’s image capture between 15’ before and after class time.

- The system help detected stranger in class and find out who absent.

- The system support user check attendance again for who missing (just today and one days before).

**1.3.2.2 Mobile**

**1.3.3 Boundaries of the System**

- The system is currently used for internal Viet Nam market. Serves for needs of Vietnamese customer.

- This system is used to manage the trading between customer and seller.

- This system is not intended for managing these aspects:

o Human Resources

o Finance

- The system supports English for customer and seller.

- The completed product includes:

o The website for customer and seller.

o All the process involved documents.

**1.3.4 Development Environment**

**1.3.4.1 Hardware requirements:**

- Personal computers for developing with the minimum configuration: CPU Core 2 Duo 2.0GHz, 2GB of RAM, 120GB of hard disk, and internet.

**1.3.4.2 Software requirements:**

o Microsoft Windows 7: operating system and platform for development

o MySQL Server 5.6: used to create and manage the database for system

o Glassfish 3.1.2: web server

o StarUML: used to create models and diagrams

o Microsoft Project 2010: used to manage process and work schedules.

o Skype: used for communication and meeting

o Source Control: GitHub and BitBucket code server

o Netbeans IDE 7.3: used to implement system.

**2. Project organization**

**2.1 Software Process Model**

Project is developed under agile model.

**2.3 Tools and Techniques**

- Front-end technologies: html5, json, CSS, JavaScript, jQuery, AJAX, Google Currency Converter, Google Map Street API

- Back-end: Java

- Web Server: Glassfish 3.1.2

- Database Management System: MySQL Server 5.6

**3.3 All Meeting Minutes**

Refer to Meeting Minutes folder.

**4. Coding Convention**

Follow Code Conventions for the Java TM Programming Language, by Sun Microsystems, rev April 20, 1999.