

CSC207/B07 Introduction to Software Design

Fall 2013 – Project Phase II

Logistics

- **Due date:** 10:00pm Thursday 7 November 2013
- **Group size:** Four. In this phase of the project you and your Phase I partner are joined with another pair to form a team of four. You will work in this team in Phase II and Phase III of the project. **All members of a team must be registered in the same tutorial section.**

Overview

In Phase II of the project, you will merge your Phase I design with that of your new teammates. You will then implement a part of your new and improved design.

Learning Goals

By the end of this phase, you should have:

- worked closely with your teammates to produce a design of a software system
- produced a working Android application that implements a part of your software design

Task I — Software Design

You have two designs developed by two pairs during Phase I of the project. With your teammates, discuss the benefits and drawbacks of each pair's Phase I design. As a team, develop a new design by merging the two Phase I designs and adopting the best features of each one. Create a file `crc_phase2.pdf`, following the same format you used in Phase I, and commit this file to the directory PII of your (newly created) team repository.

Note that your design should cover **all** the features for the application, not just the ones you will implement in this Phase.

Task II — Implementing the Android Application

When setting up your Android Application Project, you must select:

- Minimum Required SDK: API 8: Android 2.2 (Froyo)
- Target SDK: API 17: Android 4.2 (Jelly Bean)

Feature List for this Phase

Here are some of the features (slightly modified) from the original Feature List that you will implement for this Phase of the project.

- Nurses can launch the triage application and log in using a username and password, which loads saved data, if it exists. In our, unrealistic, implementation, you are allowed to simply store usernames and passwords in a file on the device.
- Nurses can save all collected data.
- Nurses can record individual patient data (name, birth date, and health card number), along with the patient's arrival time at the hospital.

- Nurses can record and update a patient's vital signs (temperature, blood pressure, and heart rate) at a particular time, retaining older values.

The Software Development Process

Your team should meet regularly while working on the project. We have two types of meetings — planning meetings and status meetings.

For **planning meetings**, you need to meet twice: once in the beginning of the project and once mid-way through the project phase. During a planning meeting, the team will (a) recap on the current state of the project (if mid-way meeting), (b) decide on a set of tasks the team will accomplish before the next planning meeting, and (c) decide who will perform which tasks.

For the **status meetings**, the team will meet at least once a week, in addition to the planning meetings. During these meetings, each member will report on (a) what (s)he has accomplished since the last meeting, (b) what (s)he plans to accomplish before the next meeting, and (c) if there are any problems/obstacles that prevent him/her from making progress.

To demonstrate the software development process the team followed, you need to **maintain a plain text file** called `meetings.txt`, where the team will record all meeting minutes.¹ *On the day of each meeting*, commit this file into your team repository. The contents of this file must match the state of the rest of your repository!

The end of this project phase

At the end of this project phase, your team should have a working version of an Android application that implements every feature on the above feature list. You should, of course, have Javadoc comments for all your code.

Please include a plain text file **README** in your repository telling your TA where to find your Phase II project. You must tell your TA everything they need to know about your project to help them run your application and navigate your work.

Task 3 — Team member and self evaluations

Any student who does not submit their evaluations on time will receive a mark of 0 on this phase of the project. The evaluations are due 48 hours after the project phase deadline.

You will be filling out and submitting a peer evaluation activity on CATME. This form will rate all team members, including yourself, on contributing to the team's work (contributing a sufficient amount of work, contributing work of good quality, being on time, helping teammates) and interacting with teammates (showing interest in teammates' ideas and contributions, asking teammates for feedback and using their suggestions to improve, making sure teammates stay informed and understand each other, providing encouragement and enthusiasm to the team).

These are meant to be private: each team member will submit these separately, and you are not required to show each other your forms. In the case of serious disagreement, or if you request it, we will hold a team meeting to discuss the results, but we will never reveal individual ratings.

Marking

All of these items affect your grade:

- CRC Model and Design Description
 - The modularity of the design, and the degree to which it is reusable and extensible.

¹See lecture slides for some example meeting minutes.

- The degree to which the design meets the requirements.
- The use of OO concepts, such as encapsulation and inheritance.
- The appropriate use of files and data structures.
- Functionality and usability of the application:
 - all functions from the backlog implemented
 - easy to use application, intuitive navigation
- Javadoc:
 - required for methods and instance and static variables
 - must have a period at the end of every sentence
 - must use `@param` and `@return` tags
 - must use good English
- Coding Style:
 - must follow Java naming conventions
 - indentation
 - consistency
 - white space
- Quality of the README file:
 - it must take the TA less than 2 minutes to read your README file and understand how to run and use your application
- Quality of the software development process:
 - the file `meetings.txt` must be committed according to the schedule
 - the contents of the repository and the state of the code must match the contents of the file `meetings.txt`
- Subversion commit history:
 - participation by all team members
 - frequent commits over an extended period of time
 - appropriate commit logs
- Peer evaluation
 - To view the evaluation criterion, see the CATME online evaluation form (www.catme.org).

Checklist

Have you...

- used your new team repository and not your individual repository and not your repository from phase I to submit your work?
- committed `crc_phaseII.pdf`?
- committed **all** of your project files, i.e. the entire Android project directory?
- committed a README file for your TA?
- committed `meetings.txt`?
- verified that your changes were committed using `svn list` and `svn status`?
- in the next 48 hours: submitted your team evaluation forms using CATME?