Milestone 1

Requirements Document

General

Kanban is a project management methodology that allows for organizing and prioritizing projects and their tasks, using boards, lists, and cards. With the right Kanban board software, one can focus on priorities, keep the team in the loop about what's current and what's coming up, and control a steady flow of work, especially in output-heavy environments like production, agencies, support, and maintenance. This is a tool that supports <u>agile development</u> and helps to visualize and manage the workflow.

In this milestone, you will get requirements for a Kanban app, written by your client, and you are requested to elicit formal requirements from them.

Goals

The goals of this milestone are:

- 1. Practice requirements engineering.
- 2. Practice high level design.

Client Requirements

Everyone's needs are unique, but the upside of the Kanban method is that, once you apply it, you can standardize and optimize your workflow with relative ease.

These are the client's needs for different aspects of the system, as transcribed from your conversations:

- 1. <u>Registration/Login</u>: The Kanban board should support login of users identified by a username, and store all of the board's information on the hard drive. The system should support many users. The users will be identified by an email address and authorized with Iris recognition.
- 2. <u>Add Task</u>: Each user can define multiple tasks in his board. The new tasks will appear in the "to-do" column. Each user can access his tasks only. Each task

- should contain a title and a short summary that does not exceed 200 words. After adding a new task, its title should be bold.
- 3. Advance Task: Each Task can be advanced to the next column using a bold red button. A task in the "done" column cannot be advanced. When a user advances a task, the "last modified" field of the task is updated. At any time the Kanban board displays all columns, and max 5 tasks per each column, sorted by the creation date.
- 4. Edit task details: Task details can be edited unless the task is in the "done" column. A user can delete a task only if the task is in the "to-do" column. After editing a task, the previous task details should be stored in a database. The database should store at most 1000 versions of each task.

Your mission

- 1. For each aspect write 5 **whole** functional requirements (20 in total). They need to be major, i.e., refer to the important issues raised by the client. For each requirement specify the entity, state, action. In addition, for each requirement add a short explanation (max. one line) regarding why you think this requirement is major.
- 2. Elicit two non-functional requirements (in total, not from each aspect).

Example:

Functional requirement 1: "When a task is advanced, the "last modified" field of the task is updated"

Entity: task.

State: update the modification date of the task to current date/time.

Action: advance.

Reason it is major: It is part of the logic for advancing tasks.

Guidelines

This task is different from what you are used to, in the sense that there is no one correct answer. This is not a case of a black and white and the same answer may be correct in one requirement and wrong in another one. You are required to make decisions regarding what is major/important and what is not. **If needed** (for reasons of whole/completeness), you are allowed to come up with additional data that was not originally given by the customer.

Submission Dates, Deliverables and Grading

The assignment should be submitted in a group of three, no more and no less.

General Submission Notes

- 1. The submission will be in moodle.
- 2. The submission should be in a single PDF file.
- 3. The file name should have the following format:
 - a. id1_id2_id3.pdf
- 4. Points will be reduced for a late submission.
- 5. Submit using moodle's group feature.
- 6. A 1 on 1 meeting will be held with second year's students. Constructive feedback will be given. Attending the meeting is mandatory.

Grading

Your deliverables will be graded according to the quality of the requirements, especially in terms of wholeness, and we will verify that you identified correctly the actor, entity, action, and state.

In addition, each of you will have a one-on-one meeting with a second year student, that will review your work with you and give you notes about it. Participating in the meeting and cooperating with the reviewer is **mandatory** for completing the milestone. While this meeting will have no affect on your grade, you may benefit a lot from such a meeting so try to make the most of it!

Good Luck!