

# Milestone 1

## *Requirements Document*

### *General*

In this milestone, you are requested to design a system for a [Kanban](#) (task management) app. Kanban is a [project management and workflow method](#) that allows you to minimize multitasking, streamline your work in progress efficiency, and improve the speed and quality of the work your collaborative and self-managing team produces.

### *Goals*

The goals of this milestone are:

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

### *Requirements*

With the right Kanban board software, you can focus on your priorities, keep your team in the loop about what's current and what's coming up, and you can control a steady flow of work, especially in output-heavy environments like production, agencies, support, and maintenance. This is a tool that helps you manage [agile development](#) and helps you to visualize and manage your workflow.

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 a relative ease.

The Kanban contains the Kanban board that allows organizing your cards by columns of "to-do", "in progress" and "done" column categories. The Kanban board contains Kanban Cards, where each card resides in a column. A card has a title and contains a short description (max. 150 characters) of the task. A task can be assigned only to the registered user (identified by email address). The number of tasks in each column can be limited. At any time the kanban board displays all columns, and max 5 tasks per each column sorted by the creation date.

Your Kanban board should support login of users identified by a username, and store all of the board's information on the hard drive.

Additionally, the system should support the following features:

1. The system should support up to 1,000,000 users.
2. Logging: All errors should be logged using [log4net](#).
1. UX
  - a. The whole system should be in yellow colors.
  - b. The system should be intuitive and easy to use.
  - c. The UX should be color blind accessible.
3. Exception Handling: The system is expected to operate even when an error occurs:
  - d. Handle any malformed input.
  - e. Handle logic errors (e.g., login for the non-existing user, etc.).
4. Security
  - a. A user that don't interact with the system for 20 seconds should be logged out automatically.

### *Submission Dates, Deliverables and Grading*

#### **Deliverables**

1. HLD according to the provided example.
  - a. Make sure you describe the following points:
    - i. Who are the users?
    - ii. Who is the client?
2. Clarified requirements. Rewrite the requirements section according to the guidelines taught in class. Do not try to find THE "correct" answer, as there are many. Fill free to make decisions regarding the requirements, as long as they follow the lecture guidelines and the following:
  - a. It should comply with how **you** define to the client and the customer.
  - b. The requirements in this document may not comply with the general story described here - make sure everything is aligned at the end.
  - c. Split the section to functional and non-functional requirements, and logically order the requirement in each sub-section (e.g., do not talk about login, jump to cards and go back to login again).
  - d. This document might contain partial requirements, clarify them and add missing and relevant information to the system.
  - e. Suggest three new features for the system.
  - f. Some requirements are too detailed for this stage, you are expected to remove them.
  - g. For each requirement - write a **one-line** justification.

## **General Submission Notes**

1. The submission will be by moodle.
2. The submission should be in a single PDF file.
3. The file name should be by the following format:
  - a. id1\_id2\_id3.pdf
4. Points will be reduced for late submission.

## **Milestone Deadline - 10.03 23:59**

A software design precedes the coding phase, and so it will be here. You need to prepare for your application a high level design document and clarified requirements document. The documents should be submitted by this deadline.

# Good Luck!