

High-Level Design

Terminology

Kanban Board

a visual process-management system on which users can be informed with and update the status of tasks at hand.

Columns

Columns are the constituents of the Kanban board. The board is divided to several columns , each signify the status of the tasks it contains. Columns can be added to the board and be removed.

Task Cards

Cards displayed on the Kanban board representing work assigned by the managers. Every user can limit the amount task cards in each column.

Client

A party served by or utilizing the service.

User

A person who interacts with the system.

Registration

The act of user enrolment to the system.

Login

The act of signing into the system by the user.

System Model

Tasks Management

Posting Tasks

an authorized user can post and allocate tasks among relevant users.

Task Status-Change

an authorized user can change tasks status (among “~~To-Do~~Backlog”, “in Progress” or “Done”). The matching card on the Kanban board will be moved to the respective column.

Tasks History

The system maintains records of past task alongside task status, details, assignments etc.

Actors

Users

A person logged-on to the system using a client software, for viewing and carrying tasks.

Users are identified by their email address and is authenticated by a password.

Managers

A user profile permitted with performing advanced tasks (i.e. posting and allocating tasks etc.).

Administrators

A user that is to be in charge of maintaining order within the system and granting permissions to other user profiles.

Requirements Document

Introduction

This is a Requirements Specification document for a task management system, to be provided to corporations, manufacturer, companies or individuals, and used by managers, workers and other employees. The system will improve the workflow management and productivity of the client. The system's main display will consist of a center board divided to columns, where each describes the work-status of each task it contains.

Requirements

Functional

a. Display:

1. The Kanban board will allow organization of task, portrayed as cards, by categorized columns. This will better inform the user as to the workflow of the organization.
2. Each user will have several boards and be able to add and remove boards.
3. By default, a board will include the following columns: "backlog", "in progress" and "done". This will help the users prioritize work.
4. Columns can be added, removed or rearranged. This will help users better the categorization.
5. Each column will display a maximum amount of cards set by the user, relevant to the user. It should reduce unnecessary clutter and help the user focus on prioritized tasks.
6. Each card will contain a description of a task. This will give the reader better understanding of the makings and importance of the undertaking at hand.
7. Tasks can be filtered by its text fields or sorted by date. This will help the user find a specific task.

b. Users and Registration

1. User access will be granted through a login page. This will prevent unauthorized people from accessing classified or personal data.
2. Registered users will be identified via email address and will be authenticated by a password.

c. Task Distribution

1. A task can only be assigned to registered users (identified by email address and authenticated by a password.). This too will prevent situations where the system is exposed to unauthorised personnel.

2. System admins will be able to grant managers and employees with permission to add and relocate cards along the board. This will assist the organization maintain hierarchy within the system.

3. Each user shall have its own personal display, in which he could sort his own relevant tasks. This will help the system to work in a more orderly manner and keep every user focused with their tasks.

Non-Functional

a. The system will back-up the entire board's information. This will prevent information loss.

b. Every error from the system will be archived using "log4net". This will help the developers maintain the system and aid with troubleshooting.

c. The system will be designed in yellow colors, per requirements made by the client.