# IMPROVING THE BASIC KANBAN TOOL

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## **OUTLINE**

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## INTRODUCTION

- Looking for improvements to Agile processes
  - o Scrum, Kanban
- Most Kanban tools lack flexibility
  - Can't organize by blocked tasks
  - Can't partition by sprint
- Motivated to design for convenience

## PROBLEM STATEMENT

Within project management tools, Kanban Boards have become increasingly famous for their ability to visualize work and efficiency. However, we believe that they have some issues:

- Traditional Kanban Boards do not meet flexibility and customization needs of varied projects
- Lack of useful productivity tools
- Lack of a way to partition tasks by criteria other than assignee, such as time period

Our intent is to solve this issue by designing a board that addresses the above issues, while maintaining core Kanban principles.

### PROPOSED SOLUTION



**TO-DO LISTS** 

View what is and isn't done, and who is working on what and when



"MY TASKS"

Personalized view of what your priorities should be



## HIGHLIGHT IMPEDIMENTS

Color-code and tag tasks to emphasize a blocked task or needed action



## ORGANIZE TASKS BY DATE

Add and view by deadlines, choose which deployment period tasks should be in

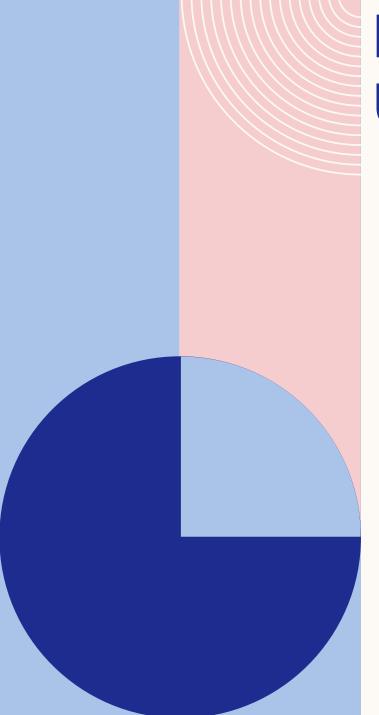


## CUSTOMIZABLE COLUMNS

Wide variety of tools to allow boards to cater exactly to your project's needs

## RELATION TO PROJECT GOAL

- Overarching Goal: Design something to improve software development processes
- Issues/tasks are important to organize in these processes
  - This is often done using Kanban boards
- We hope our improved design will add convenience to issue management



## REQUIREMENTS/ USE CASES

## **USE CASE 1: TRACK TASKS ASSIGNED TO ME**

#### 1. Preconditions

User must be logged in and have an active project existing in the system.

#### 2. Main Flow

User will see a side-panel alongside board consisting of tasks assigned to them [S1]. User will update task from side-panel [S2]. Server will reflect updates in the main kanban board that can be viewed by all team members [S3].

#### 3. Subflows

[S1] Front-end will have simple view of all features for user to navigate

[S2] Changes to task in one view will be reflected in all views. Front-end communicates with back-end.

[S3] Changes made are reflected in database.

#### 4. Alternative Flows

[E1] User has no tasks assigned to them

## USE CASE 2: ASSIGN TASKS TO A SPRINT/ITERATION & TRACK BLOCKED TASKS

#### 1. Preconditions

User must be logged into system

#### 2. Main Flow

User will click an "add" button to create a new task [S1]. Server will prompt user with a selection of time frames to add to the task [S2]. User will select a different task that is blocked [S3]. Server will allow user to select a color to change the box around the task [S4].

#### 3. Subflows

[S1] User fills out description for new task.

[S2] User will select a date from options.

[S3] User will click on task and change status.

[S4] User will select a color and system will change it.

#### 4. Alternative Flows

[E1] Time frame for tasks is in the past

## **THANK YOU**

Any Questions?