Kanban Project Management System Specification

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Product Backlog

1. User Authentication & Authorization:

Feature	Action name	Description
User sign up	register_action	Allow a new user to register for the Kanban management system so that he can log in to the system. It also creates a profile for the user when he registers. After registration, he should complete 2fa before he can get access to other functionalities
User log in	login_action	Allow an existing user to log in. Check if the user has completed 2fa, if not, he will be redirected to the 2fa page.
OAuth	-	Allow user to sign up and log in with a 3rd party account.
2fa authentication	_status_check	The user must authenticate after registration.
User authorization level	-	A user has different authorization levels related to a specific workspace. The creator of the workspace can edit it and add tasks, the participants can add tasks. Others have no access to it.

2. User profile

Feature	Action name	Description
Profile page as the home page	home_action	When a user logs in to the system, redirect to his profile page.
Edit user profile	edit_user_profile	Allow a user to edit his profile
View other	other_profile_acti	Allow user to view other user’s profile

user’s profile	on	

3. Workspace Management:

Feature	Action name	Description
Create a workspace	workspace_action	Allows a user to create a workspace and invite others to participate into the workspace.
Edit workspace configuration	edit_workspace_action	Allows the creator of the workspace to edit the workspace name and color scheme.
Edit workspace users	edit_workspace_user_action	Allow the creator of the workspace to invite users to or remove users from a specific workspace, and edit authorization levels.
Integrate workspaces	integrate_workspac	Allow a user to integrate multiple workspaces.

4. Task Management:

Feature	Action name	Description
Create a task	create_task_action	Allows a user to create tasks under the current workspace with attributes.
View Tasks	/	After creation, the task is shown by groups in the workspace.
Edit a task	edit_task_action	Allow a user to edit an existing task.
Delete a task	edit_task_action	Allow a user to delete an existing task.
Group tasks	/	Group tasks under 2 options: assignee and sprint grouping.
Drag tasks	/	tasks can be dragged across columns and specified groupings.

Sprint 1 backlog:

1. Project setup
    a. Variable name and function name define - zhongzuo
    b. Project creation - zhongzuo

    c. Data Models creation - zhongzuo
2. User Authentication & Authorization:
    a. Build login interface - minhuix
    b. Build signup interface - chuyuns
    c. Use django.contrib.auth.models and mysql to store user information: username, first name, last name, email, and password. - wwu4
    d. When a user signs up, send a confirmation email to their email address. - chuyuns (mock)
    e. The user needs to enter the correct 2fa code to have their account activated. -chuyuns (mock)
    f. Until an account is activated, the user cannot perform any action. - wwu4
    g. The user can asks the server to resend the 2fa code. - chuyuns (mock)
3. Workspace Management:
    a. Build workspace creation modal - minhuix
    b. Build workspace interface - minhuix
    c. Create a workspace - wwu4
    d. Edit workspace configuration: edit workspace name, edit workspace color scheme - wwu4
4. Task Management:
    a. Build task creation model - minhuix
    b. Create a task: including workspace, task name, task description, status, start and end time, assignee, priority - zhongzuo
5. User profile - zhongzuo

Sprint 1 product owner

Andrew id: zhongzuo
Name: Zhong Zuo

Data model

The Profile model to store user information:

```
class Profile(models.Model):
   user = models.ForeignKey(User, on_delete=models.PROTECT,
related_name="profile_user")
   register_type = models.CharField(max_length=20)
   otp = models.CharField(max_length=30, default=0)
   authentication_status = models.BooleanField(default=False)
   profile_description = models.TextField(max_length=50, null=True)
```

The Workspace model to store workspace information:

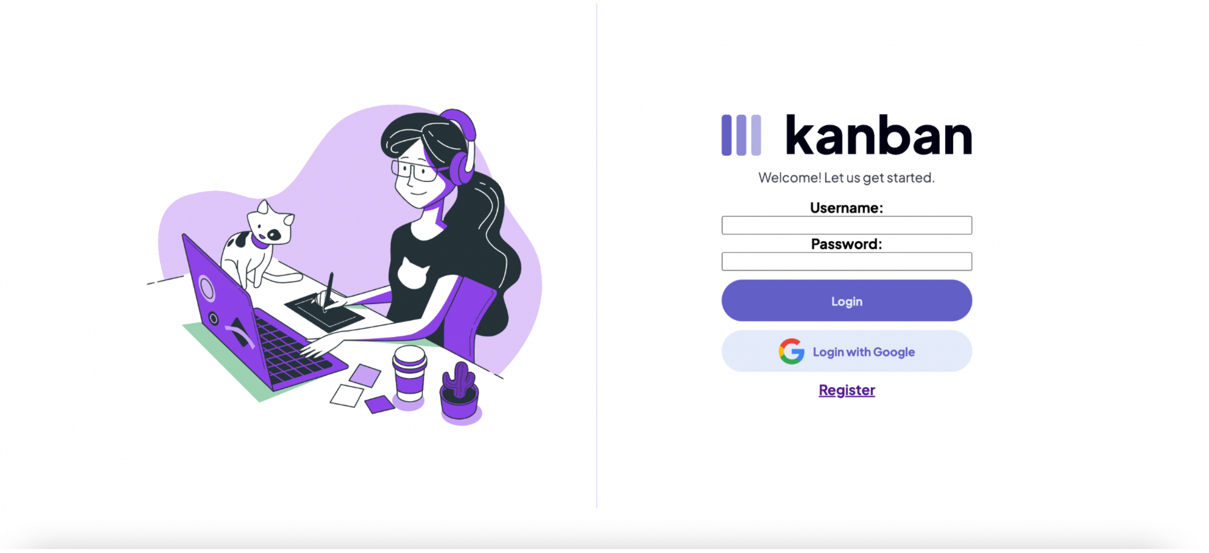
```
class Workspace(models.Model):
   id = models.AutoField(primary_key=True)
   name = models.CharField(max_length=50)
   creator = models.ForeignKey(User, on_delete=models.CASCADE,
related_name='created_workspaces')
   participants = models.ManyToManyField(User, related_name="participant")
   color_scheme = models.IntegerField()
```

The Task model to store task information:

```
class Task(models.Model):
   id = models.AutoField(primary_key=True)
   taskname = models.TextField(max_length=50)
   description = models.TextField(max_length=500)
   assignee = models.ForeignKey(User, default=None, on_delete=models.PROTECT,
to_field='id')
   creation_date = models.DateField()
   due_date = models.DateField()
   status = models.IntegerField()
   sprint = models.IntegerField()
   priority = models.IntegerField()
```

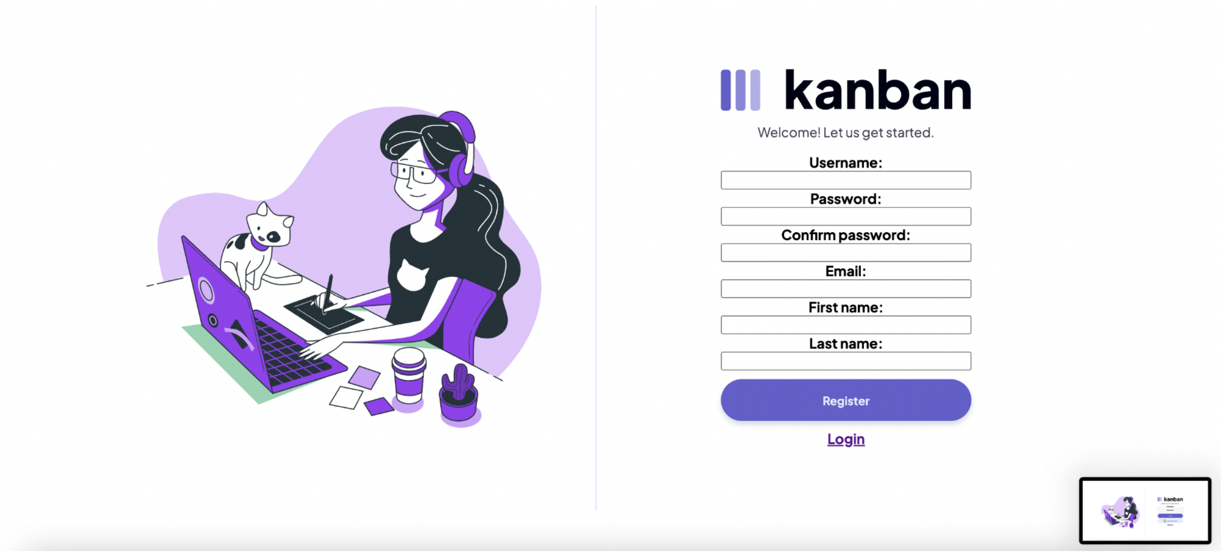
Views

1. Login page



Welcome! Let us get started.

2. Register page



kanban

Welcome! Let us get started.

Username:

Password:

Confirm password:

Email:

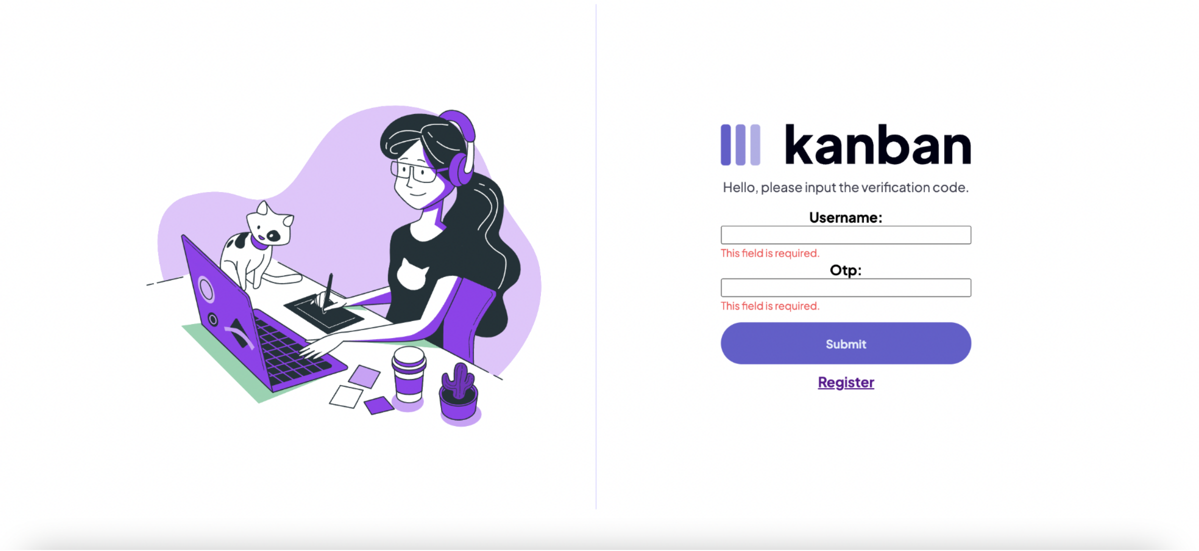
First name:

Last name:

Register

Login

3. 2fa page



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Hello, please input the verification code.

Username:

This field is required.

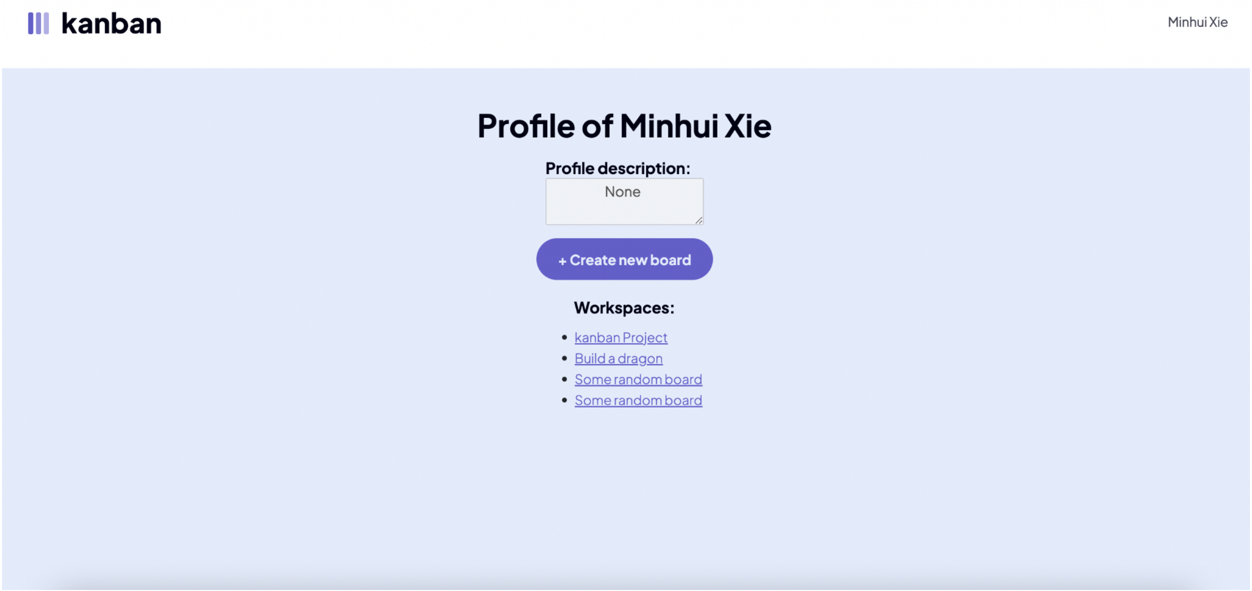
Otp:

This field is required.

Submit

Register

4. Home (user profile) page



kanban

Minhui Xie

Profile of Minhui Xie

Profile description:

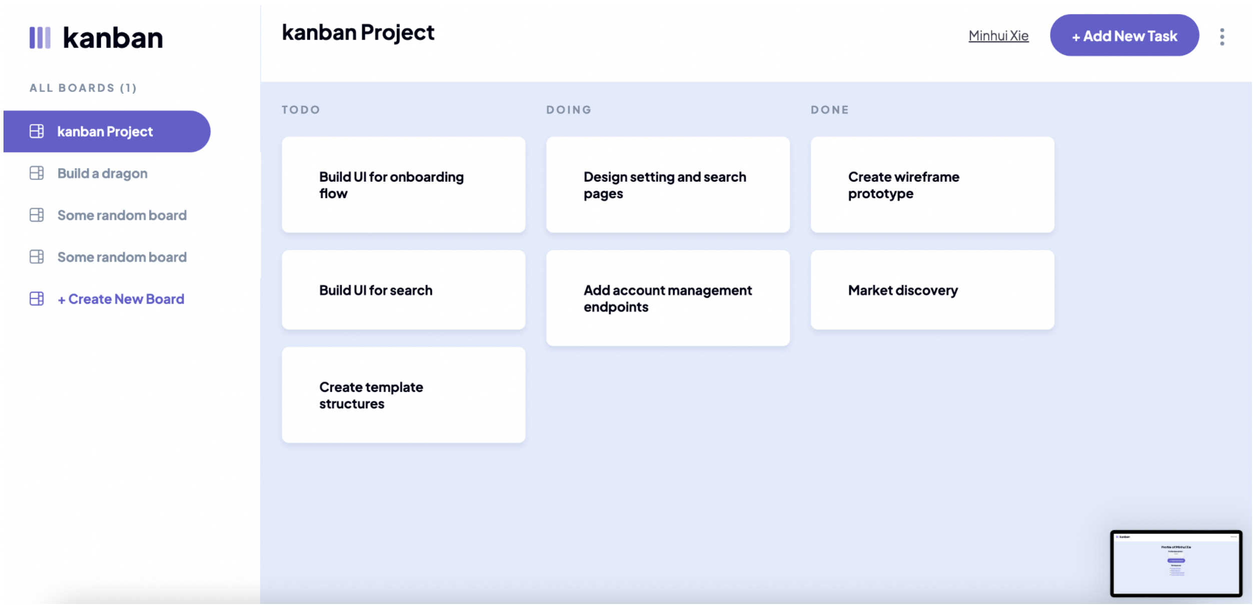
None

+ Create new board

Workspaces:

- kanban Project
- Build a dragon
- Some random board
- Some random board

5. Workspace page



kanban

ALL BOARDS (1)

- kanban Project
- Build a dragon
- Some random board
- Some random board
- + Create New Board

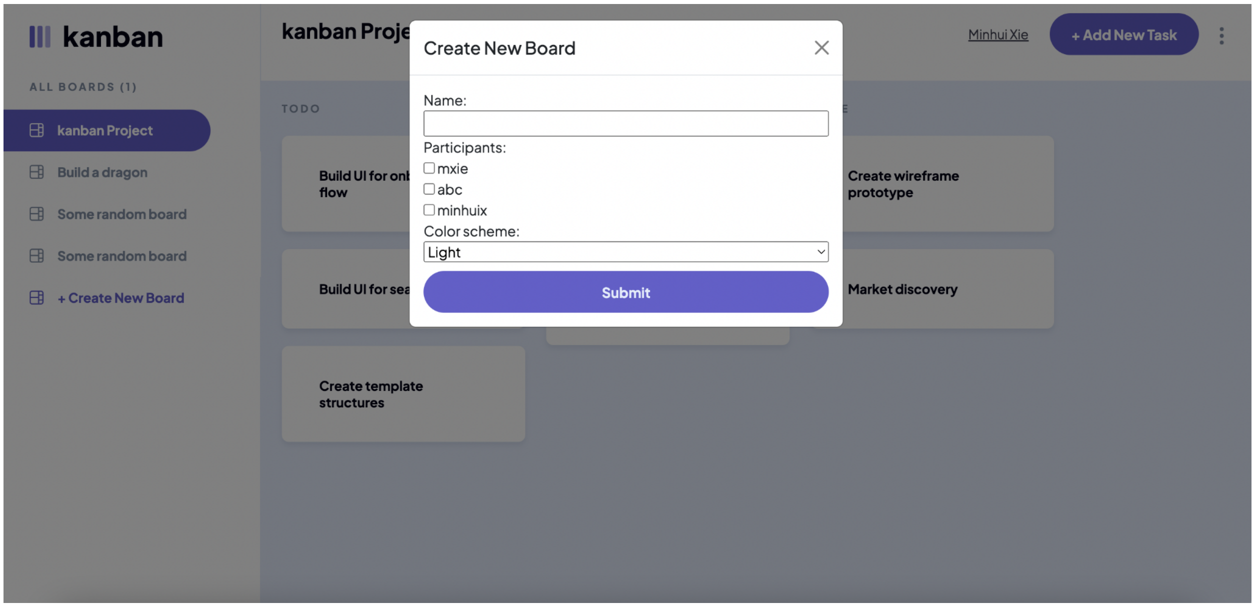
kanban Project

Minhui Xie

+ Add New Task

TODO	DOING	DONE
Build UI for onboarding flow	Design setting and search pages	Create wireframe prototype
Build UI for search	Add account management endpoints	Market discovery
Create template structures		

6. Create workspace page



Create New Board

Name:

Participants:

☐ mxie

☐ abc

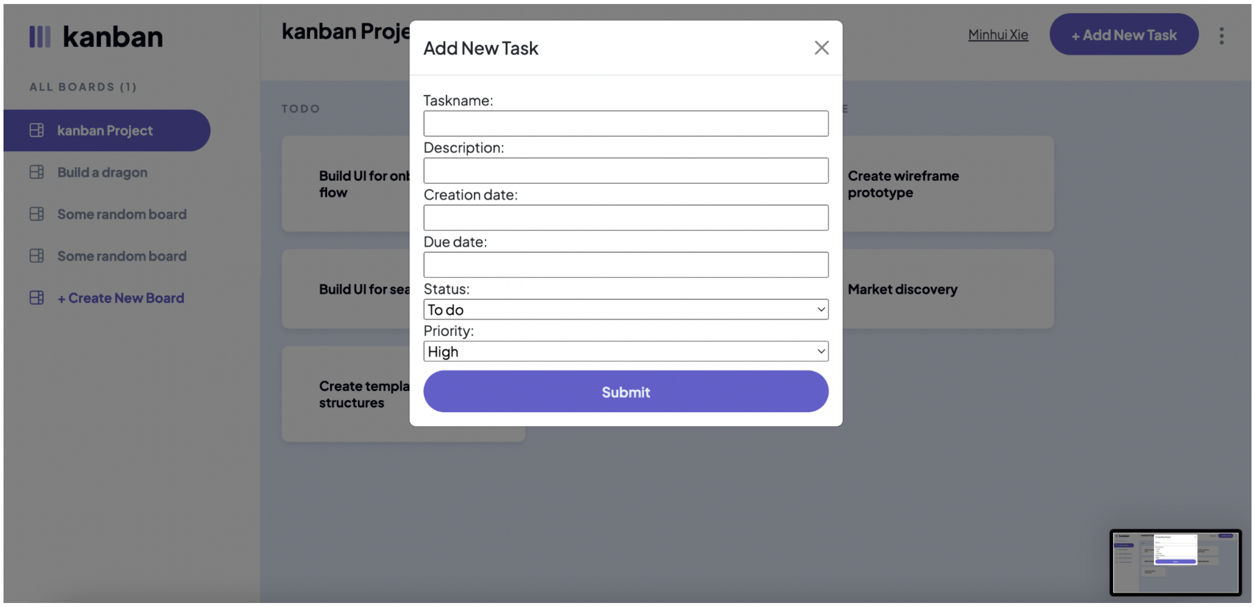
☐ minhuix

Color scheme:

Light

Submit

7. Create task page



Add New Task

Taskname:

Description:

Creation date:

Due date:

Status:

To do

Priority:

High

Submit