PicVerse : User Stories Documentation

Project Title: PicVerse – A Social Media Photo Sharing Platform

Group ID: 14

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Sprint 1 : User Onboarding & Security

09 Mar 2025 to 16 Mar 2025

User Story #1 As a user, I need an authentication system

Description:- As a user, I want to securely sign up, log in, and recover my password so that I can access my account safely without worrying about security breaches.

Sub Tasks:-

- **Set up database schema for user accounts** → Design and create tables for securely storing user credentials, including hashed passwords.
- **Implement email/password authentication** → Develop a login and registration system that allows users to authenticate using their email and password.
- **Develop password recovery functionality** → Create a password reset mechanism that allows users to recover their accounts via email.
- **Test authentication flow and fix bugs** → Conduct extensive testing of login/logout flows to identify and resolve any security or usability issues.
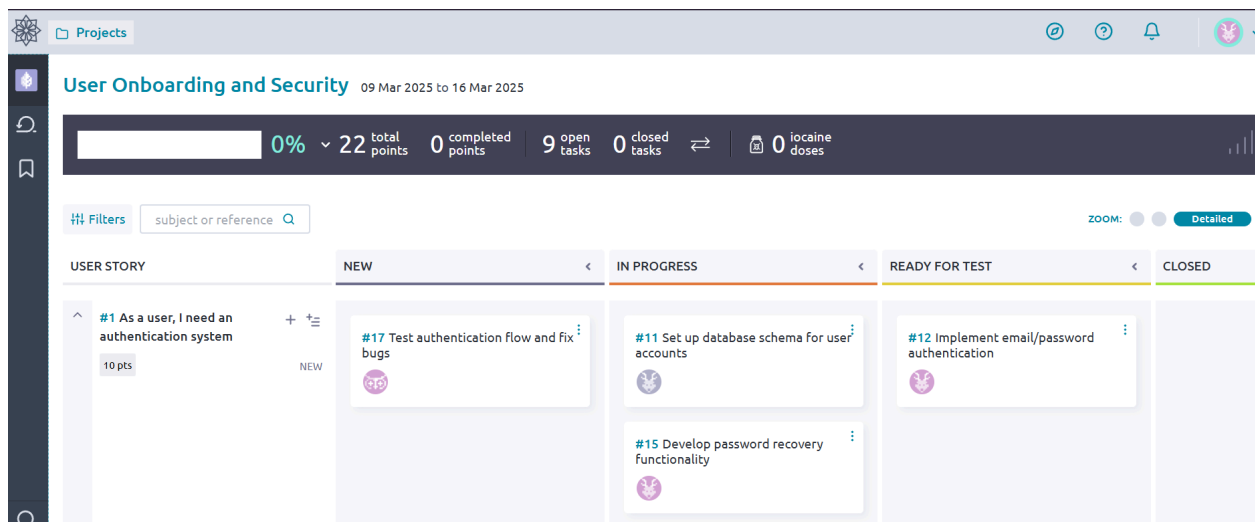
POINTS:-   UX-2   Design-2   Frontend-3   Backend-3

User Story #2: As a User, Add OTP Verification During Registration

Description: As a user, I want to receive a One-Time Password (OTP) on my mobile number/email while registering, so that my account can be verified securely before getting created.

Sub Tasks:-
- **Design OTP input screen during registration flow**→Create a user-friendly OTP input interface where users can enter the received code. Add features like 'Resend OTP' and clear instructions for user guidance.
- **Create backend API to generate and send OTP via email**→Develop a secure API that generates a random OTP and sends it via email (or SMS). Ensure the OTP is encrypted, time-limited, and linked to the user's registration session.
- **Validate entered OTP and verify user identity**→Implement logic to match the entered OTP with the stored value in the database. If correct, mark the user as verified; otherwise, show error messages and allow retries.
- **Show appropriate messages for OTP sent, verified, or incorrect**→Display clear messages like "OTP Sent Successfully," "OTP Verified," or "Invalid OTP" to ensure users know the status of their verification attempt.
- **Test entire registration + OTP flow**→Conduct thorough testing to confirm that OTP generation, delivery, input, and verification processes work seamlessly across various scenarios, including incorrect OTP entries, expired OTPs, and multiple attempts.

POINTS:-   UX: 2   Design: 2   Frontend: 3   Backend: 5
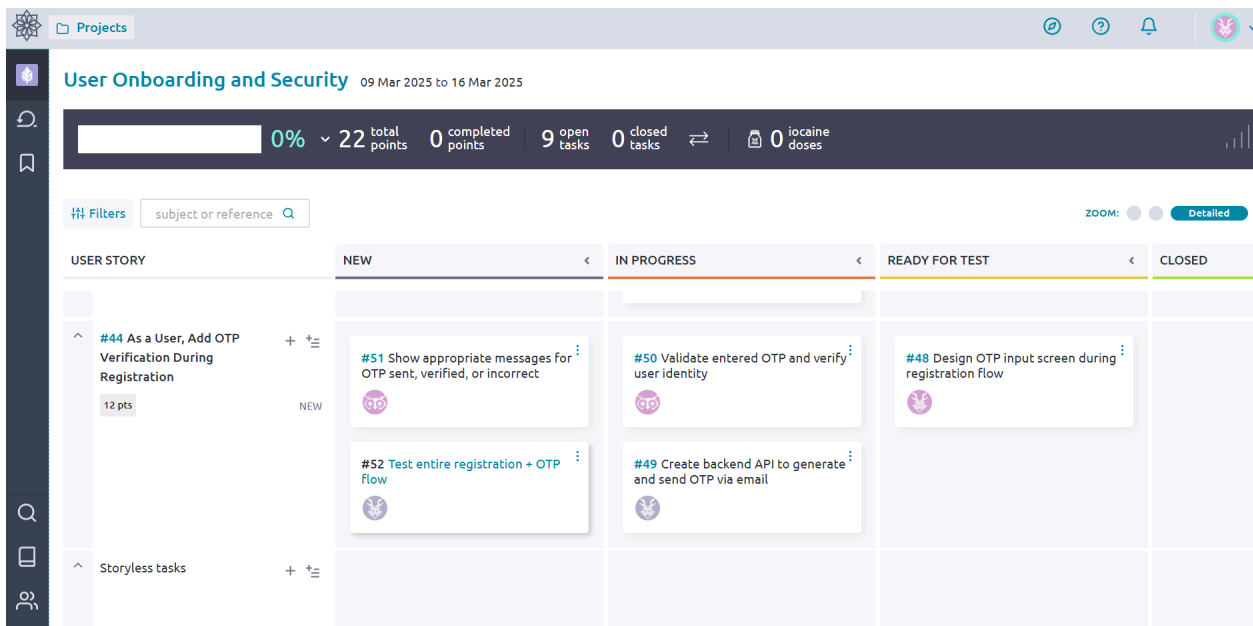
Sprint 2 : Social Interactions

16 Mar 2025 to 23 Mar 2025

User Story #3 As a user, I want to Follow or Unfollow people.

Description:- As a user, I want to follow and unfollow other users so that I can curate my feed and see posts from people I like.

Sub Tasks:-

- **Design database schema for following system** → Create tables to store follower/following relationships.
- **Implement follow/unfollow button** → Develop a button that allows users to follow or unfollow other users.
- **Update feed to show posts from followed users** → Ensure that the home feed only displays posts from followed users..
- **Test and optimize follow/unfollow feature** → Verify that the follow/unfollow functionality works properly and is scalable.
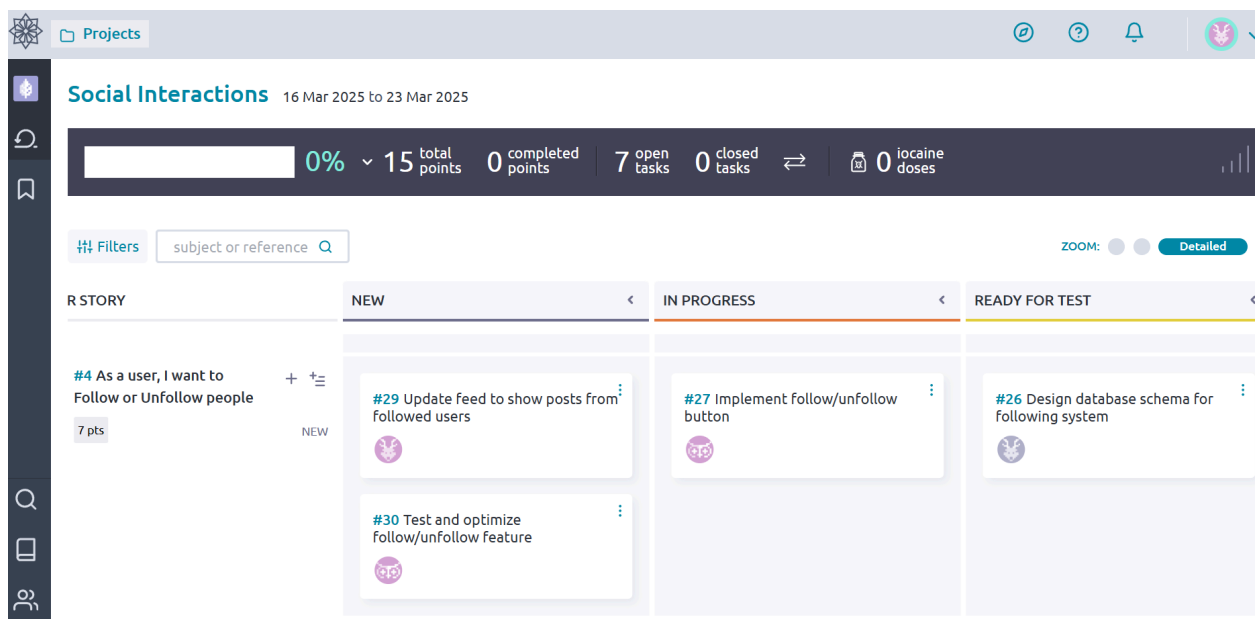
POINTS:-   UX-3   Design-2   Frontend-3   Backend-2

User Story #4:- As a user, I want to Like & Comment on posts

Description: As a user, I want to like and comment on posts so that I can engage with other users and express my thoughts.

Sub Tasks:-

- **Create database schema for likes and comments** → Design tables to store likes and comments with timestamps.
- **Implement like button with real-time updates** → Develop a like button that instantly updates the UI when clicked.
- **Test and debug the like/comment system** → Ensure the system works smoothly and resolves any issues.
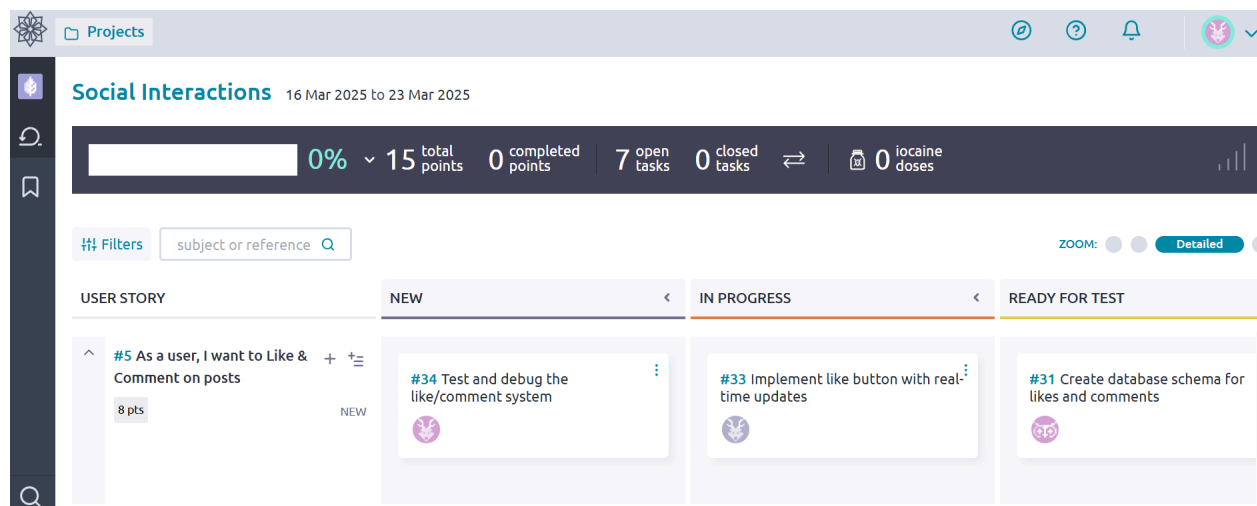
POINTS:-   UX-2   Design-1   Frontend-2   Backend-3

Sprint 3 : Profile & Content Sharing

23 Mar 2025 to 30 Mar 2025

User Story #5:- As a user, I want to Upload My Photos

Description:-As a user, i would like to upload, store, and manage images on PicVerse.

Sub Tasks:-

- **Design database schema for image storage** → Create database tables to store image metadata, such as file name, user ID, and timestamps.
- **Implement image upload functionality** → Develop a feature that allows users to upload images from their device.
- **Test and debug upload functionality** → Ensure that the upload process works smoothly and fixes any potential errors.

POINTS:-   UX-2   Design-2   Frontend-3   Backend-3

User Story #6:- As a user, I want to Personalize My Profile

Description:-As a user, I want to have a customizable profile so that I can share my personal details and make my profile unique.

Sub Tasks:-

- **Design UI for profile page** → Develop a user-friendly profile interface with a modern design.
- **Implement backend for storing user details** → Create an API and database structure to store user information securely.
- **Enable profile picture uploads** → Allow users to upload and change their profile pictures.
- **Allow users to update their bio and links** → Provide an option for users to customize their bio and add external links.
- **Test profile update functionality** → Ensure that changes to user profiles are saved and reflected correctly.

POINTS:-   UX-3   Design-2   Frontend-3   Backend-2

Sprint 4 : Communication & Discovery

30 Mar 2025 to 06 Apr 2025

User Story #7: As a user, I want to Search other users.

Description:- Users should be able to search for users with username.

Sub Tasks:-

- **Implement search functionality by username** → Develop a search bar that allows users to find others using their username.
- **Optimize database queries for faster searches** → Improve search performance to return results quickly.
- **Test search results and refine recommendations** → Ensure the search results are accurate and relevant.
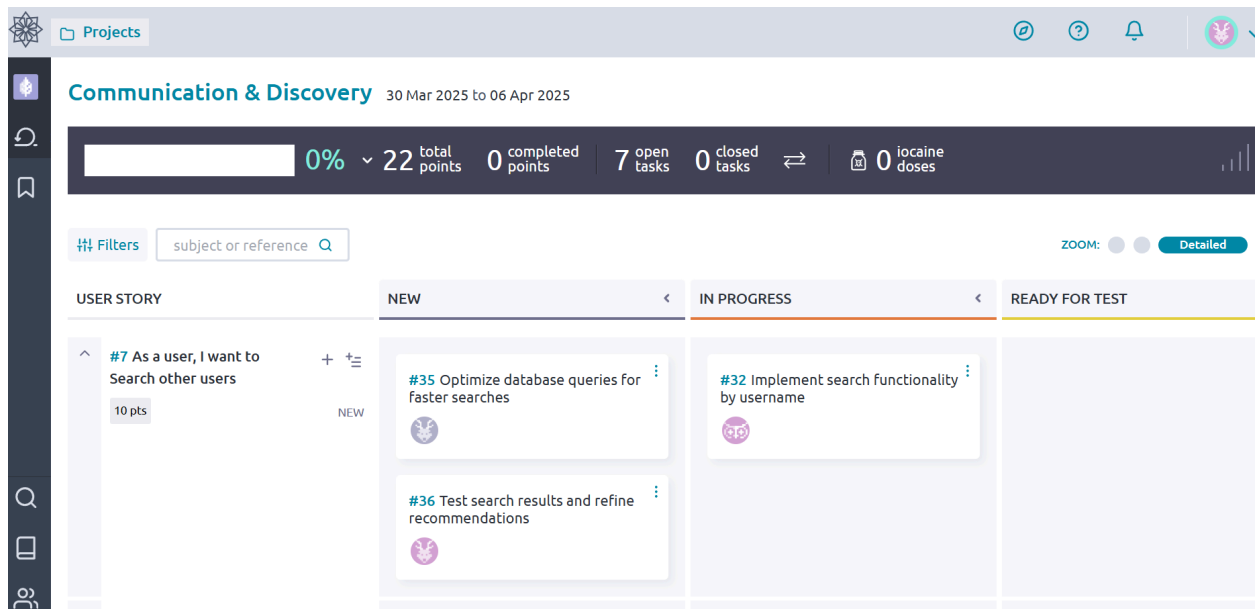
POINTS:-   UX-2   Design-2   Frontend-3   Backend-3

User Story #8: As a user , I want to message my Friends.

Description:- As a user, I want to send and receive direct messages so that I can have private conversations with other users.

Sub Tasks:-

- **Set up database schema for chat messages** → Create tables to store message history, sender, receiver, and timestamps.
- **Develop real-time messaging system** → Implement WebSockets or Firebase for live chat functionality.
- **Implement UI for chat interface** → Design a user-friendly chat screen.
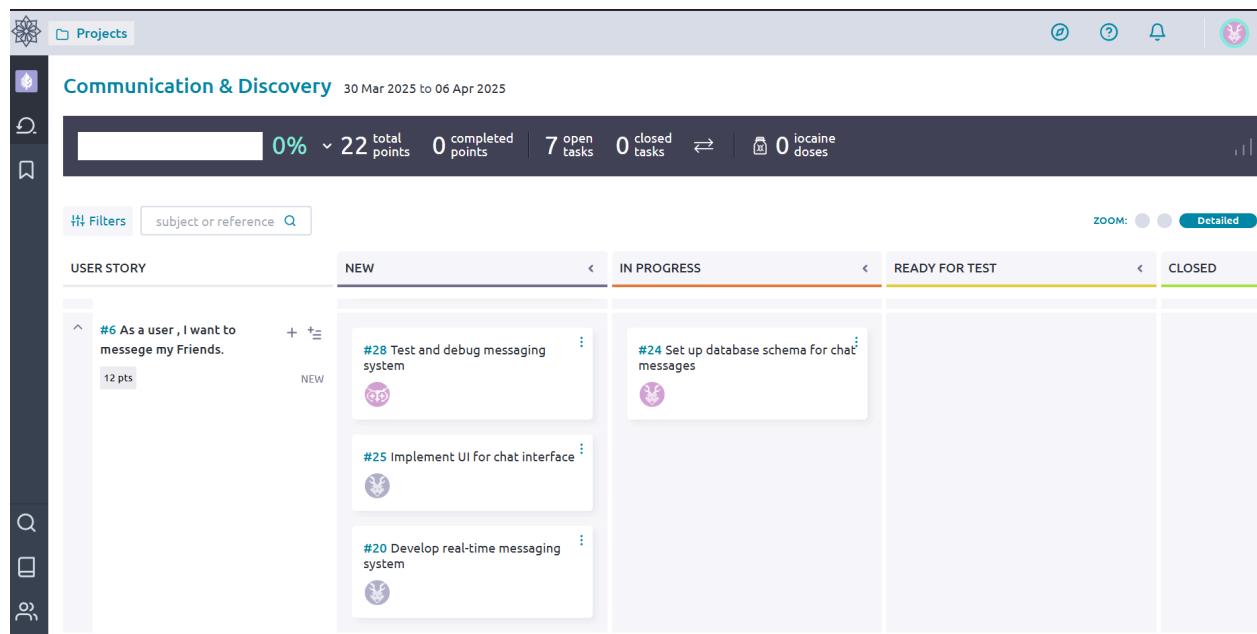- **Test and debug messaging system** → Ensure the chat system is working smoothly.

POINTS:-   UX-2   Design-2   Frontend-3   Backend-5

User Story #9: As a user, I want Discussion Forum for Users

Description:- As a user, I want to post queries or discussions in the forum so that I can engage with other users and gain insights.

Subtasks:-

- **Create Forum Posting UI**→Design an intuitive text input field where users can type their queries.Include a clear "Post" button for submission.
- **Develop Forum Post Listing**→Display a list of all forum posts with usernames, post content, and timestamps. Include an "Open" button for each post to expand and view detailed discussions.
- **Backend for Forum Listing** →Develop an API to fetch and display forum posts.Ensure efficient data retrieval for better performance.
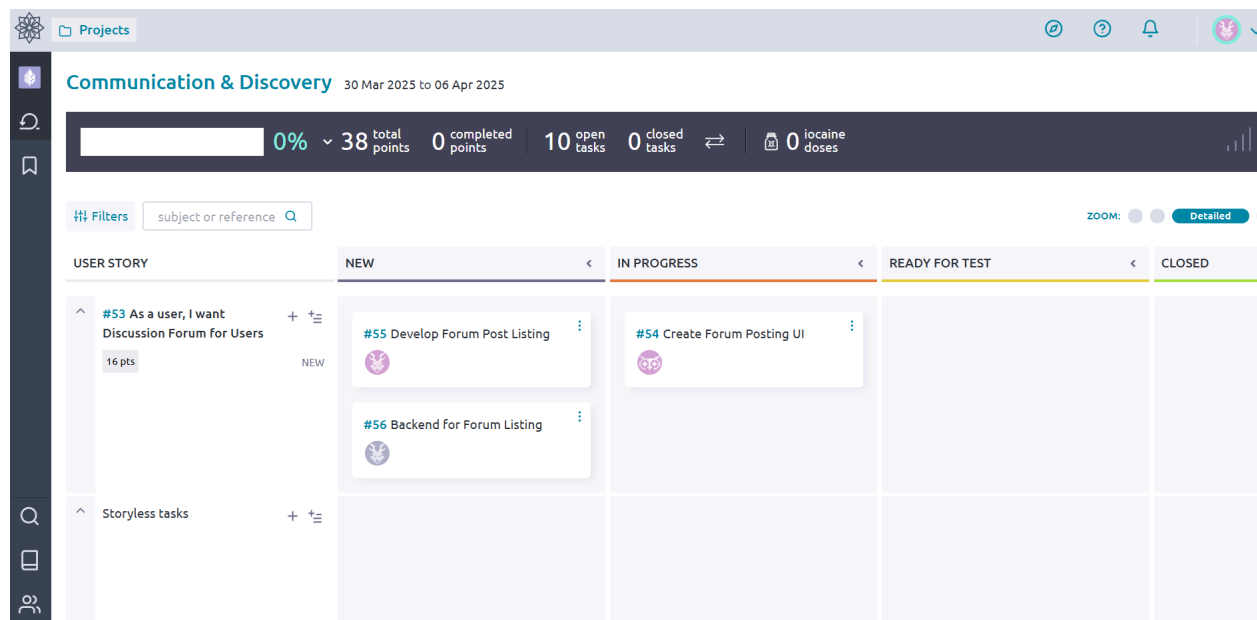
POINTS: UX: 3   Design: 5   Frontend: 3   Backend: 5

Sprint 5 : Admin Controls & Performance Insights

30 Mar 2025 to 06 Apr 2025

User Story #10: As an Admin, I want to Ban a users

Description:- As an Admin, I want to be able to ban users who are bothering me so that I can have a safe experience on the platform.

Sub Tasks:-

- **Design database schema for banned users** → Create a table to store banned user information, including user ID, ban reason, and duration.
- **Develop an admin panel for banning users** → Create a dashboard where admins can view reports and ban users if necessary.
- **Test and debug banning system** → Ensure all ban-related features work correctly and users cannot bypass restrictions.
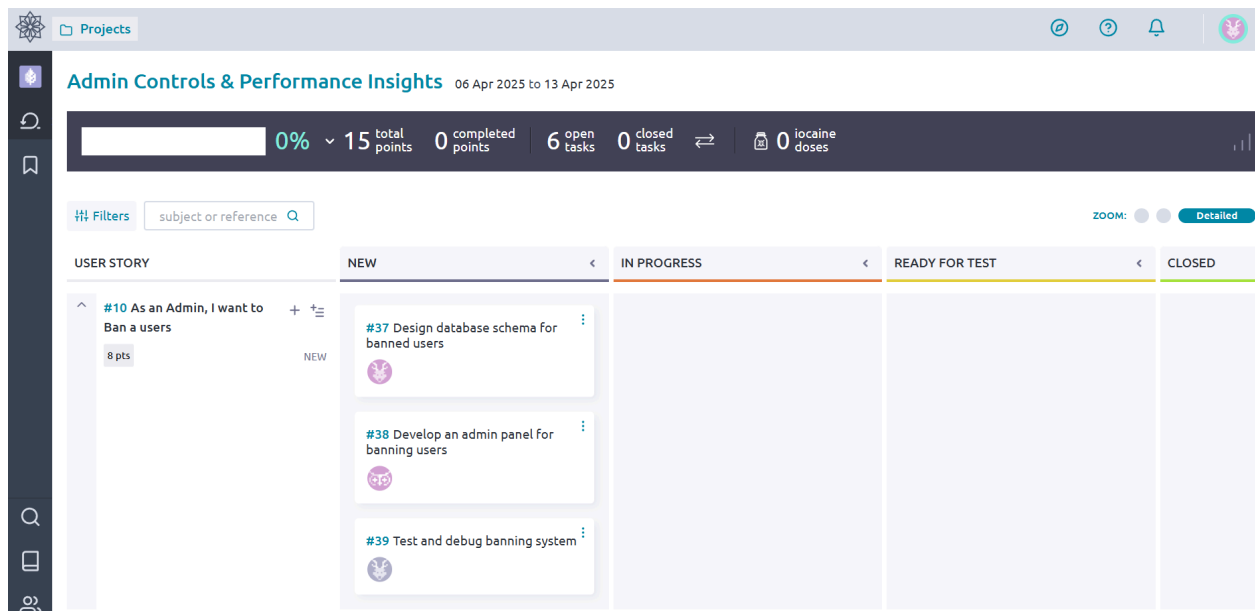
POINTS:- UX-2 Design-2 Frontend-2 Backend-2

User Story #11: As a Admin, I want Server Response Monitoring

Description:-As an admin, I want to monitor server response time so that I can ensure platform performance is optimal.

Sub Tasks:-
- **Develop a dashboard displaying real-time server response metrics**→Create a visual interface that shows server response metrics such as average response time, peak loads, and downtime instances. The dashboard should update dynamically to ensure the data remains current.
- **Provide visual graphs showing response time trends over different periods**→Implement line graphs, bar charts, or pie charts to visualize server performance trends over time (e.g., hourly, daily, weekly). This helps admins track long-term performance patterns.
- **Ensure the dashboard auto-refreshes to provide updated data**→Implement an automatic refresh feature that updates the displayed data at regular intervals without requiring manual page refreshes. This ensures admins always see the most recent server response data.
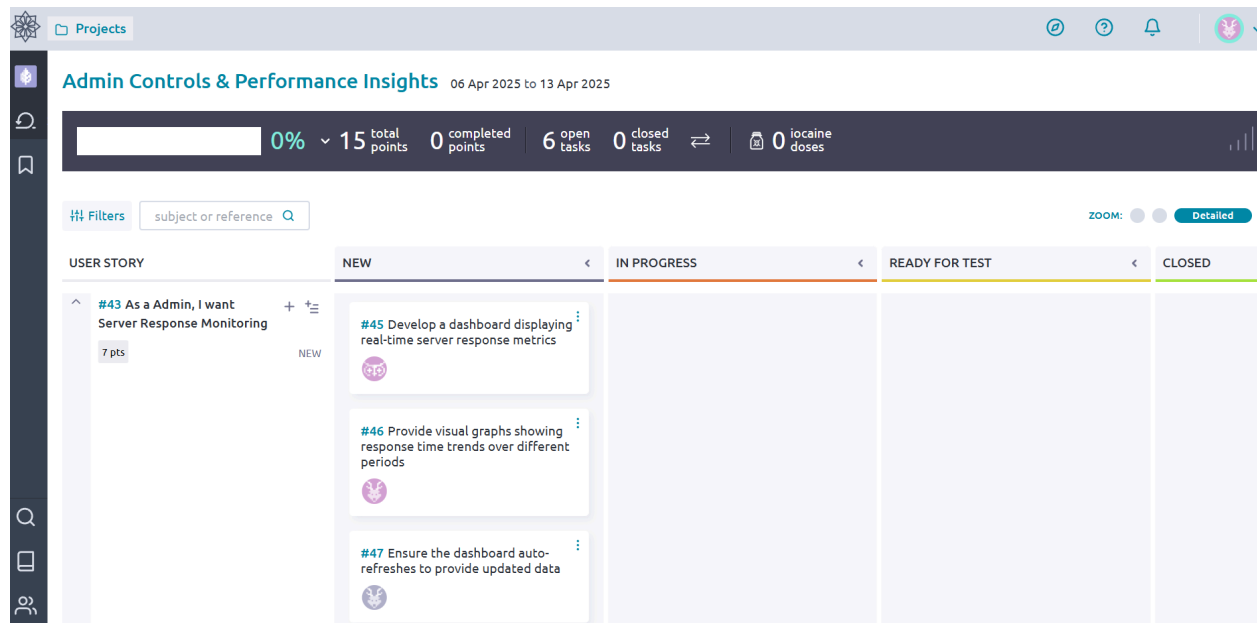
POINTS:-   UX: 1   Design: 2   Frontend: 2   Backend: 3

Agile Project Plan (5-Week Sprint Plan):-

Sprint	Duration	Goals	Deliverables
Sprint 1: User Onboarding & Security	March 09 – March 16	Implement secure user authentication and registration systems.	User login system with hashed passwords.
		Add OTP verification for enhanced security.	OTP verification system for new users.
		Enable password recovery functionality.	Password recovery via email.
Sprint 2: Social Interactions	March 16 – March 23	Implement follow/unfollow functionality to build user connections.	- Follow/Unfollow system integrated with the feed.
		Develop a like and comment system for user engagement.	Like buttons with real-time updates. Comments feature for post interaction.
Sprint 3: Profile & Content Sharing	March 23 – March 30	Develop image upload functionality for users.	Image upload feature for sharing content.
		Allow users to customize their profile details.	Personalized profile page with bio, links, and profile picture upload.
Sprint 4: Communication & Discovery	March 30 – April 06	Implement a search feature for users.	Search system with username-based results.
		Develop a messaging system for private conversations.	Real-time chat messaging interface.

		Create a discussion forum for public discussions.	Forum posting feature with a list view for discussions.
Sprint 5: Admin Controls & Performance Insights	April 06 – April 13	Develop admin features to manage platform security.	Admin panel for banning users.
		Implement server performance monitoring to ensure optimal performance.	Server performance dashboard with response metrics and graphs.