

FTGP Group [Group Number]: Sprint 3 Report (26th April)

Sprint 2 Review (Sprint duration 22nd – 26th April):

Almost finish all the basic frontend construction, we will move on to backend construction in the next week and let one person continue improving frontend in the next few weeks.

Completed work, i.e. which tasks were complete and by who:

Jingkun Yang:

New Component Integration: Define global variables

Location: `mobile/api/global.js` and `mobile/api/interface.js`

Features:

- Define global variables that can be used by different parts of the entire application.
- A module that encapsulates network request functionality for applications developed using the uni-app framework.

New Component Integration: New function "customer service" in the front-end mobile section.

Location: `mobile/pages/login`

Features:

- Get the user's details from the backend API.
- Display them on the page.

Yuyao Wang

New Component Integration: "Admin Page"

Location: admin-pc/pages/admin

Complete the design of the admin page, which is used to allow the administrator to manage the project and users, such as reviewing whether the project is reasonable and whether the milestone goal is achieved, so as to determine whether to release the loan next. It also vets people who want to start a crowdfunding project. All in all, admins have higher privileges than regular users.

New Component Integration: "Complete the components"

Location: admin-pc/components/uni-popup, uni-transition

- The Transaction part is mainly used to implement transition animations, making animations smoother when opening or closing windows to enhance user experience.
- The Popup part is used for displaying pop-up windows, which requires embedding the transaction component.

Yunkui Yu

New Component Integration: "Project"

Location: admin-pc/components/admin-components

In this function, the administrator can view the project information submitted by the user, including project id, milestone information, applicant and so on. And decide whether to approve or reject the user's project application.

New Folder: "u-chart"

Location: admin-pc/components

Easy to integrate into existing projects, whether used in applets or web pages, charting and data updating is simple and fast.

Aibi Xu

Investment Management:

Location: mobile\pages\task\electronic

Displays an overview of the user's investments, including the number and status of investments.

Provides detailed results, such as profit and loss data, for specific investments or trades, which helps users monitor and analyze their financial situation.

Task Management:

Location:mobile\pages\task\newTask

Allows users to enter all the necessary information to set up a new task, including task description, priority, deadline, and so on.

Provides the ability to modify existing tasks, supporting the adjustment of task status, deadline and other key parameters.

Order Management:

Location:mobile\pages\task\order

Provides an interface to browse orders and supports paging and loading, allowing users to browse various orders through different category tabs.

Provides a comprehensive view of the order list, including search and filtering features to help users quickly find specific orders.

Display detailed information about individual tasks and may include the ability to update or modify those task details.

Freddie Yu

API Structure Development:

Built the initial API structure within the front-end files to facilitate future database integration. This setup is essential for supporting scalable, robust back-end services.

UI Enhancements and Vector Images:

Modified the overall style of the user interface to improve visual appeal and user experience. Added new, clickable vector images to all UI components, enhancing interactivity and the aesthetic quality of the platform.

Backend Database Construction:

Constructed several backend databases using MongoDB. This development is pivotal for managing large volumes of data efficiently and supports our goal of robust data handling and retrieval capabilities.

Changes, i.e. tasks that have changed/not completed and why:

We are considering how to improve the login interface to have more blockchain properties. So far, we decided to keep the login file and connect it with the blockchain wallet.

Agreed weekly “Equity share”, i.e. how this sprint’s work was split:

Equally distributed, each person completes all the base parts of the frontend on the original basis.

Sprint 3 Planning (Sprint duration 29th April – 3rd May)

This should summarize your sprint planning meeting. The meeting should be done at the beginning of each sprint. You must specify your sprint vision and select which items from the product backlog you plan on completing during the next sprint (sprint backlog). Additionally, you must select the product owner and the scrum master.

Product Owner: Jingkun Yang

Scrum Master: Freddie Yu

Sprint Vision:

Build the foundation of the backend to prepare for later blockchain wallets and smart contracts writing.

Sprint Backlog:

Jingkun Yang:

Basic blockchain and a simple web application:

- Defines the basic structure and method of a blockchain

- Created a network server using Flask
- Defines routes for Flask applications and for handling HTTP requests

Yuyao Wang

Design the API for users to use:

My goal for next week is to complete some APIs that users (both regular users and administrators) will use, including registration, login, information acquisition, and user authentication, where user information needs to be saved to the database and logged in users need to be authenticated.

Aibo Xu

Build a basic blockchain structure which will include creating blocks with specific data and metadata, generating a unique hash value for each block to ensure its immutability, and automatically creating the initial block of the chain as a starting point. Additionally, this code will support comparing the equality of two blocks, inserting the genesis block when initializing the blockchain, and providing the ability to convert blocks to dictionary or JSON format for storage and display. These integrated features will allow data to be stored securely and immutably for application scenarios that require high data integrity.

Freddie Yu

Optimize MongoDB Usage:

Intend to further refine MongoDB operations, focusing on enhancing data retrieval speeds and ensuring data integrity across the platform. This includes implementing more efficient querying techniques and optimizing the existing database schemas.

Extend Redis Implementation:

Plan to expand the use of Redis to support additional real-time features such as session management and caching. This will improve the overall speed and efficiency of the platform, especially in managing user sessions and speeding up frequently accessed data.

Integration Testing:

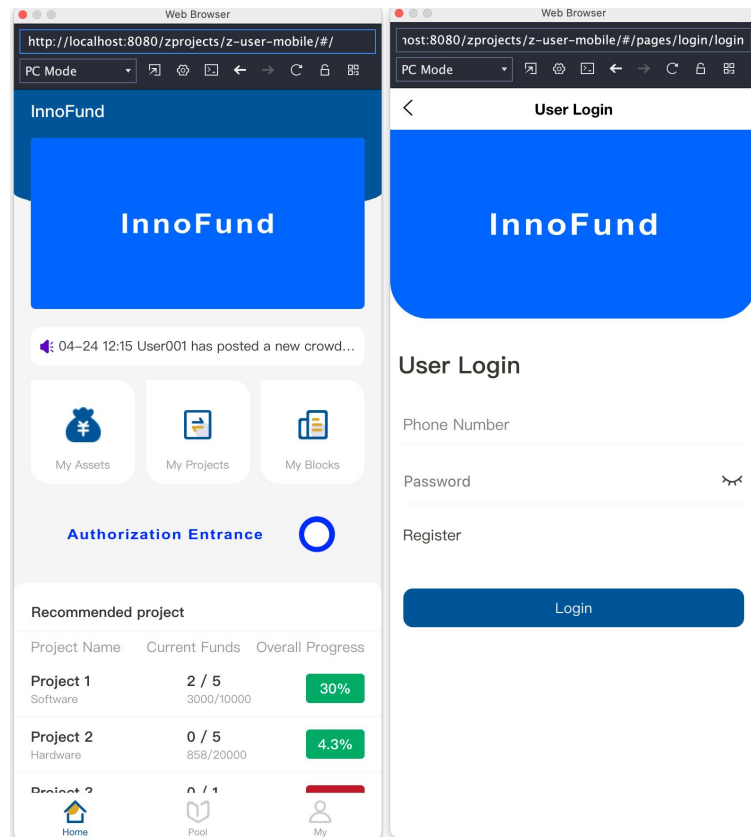
Conduct integration testing between MongoDB and Redis to ensure seamless interaction between these databases and the front-end components. This testing is crucial to validate the reliability and efficiency of the platform under various data loads and user scenarios.

Yunkui Yu

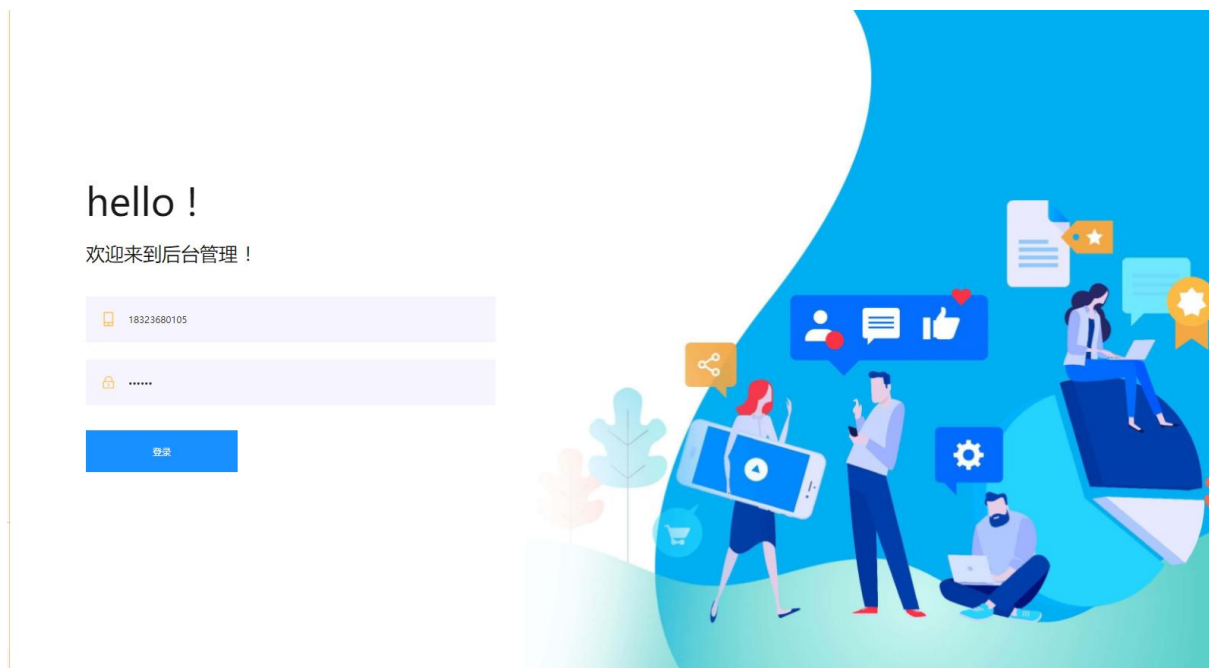
Design the Task management API:

My goal for next week is to complete a backend API module written using the Flask framework that contains a Blueprint called task_api. This blueprint defines multiple Task-related routes that handle HTTP requests related to task management.

Anything else you would like to share:
Frontend Mobile part:



Frontend PC part:



[illegible]