Balqa Applied University - Center
IT - Software Engineer Department

SYNCHAND

WEB APPLICATION

Smart and modular way to manage your projects in synchronous procedures.

Special Thanks message

Special thanks to Dr. Sawsan Abu-Taleb for her exceptional supervision and the invaluable guidelines provided throughout the Synchand project.

About Us

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SYNC HAND

PROJECTS MANAGEMENT TOOL

This project name means the project vision, where we mean synchronous operations that are provided through executing the project, also based on collaborations between the team members on the one hand!

Project Features

- **Project Tracking: This enables users to track the status and progress of their personal and team projects in real-time.**
- **AI Assistance: Integrates artificial intelligence to assist in task management, workflow optimization, and decision-making.**
- **User-Friendly Dashboard: Designed with a modern UI to ensure usability, accessibility, and seamless navigation as we learn in GUI and HCI**
- **Progress Monitoring: Offers a structured approach to tracking project milestones, ensuring users stay informed about their progress.**

Technologies and techniques

01 Next JS	02 Tailwind	03 MongoDB
04 MCV	05 Draw IO	06 Gemini API
07 Penetration Testing	08 Clerk	09 PWA

Software Engineering Techniques
In SyncHand Project

Requirements

This refers to gathering and defining what a software system should do.

Activity Diagram

Represents the workflow of a system, showing different activities and decisions in a process

Use Case Diagram

A visual representation of how users (actors) interact with a system

Robustness Diagram

Provides workflow of the system It ensures logical consistency between components

Sequence Diagram

Displays how objects interact in a specific sequence, focusing on the order of messages exchanged between components over time.

Component Diagram

Represents the physical structure of a system, and their dependencies.

SDLC - Agail - Scrum

Software Engineering Approach

That used in SyncHand Project

Software Requirements Specifications

A technique that used in requirements:

- Role-playing [as a gathering]
- process-oriented [as implementing principle]

1. The system shall allow users to log in securely using their credentials.
2. The system shall allow users to log out securely from their accounts.
3. The system shall allow users to create new projects, specifying relevant details.
4. The system shall allow users to update existing projects, modifying project details as needed.
5. The system shall allow users to delete projects, permanently removing them from the dashboard.

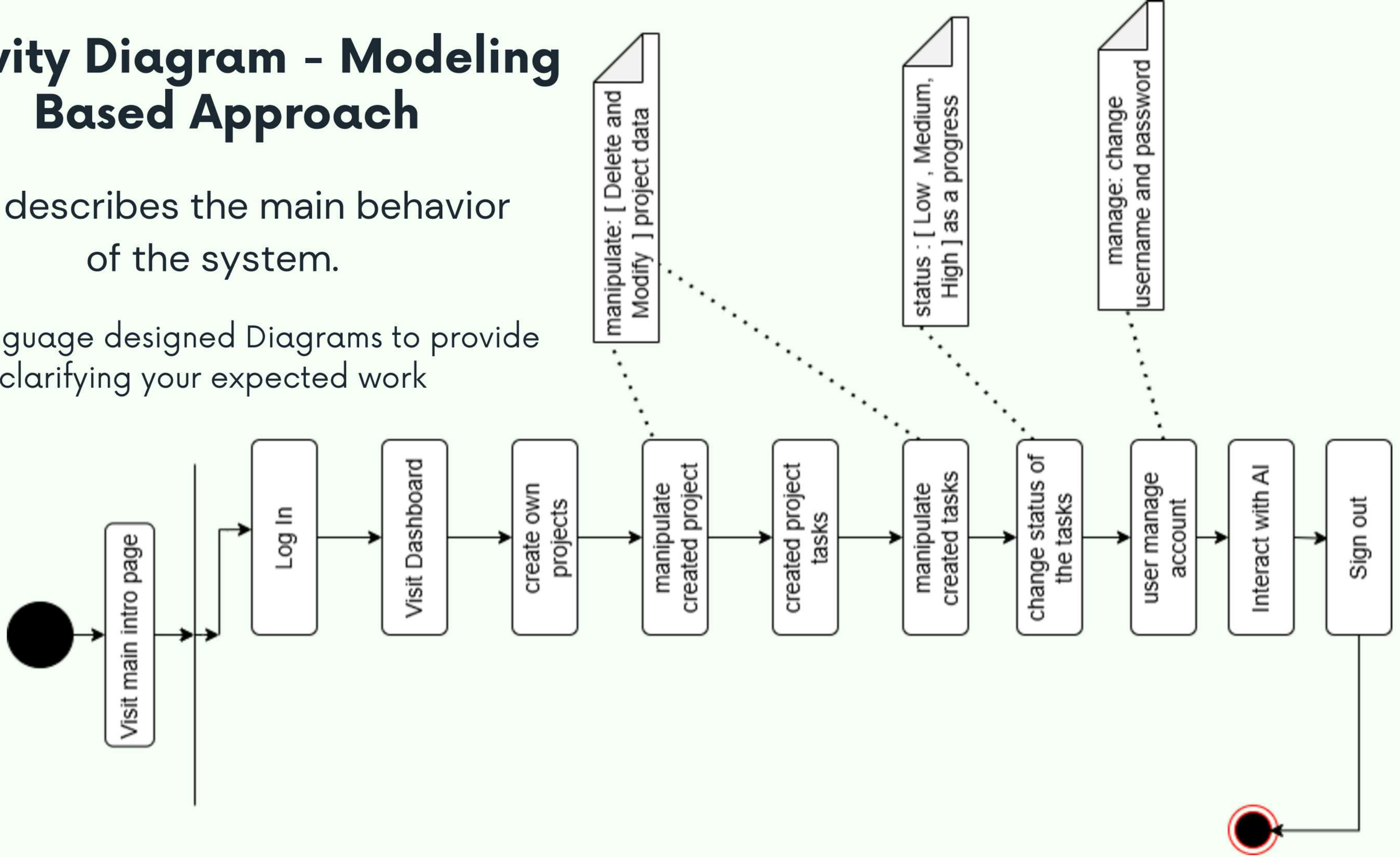
Software Requirements Specifications

1. The system shall provide users with a real-time progress tracker, displaying project completion as a percentage (0% to 100%).
2. The system shall provide a dedicated page for project status, categorizing projects as "Completed" or "In Progress".
3. The system shall provide a dedicated AI assistance page, offering intelligent suggestions to help users build, improve, and optimize their projects.
4. The system shall allow users to submit feedback on their experience, helping enhance the platform’s usability and effectiveness.

Activity Diagram - Modeling Based Approach

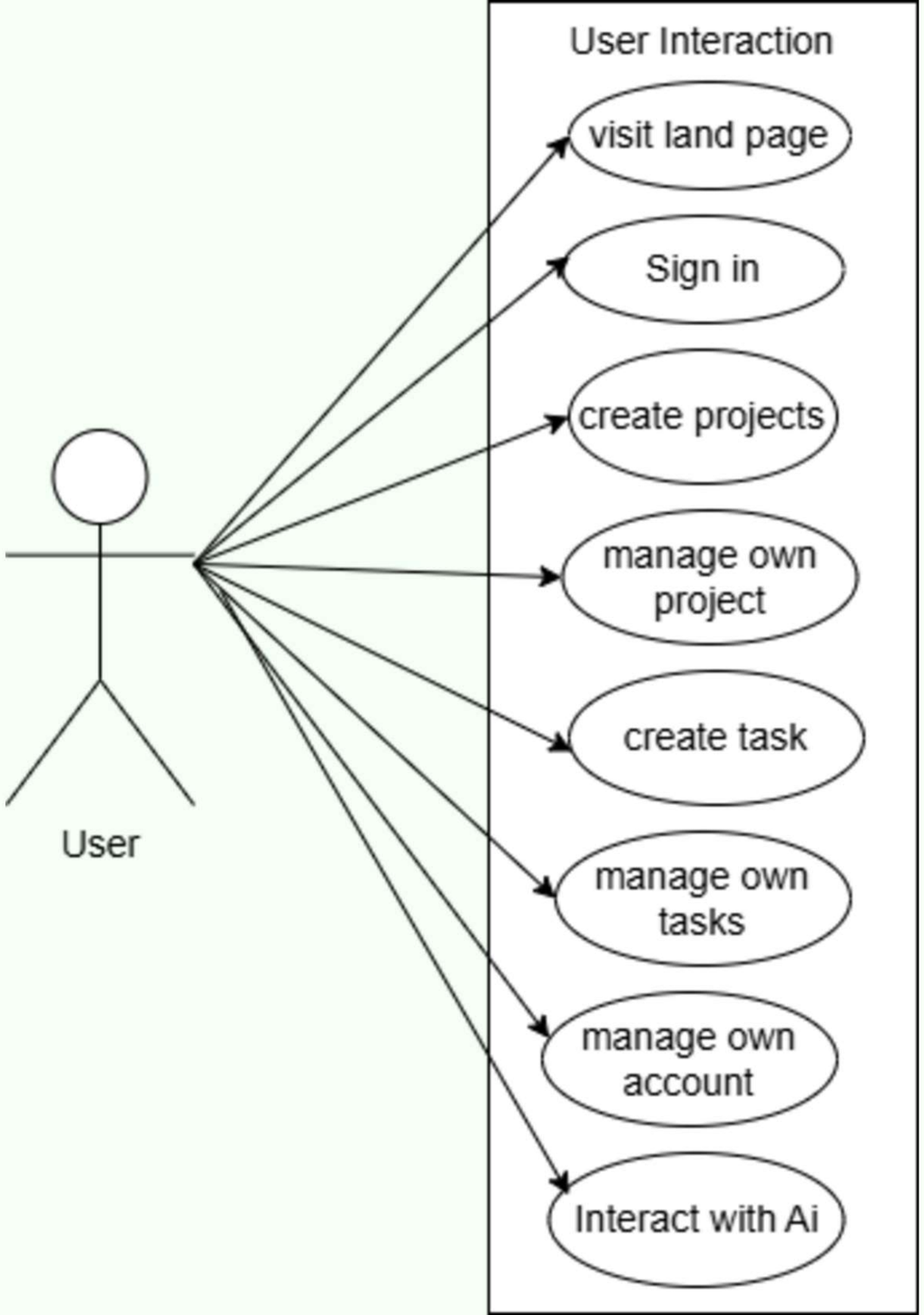
That describes the main behavior of the system.

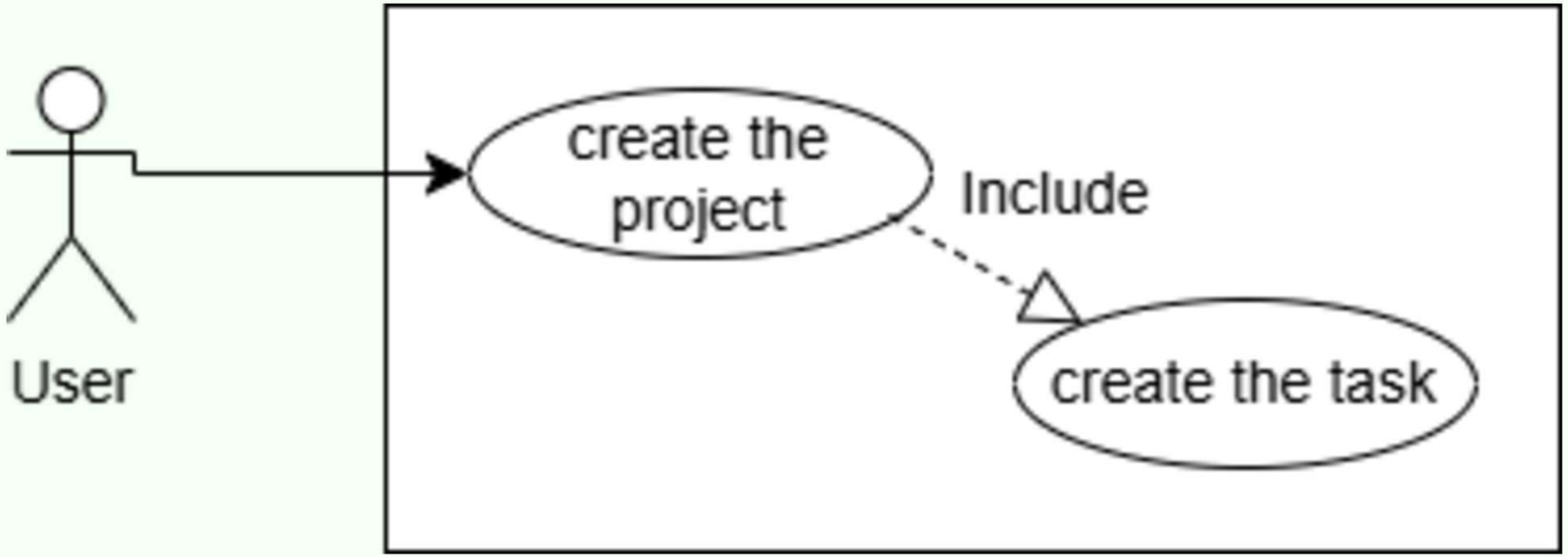
OCL language designed Diagrams to provide clarifying your expected work

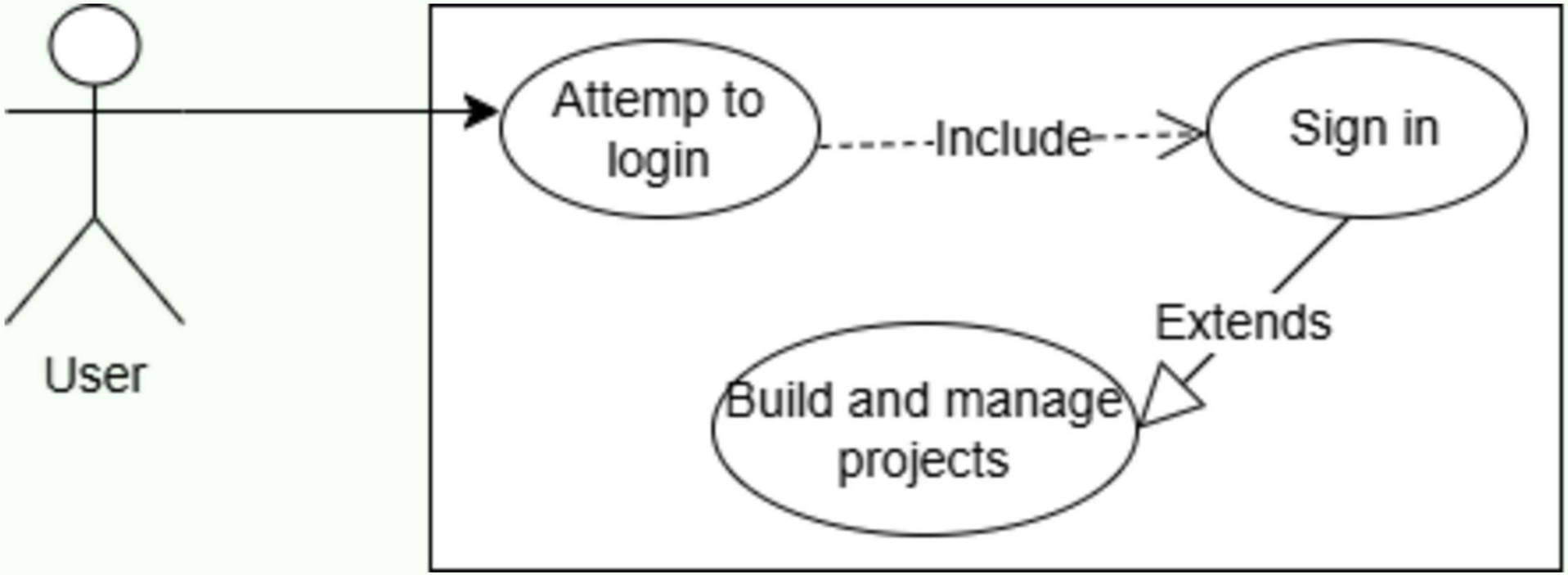


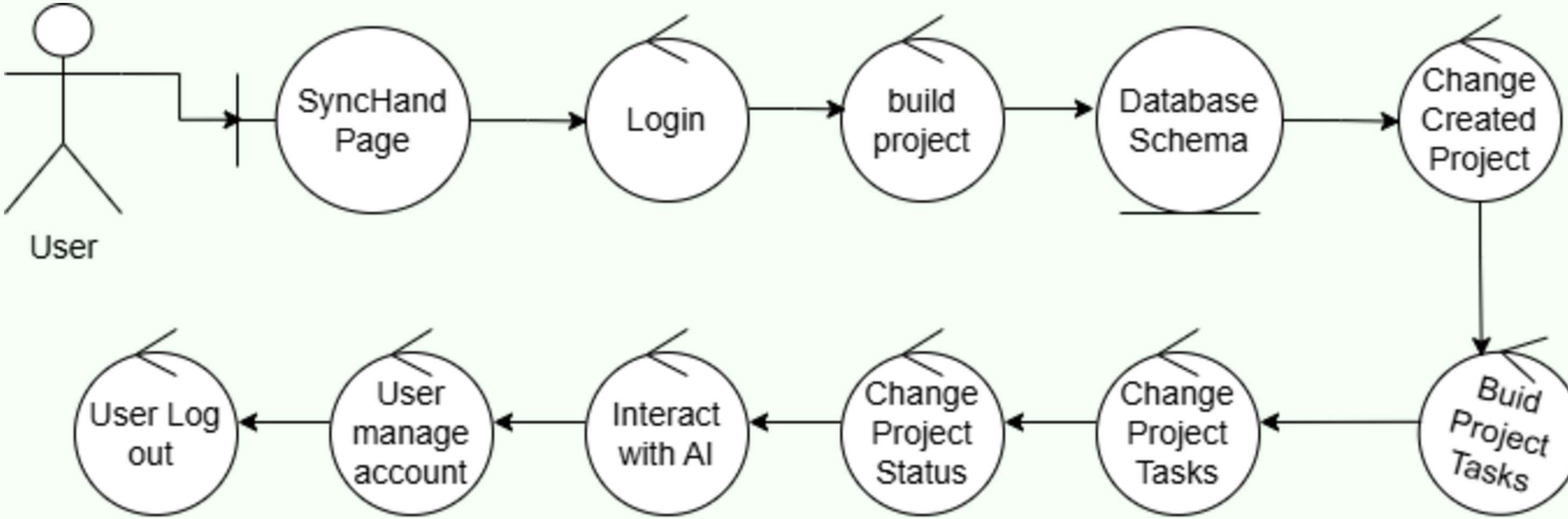
Main Usecase

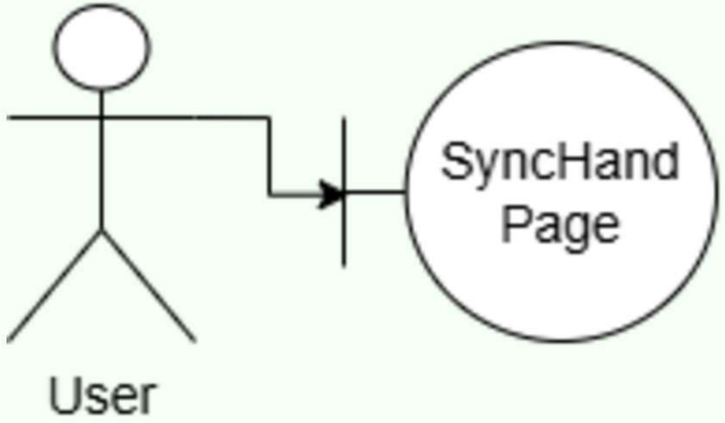
That describes the user interaction with the system.




User
create the project
Include
create the task

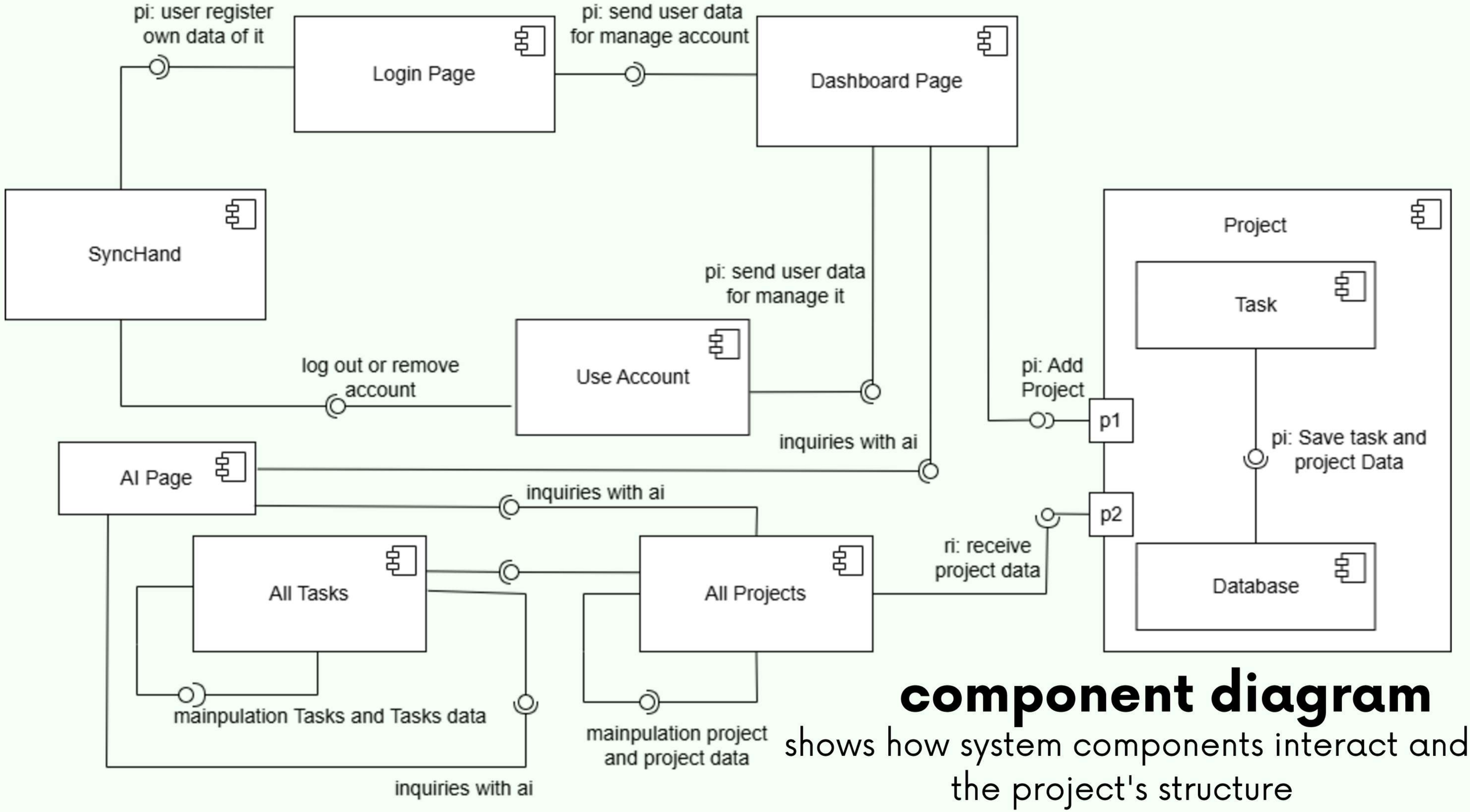

User
Attemp to login
Include
Sign in
Extends
Build and manage projects





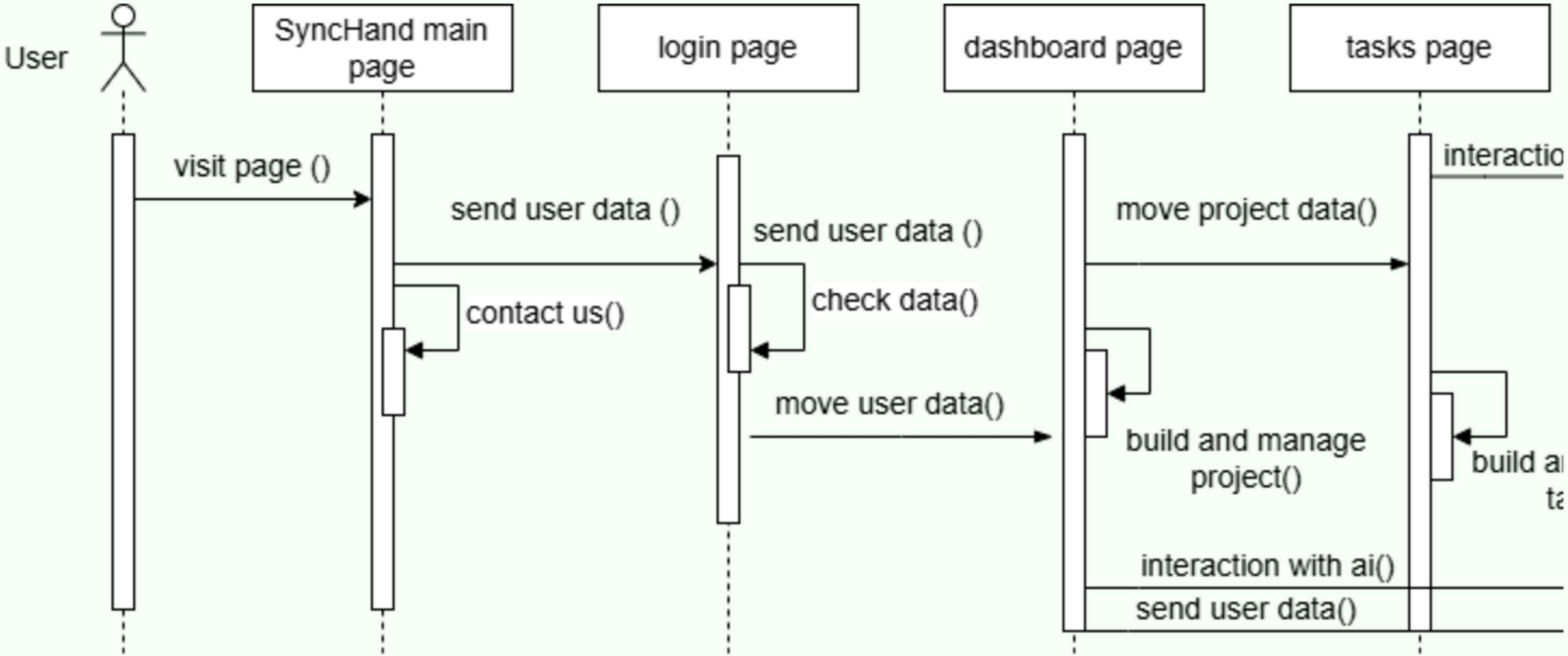
Robustness Analysis Diagram:

helps us bridge the gap between Use Cases and Sequence diagrams that are used in software architecture.

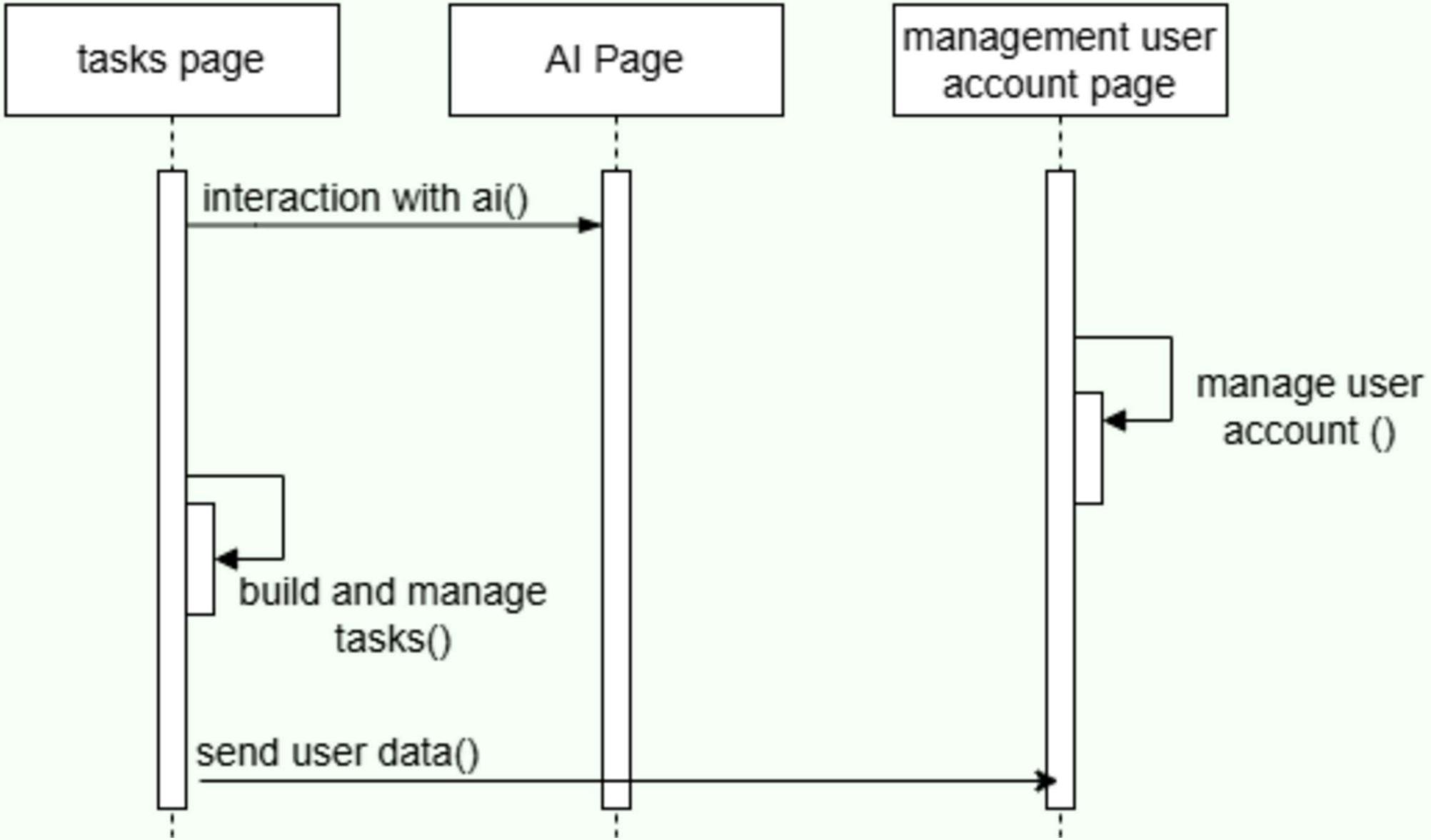


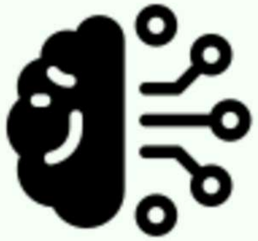
component diagram

shows how system components interact and the project's structure



A sequence diagram
shows the order of interactions between system components.


tasks page
AI Page
management user account page
interaction with ai()
manage user account ()
build and manage tasks()
send user data()



Future Feature

Based on feedback from Dr. Sawsan Abu-Taleb, we have suggested implementing a chat system to facilitate communication between the project owner and team members.

Thanks for all of you

If you have any questions, we are welcome to answer the theme