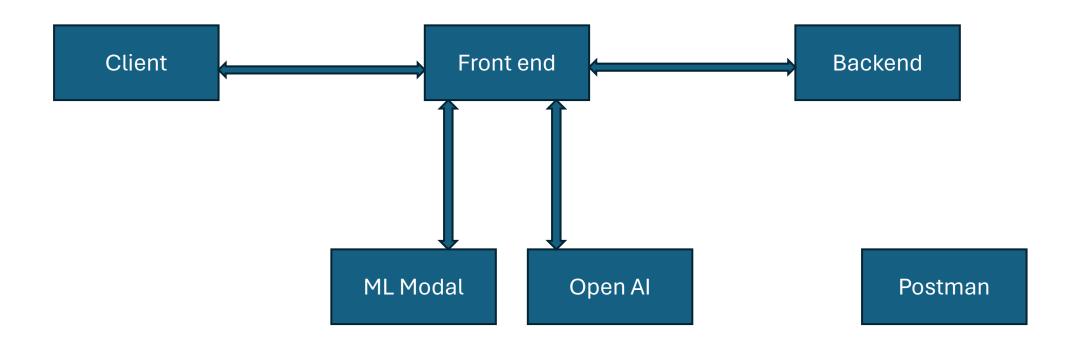
# Al integration in Web Page

# **Block Diagram**



# Technology Stack

IDE • VS code Backend • Springboot: Java Frontend • Vuejs: Java Al integration Chatgpt Assistant: python, Axios • SK learn, Decision tree classifier, Python, Flask, Machine Machine learning Model learning Model

# Installing VS code and Dependency

- Download Vs code from <u>https://code.visualstudio.com/Docs/setup/setup-overview</u>
- After downloading, run the installer (VSCodeUserSetup-{version}.exe)

# Installing Python

- Download from <a href="https://www.python.org/">https://www.python.org/</a>
- Install python extension in VS code
  - Open the Command Palette by pressing Ctrl+Shift+P.
  - Type "Python: Select Interpreter" and select it.
  - Create the virtual environment with flask
    - mkdir my\_flask\_project
    - cd my\_flask\_project
    - python -m venv venv
    - .\venv\Scripts\activate
    - pip install Flask
    - python app.py

# Installing Backend (spring boot)

- Download the Java JDK from <a href="https://www.oracle.com/java/technologies/downloads/">https://www.oracle.com/java/technologies/downloads/</a>
- Run the downloaded installer.
- Open VS Code.
  - Go to the Extensions view by clicking on the square icon on the sidebar or pressing Ctrl+Shift+X.
  - Search for "Java Extension Pack" and "Spring Boot Extension Pack".
  - Click the Install button for each extension pack.

# Installing Front end (Vue js)

- Install node js from <a href="https://nodejs.org/en">https://nodejs.org/en</a>
- Run the downloaded installer
  - Run node -v to check the Node.js version.
  - Run npm -v to check the npm version.
- Install vue cli from command prompt
  - npm install -g @vue/cli\
  - vue create your-project-name
- Install VS Code Extensions for Vue Development
  - Vetur, Vue VSCode Snippets
  - Open the Project in VS Code

# Installing Postman

- Install Postman from <a href="https://www.postman.com/downloads/">https://www.postman.com/downloads/</a>
- Once Postman is installed, you can launch it and start making API requests.

### Spring boot Resources

- Spring Guide <a href="https://spring.io/guides">https://spring.io/guides</a>
- Spring Boot Reference Documentation <u>https://docs.spring.io/spring-</u> <u>boot/docs/current/reference/htmlsingle/</u>
- Youtube: <a href="https://www.youtube.com/watch?v=msXL2oDexqw">https://www.youtube.com/watch?v=msXL2oDexqw</a>
- Security and Authentication
  - https://www.youtube.com/watch?v=EjrlN\_OQVDQ

#### Vue Js resources

- Vue.js Official Documentation: <u>https://vuejs.org/guide/introduction.html</u>
- View Mastery: <a href="https://www.vuemastery.com/courses/intro-to-vue-3/intro-to-vue3">https://www.vuemastery.com/courses/intro-to-vue-3/intro-to-vue3</a>
- Youtube: <a href="https://www.youtube.com/watch?v=FXploQ\_rT\_c">https://www.youtube.com/watch?v=FXploQ\_rT\_c</a>
- Stack overflow: <a href="https://stackoverflow.com/tags/vue.js/info">https://stackoverflow.com/tags/vue.js/info</a>

### Flask and Open AI resources

- Flask Tutorial: <a href="https://blog.miguelgrinberg.com/post/the-flask-mega-tutorial-part-i-hello-world">https://blog.miguelgrinberg.com/post/the-flask-mega-tutorial-part-i-hello-world</a>
- Open AI playground: <a href="https://platform.openai.com/playground">https://platform.openai.com/playground</a>
- Open Al API request: <a href="https://platform.openai.com/docs/api-reference/introduction">https://platform.openai.com/docs/api-reference/introduction</a>
- Youtube: <a href="https://www.youtube.com/watch?v=0h1ry-SqlNc&t=875s">https://www.youtube.com/watch?v=0h1ry-SqlNc&t=875s</a>

# Important Steps

Set up environment

• IDE, Dependencies, Framework, libraries

Github

• Branching, code sharing, code updates, commits

Creating Login/Signup Page

• Authentication/Authorization

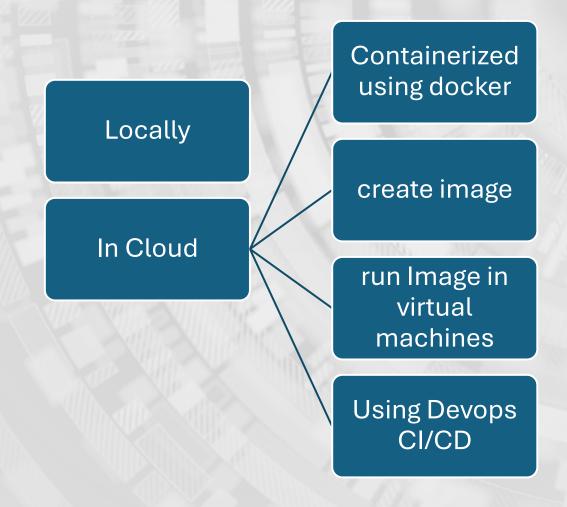
Development

• Implementing Idea into application

Interfacing

• Frontend, Backend, microservice, openai

# Deployment



#### **Know how**

Watch tutorials about the platform you are working

Understand work flows/architecture of platform

Build Idea, Algorithm

Leverage AI for fast coding and test in your platform

Built with mock data before interfacing

Interface and troubleshoot

Deployment

# **Apicalls**



# Open AI terminology

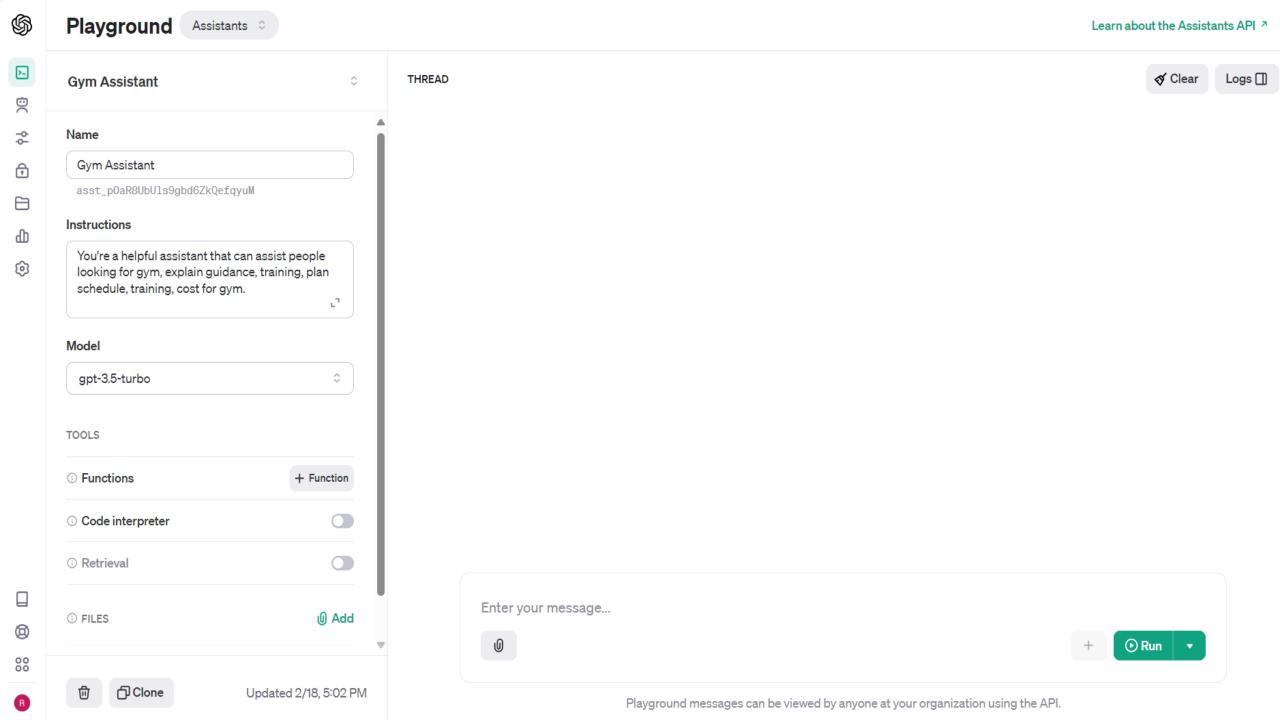
**API** key

Configuring AI service

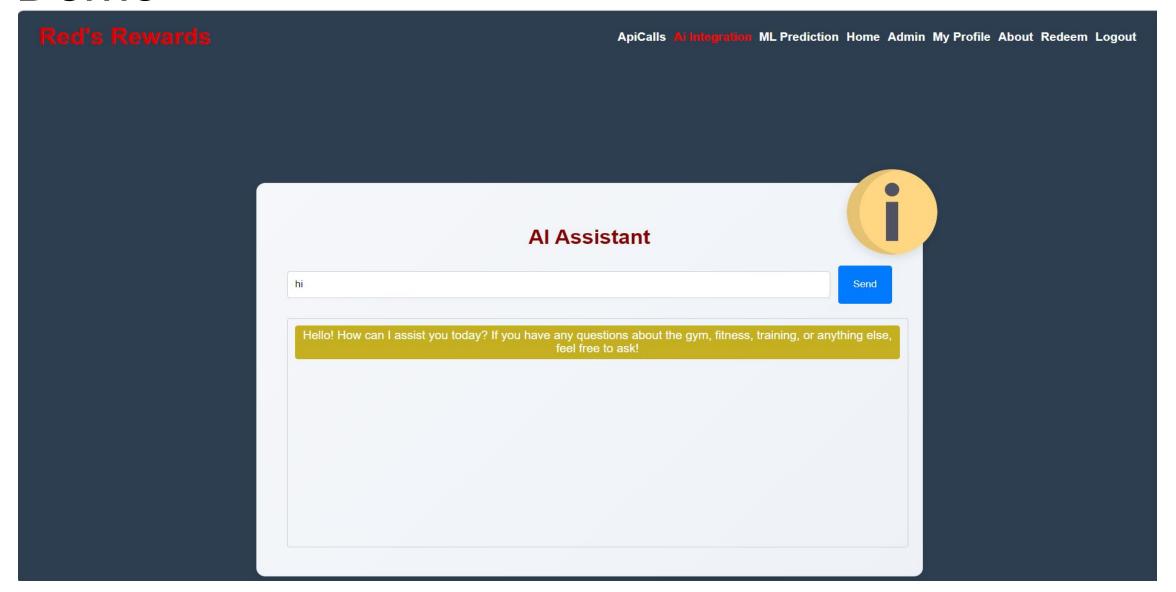
- Configuring Assistant, Assistant id, file ids, modal
- Configuring User message, Userid, file ids, fileuser message,

Threading

Handling Response message



# Demo



• Thanks , You could ask Questions!