Build Documentation

Clone

First, the project needs to be downloaded to your local machine. You can clone the repository from Github either by using an HTTPS or SSH link.

HTTPS Link

```
git clone https://github.com/amosproj/amos2024ss06-health-ai-framework.git
```

SSH Link

```
git clone git@github.com:amosproj/amos2024ss06-health-ai-framework.git
```

Build Process

Our project uses Python 3.10 as a prerequisite.
Because we use python, there is no building. We utilise the package and dependency manager called PDM. To install the manager, create a virtual environment and download the needed dependencies, you can use the following commands:

```
# Install pdm
pip install pdm
# Install the dependencies in a virtual environment
pdm install
```

All project dependencies are stored in a file pyproject.toml. The file also describes which particular versions of each library are used.
Our toml file also defines scripts that can be run with PDM. More detailed information about different components can be found in the design documentation. For example you can run the config and orchestrator components with:

```
pdm build-config
pdm run-orchestrator
```

Deploy

After cloning the repository, if you want to run the project in a container instead of on your local machine, you can set it up with the container tool Singularity (now called Apptainer).

```
# Build the Singularity container
singularity build Apptainer.sif Apptainer.def
# Opens a shell within the container to interact with its environment
singularity shell Apptainer.sif
```

In the shell, run the build commands from the previous section about building.

Build and Run the App

Build

For the app environment, we use the package manager yarn. You can install it via npm

```
npm install --global yarn
yarn --version #check version
```

In the cloned project (refer to Build Documentation) root, we can now install all the needed dependencies for the app by running the command

```
yarn
```

This will also download the expo framework which we use to deploy and run the app.

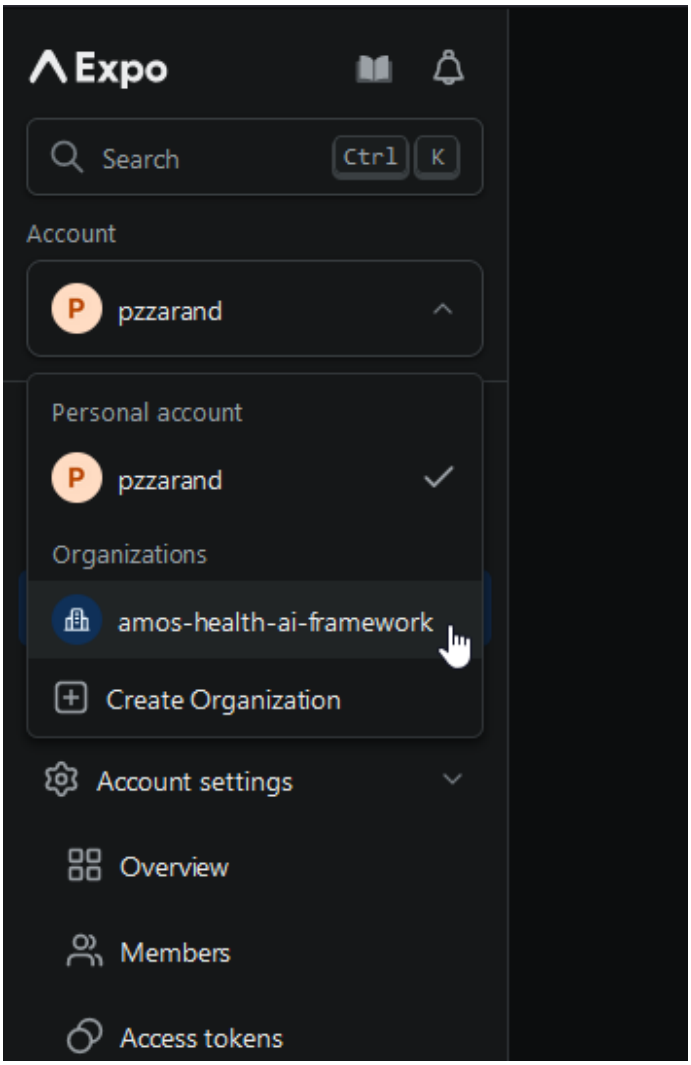
- Make sure that you have no previous installation of `node_modules` in your root directory from other tools like `npm` before running `yarn`. This might interfere with yarn.

Install the App on Your Phone

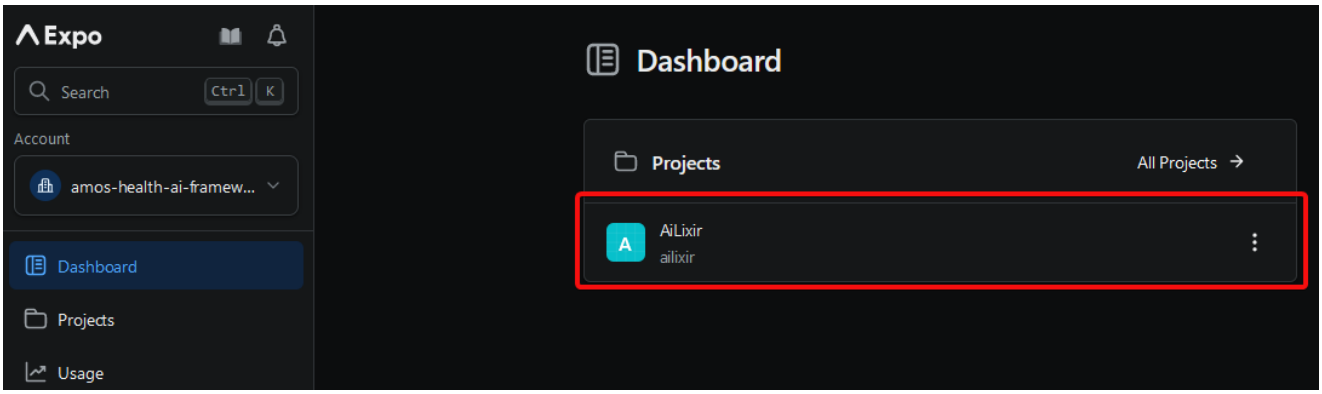
You can either execute the app on your personal phone or an emulator. The following steps will require access to a development build. Ask one of the friendly developers of this repository :).

Get the Development Build

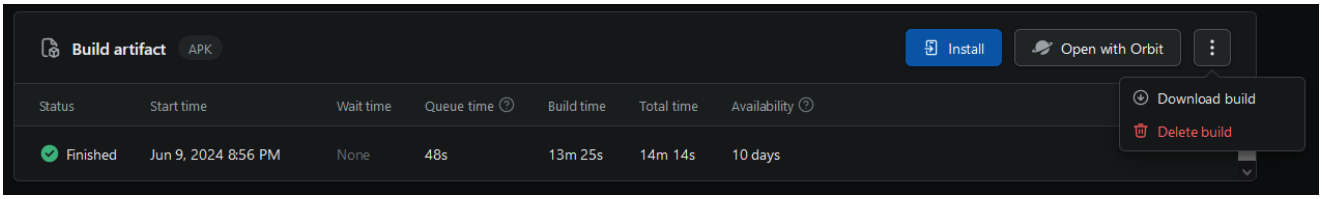
To download a development build, sign into your expo account here. Click on the `amos-health-ai-framework` organization.



Now, click on the `AiLixir` project.



On the left side, navigate to `Builds`. Click on the topmost build. Now click on `Install`.



- Scan the showing QR-code with your device, et voilà, it will install the development build on your device.

- Alternatively, if you want to use an **emulator**, click on the three dots to the right and download the build on your computer. Once you have the emulator running, drag and drop the downloaded build file on your emulator.

Emulator

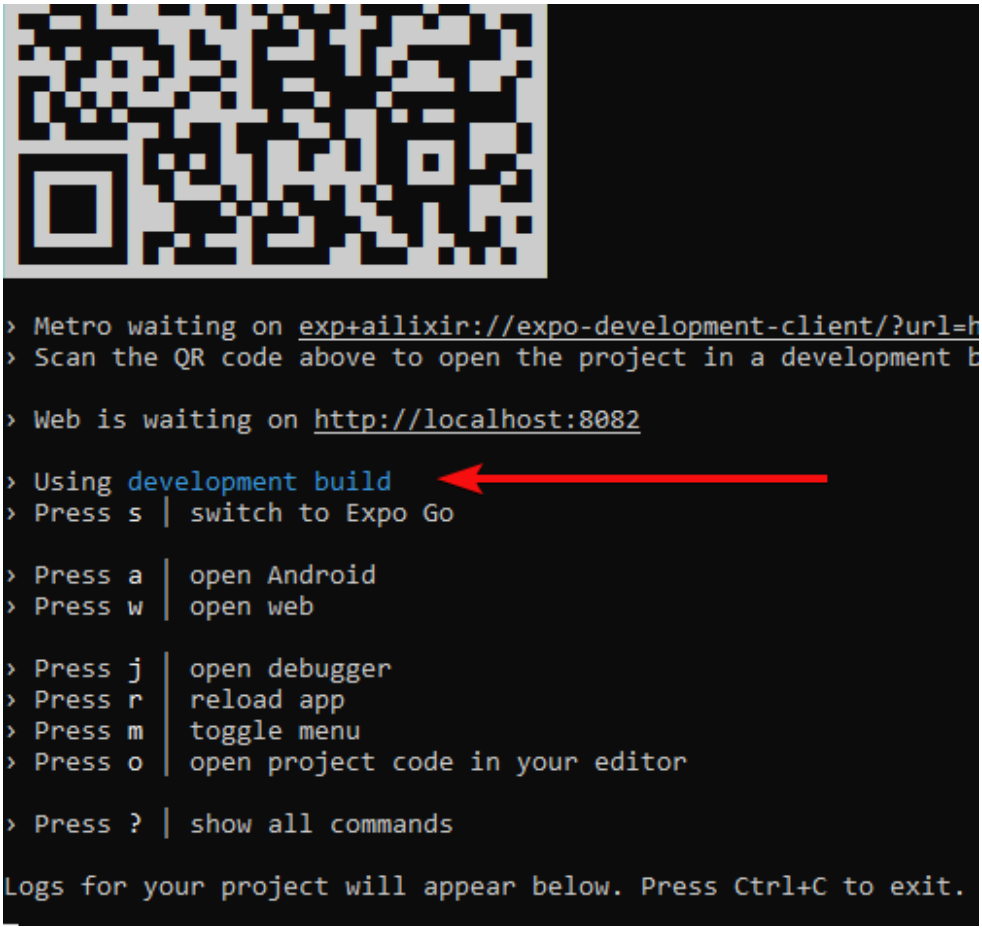
You can use Android Studio to set up an emulator. Follow the steps detailed under `Set up Android Studio` on the official expo documentation.

Run the App

Once you have installed the dependencies and the development build of the app, you are ready to run it! :) If you haven't already In your terminal, execute

```
yarn start
```

It should say `Using development build`, otherwise press `'s'`.



Now on your device, scan the QR code. If you are using an emulator you can instead press `'a'`.

Et voilà, this should run the app on the chosen device.