Setup

1. **Clone the Repository**:

```
git clone git@github.com:amosproj/amos2023ws01-ticket-chat-ai.git
```

Build and Deploy the Backend

Setup

1. **Install Python**: go to python.org
2. **Install MongoDB Community Server**: go to mongodb.com
3. **Navigate to Backend**:

```
cd amos2023ws01-ticket-chat-ai/Backend
```

4. **Install the Dependencies**:

```
pip install -r requirements.txt
```

5. **Set the Email Account Data**:
   - Navigate into `./backend` directory. Rename .env_example to .env and set your Email Password inside the .env
   - Open the config.ini and set your Email Account Name, IMAP- and SMTP Server

Running and Testing the Project

1. **Start Database**:
   - Mac:

     ```
     brew services start mongodb-community@7.0
     ```

   - Windows:

     ```
     elevate -w net start MongoDB
     ```

     Alternative:
     1. Add the path to `mongod.exe` to the environment variables in order to use it globally.
     2. Create a storage directory at any location, for example, `...\data\db`, if you have not already done so.
     3. Run `mongod` with path to storage location for example:

        ```
        mongod --dbpath E:\workspace\Uni\ws23-24\AMOS\data\db
        ```

   - Linux:

     ```
     sudo systemctl start mongod
     ```

2. **Start the Backend API**:

```
uvicorn app.main:app --reload
```

3. **Use the endpoints**: go to SwaggerUI **OR** try Postman with the base URL `http://localhost:8000/api/v1` + router path

4. **Run the tests**:

```
pytest test/
```

Run Test Model

1. Navigate into `./backend/app/models/t5` directory.

2. Train the model by running the following command:

```
python train_t5_model.py
```

3. Test the trained model by running the following command:

```
python use_trained_t5_model.py
```

4. Test the untrained T5 model by running the following command:

```
python train_t5_model.py
```

Run the Email Proxy

1. Start Backend API
2. Navigate to `app/email` and run:

```
python main.py
```

Build and Deploy the Frontend

Setup

1. **Install newest Version of Node.js**: go to nodejs.org or on Linux:

```
sudo apt install npm
```

```
nmp install -g n
```

```
n lts
```

2. **Navigate to Frontend**:

```
cd amos2023ws01-ticket-chat-ai/Frontend
```

3. **Install Angular CLI** (Optional but recommended):

```
npm install -g @angular/cli
```

4. **Install the Dependencies:**

```
npm install
```

Build

Run `ng build` to build the project. The build artifacts will be stored in the `dist/` directory.

Running unit tests

Run `ng test` to execute the unit tests via Karma.

Running end-to-end tests

Run `ng e2e` to execute the end-to-end tests via a platform of your choice. To use this command, you need to first add a package that implements end-to-end testing capabilities.