Production

Initial Setup

- 1. Install Docker Desktop:
 - Go to docker.com and download the app
 - o Open Docker Desktop
- 2. Download and configure the Project:
 - Go to github.com and download the latest release
 - Unzip the project folder and place it somewhere on your machine
 - Navigate to Backend and copy the file .env_example and paste it in the same folder named as .env_prod
 - Open the file .env_prod and replace the variable values as follows:

```
TEST_STAGE=prod
PASSWORD={{correct email password}}
SECRET_KEY=Some_random_32byte_key
MONGODB_URL=mongodb://mongo:27017/
```

Build and Run the TalkTix Apps

1. **Build and start the containers**: open a terminal/shell (e.g., Terminal, Powershell, Bash, etc.) in the project `s root folder (amos2023ws01-ticket-chat-ai/) and execute (Copy and Paste into terminal and press Enter):

```
docker-compose up
```

- 2. Use the apps: go to the User Documentation
- 3. **Stop the containers and clean up**: open a shell in the project 's root folder (e.g., Terminal, Powershell, Bash, etc.) and execute:

```
docker-compose down
docker image prune -f -a
```

Development

Initial Setup

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
 - o 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.