USTH Connect

User Interface Layer

Android Studio

- Schedule UI
- Resource UI
- Campus UI
- Study Buddy UI
- Profile UI

User

REST API

Application Logic Layer

Spring Boot Framework

- Google Calendar Integration Service
- Authenticaton Manager
- Communication Service
- Request Processor
- Moodle Integration Service
- Notification Manager
- Map Navigation Service
- User Data Manager
- Study Buddy Matcher

Google Calendar API — REST API

Linphone VoIP Library — REST API

Moodle API — REST API

MapBox API — REST API

JPA

Data Management Layer

PostgreSQL

- Schedule Data
- Course Data
- Campus Data
- Resource Data
- Notification Data
- Student Data
- Study Buddy Data
- Communication Data

Machine Learning Model

python

- K-modes Clustering Model