

# Software Documentation

## Github

The "stable-" prefix of branches is used when automatic testing on github is wanted.

On pull requests to the main branch the tests will run automatically. The test results must be green before the pull request can be merged.

If a branch is successfully merged into the main branch a github action will automatically build docker images of the frontend and backend and push them to the docker hub repository.

## Backend

Technologies used:

- Typescript
- Express
- Keycloak
- Multer
- Archiver
- Jest

To start the backend a .env file in the backend root directory is needed. The .env file should contain the following:

- PORT=3000
- SECRET\_KEY=Your secret key
  - what the secret key is set to is not important for developing

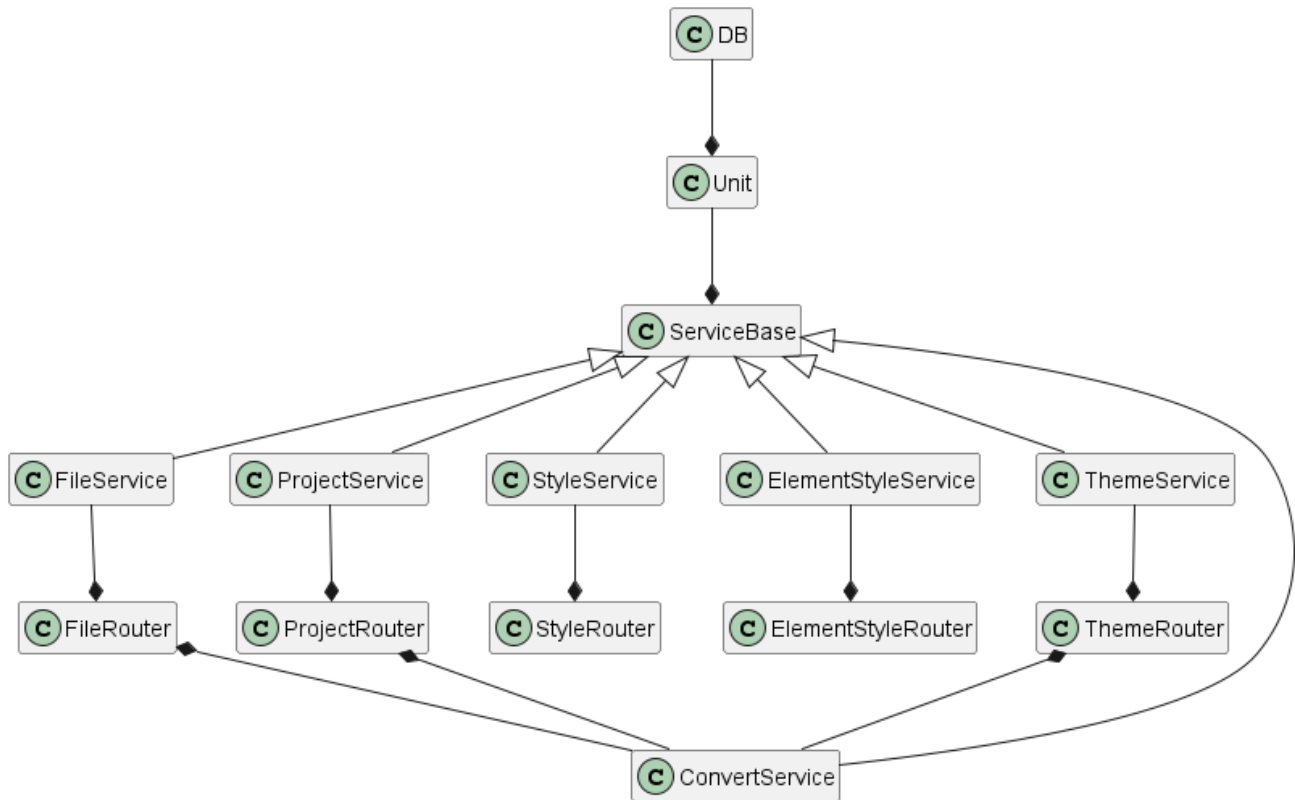
The backend consists of:

- Database utility classes
  - /src/database
- Routers
- they contain the endpoints of the API
  - /src/routes
- Services
  - they contain the functions for accessing the database
  - the services also contain some utility methods for the database and the data we store
  - /src/services

In the "app.ts" file are the routers used as middleware and keycloak get initialized.

The routers use the services to access the database. The routers also handle most of the file handling using multer.

The "Convert Service" is a special service which handles converting the files of the user to html. The service uses the "archiver" library to create a zip file of the html files.



## Frontend

Technologies used:

- Typescript
- Angular
- TailwindCSS

The frontend consists of:

- Components
  - /src/app/components
- Services
  - /src/app/services

The components use the services to access the backend.

Pages:

- Landing Page
- Project Selection
- Theme Selection
- Project Editor

The selection pages are used to selecting, creating and changing the name of the project and theme. The theme selection can also change if the theme is public or not.

The project editor uses:

- theme-editor component
- file-list component
- file-preview component

The project editor has a button to generate the site and the "Change Theme" button uses the theme selection page.