

Technical documentation

The purpose of this document is generic Technical document for the use of CesiumJS application for the Master thesis.

The Application features:

- 2D and 3D view of buildings.
- Navigate between buildings by selecting one and then click on next button.
- Assess buildings by comparing the selected one to the 2D map or to cloud point if users check it.
- Giving feedback about the selected building by filling the feedback form.

Project Structure:

When download the last version of CesiumJs from <https://cesiumjs.org/downloads/>, it will generate a lot of libraries and folders that Cesiumjs uses, but the main core of the Master thesis implementation is inside the folder Apps.

Data Structure:

The data comes from an existing file in the format of GeoJSON with path (/Apps/roofTop.geojson) which contains the FeatureCollection of the roofs and the coordinates of each one.

While the file with path (/Apps/testdata.geojson) has been used for test cases that applied to test users.

Run The Application:

In order to run the app, Nodejs and npm should be installed, then after installing them run **npm install** to generate node_modules library inside the project folder.

Then finally, open a terminal or command in the main path of the project and run **node server.js**.

Then access this link to open the application:

<http://localhost:3003/Apps/roofBuilding.html>