

When selecting a building, the main map view will be replaced by a floor plan of the selected building. Once this happens, it is possible for the user to switch between the different floors of the selected building.

- Find nearest vertex in the underlying graph of the map by clicking on the map - *Functionality*

### 2.1.2 Criteria only used in Administration Tool

- Draw the ~~Underlying~~ <sup>is ~~usable~~ displayed</sup> graph on top of the map.

- Highlight a set of vertices and edges

Vertices and Edges of the underlying graph will be drawn in another color when selected by the user.

- Highlight an outline of a building *Why do you need the outline? Or you mean the road around?*

An outline of a building will be drawn in another color when selected by the user.

## 2.2 Mandatory Criteria – Routing

### 2.2.1 Input

- Provide text fields for searching locations -

*The main point here is that user is able to search for desired location.*

Locations can be searched for by typing identifying information into a text field. This information includes building names/numbers, room name/numbers and addresses. Using these text fields, you can provide a start and end point when searching for a route.

- Provide auto-completion/ search suggestions in the search fields

- Select start and destination by clicking on the map

### 2.2.2 Computing the route

- Find a location

- Routing for pedestrians

- Use a fast algorithm for routing

Calculation speed is essential for routing applications. Our goal is to minimize this time as much as possible. For further explanation, see "Nonfunctional Requirements".

- Compute the shortest path between two locations (in- and outdoor)

It is possible to search for routes on the whole campus map. Those routes may or may not start or end in buildings.

- Provide shortcuts through other buildings, *when computing shortest path, The system will take into account routes that pass through other buildings.*
- When routing to a building (or lecture hall) with more than one entrance, the path to the nearest entrance is calculated and not the path to the main entrance.