Conceptual Architecture

1. Identify key concepts

1. The system shall **keep** a map of Republic of Macedonia
2. The system shall have an **"Enter location"** option
3. The system shall **allow** the user to **choose** which facility is looking for
4. The system shall keep specifications about the facilities
5. The system shall **display** a list of facilities upon entering location
6. The system shall **allow** the user to choose a facility from the list
7. The system shall **calculate** the shortest route to the chosen facility
8. The system shall **provide** the name of the facility
9. The system shall provide the address of the facility
10. The system shall provide the contact information of the facility
11. The system shall be **accessible** on all personal computers
12. The system shall be **supported** on most browsers like Chrome, Firefox
13. The system shall be **available** in English language
14. The system shall **alert** the user upon arriving at the destination

2.Assign key concepts from requirements to categories

Data	**Function**	**Stakeholder**	**System**	**Hardware**	**Abs. Concept**
map	Keep	user	Chrome	Personal computers	Enter location
facility	choose	admin	Firefox		Contact information
specifications	display				English language
location	calculate				Shortest route
name	provide				accessible
address	alert				available
destination	allow				
	supported				

3. Component Responsibilities

AppUI: ShowFacilities, DisplayMap, DrawRoute

Navigation Services: FindNearestFacilities, ComputeRoute

Map: ShowDetailedMap

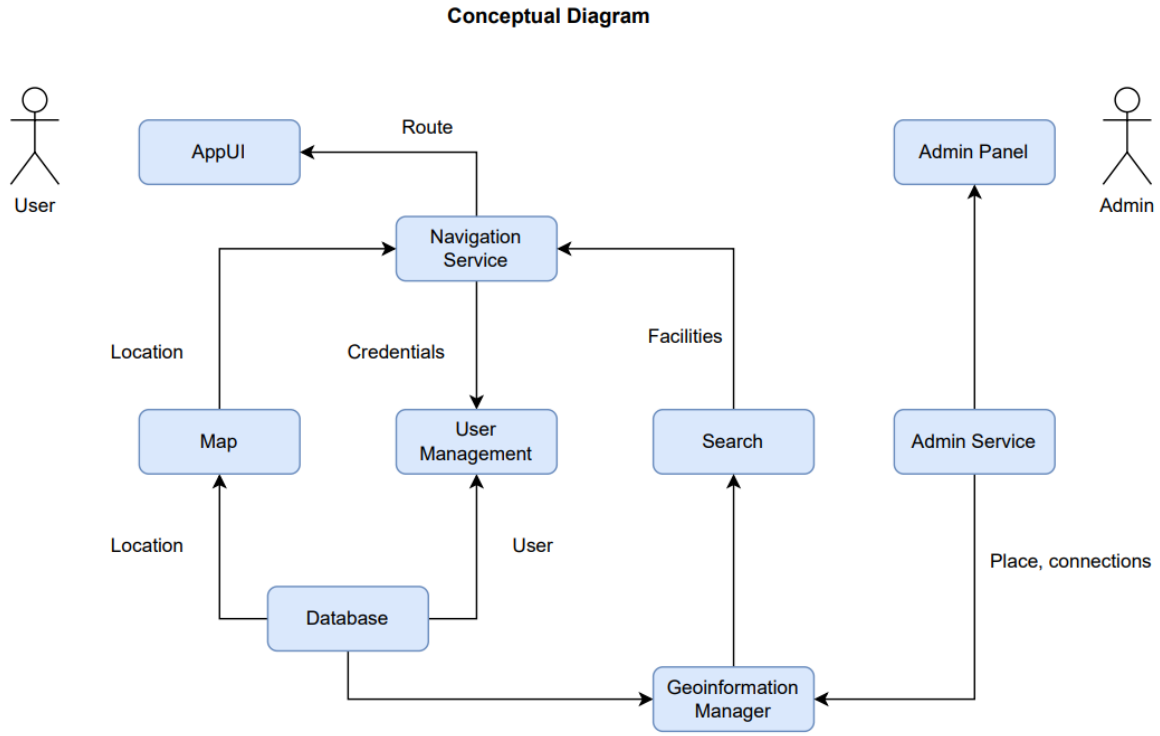
User Management: RegisterUser, LoginUser

Search: SearchFacilities

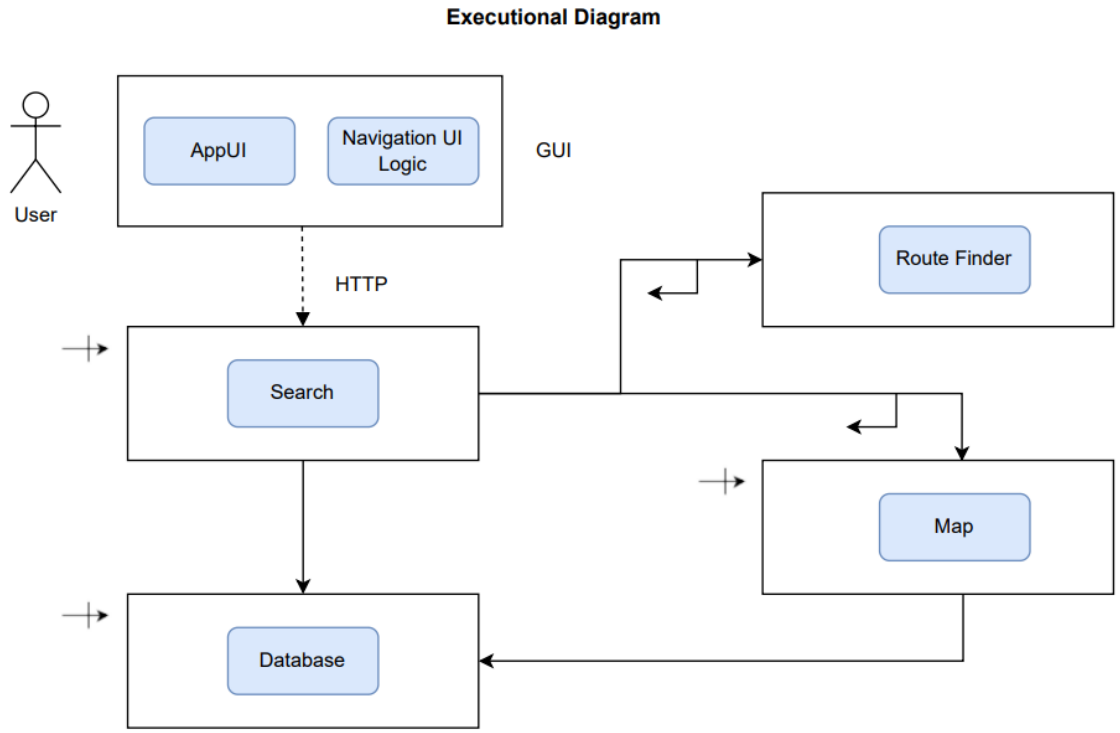
Geoinformation Manager

Admin Service: AddFacilityLocation, RemoveFacilityLocation

Admin Panel: ListFacilities, ListConnections

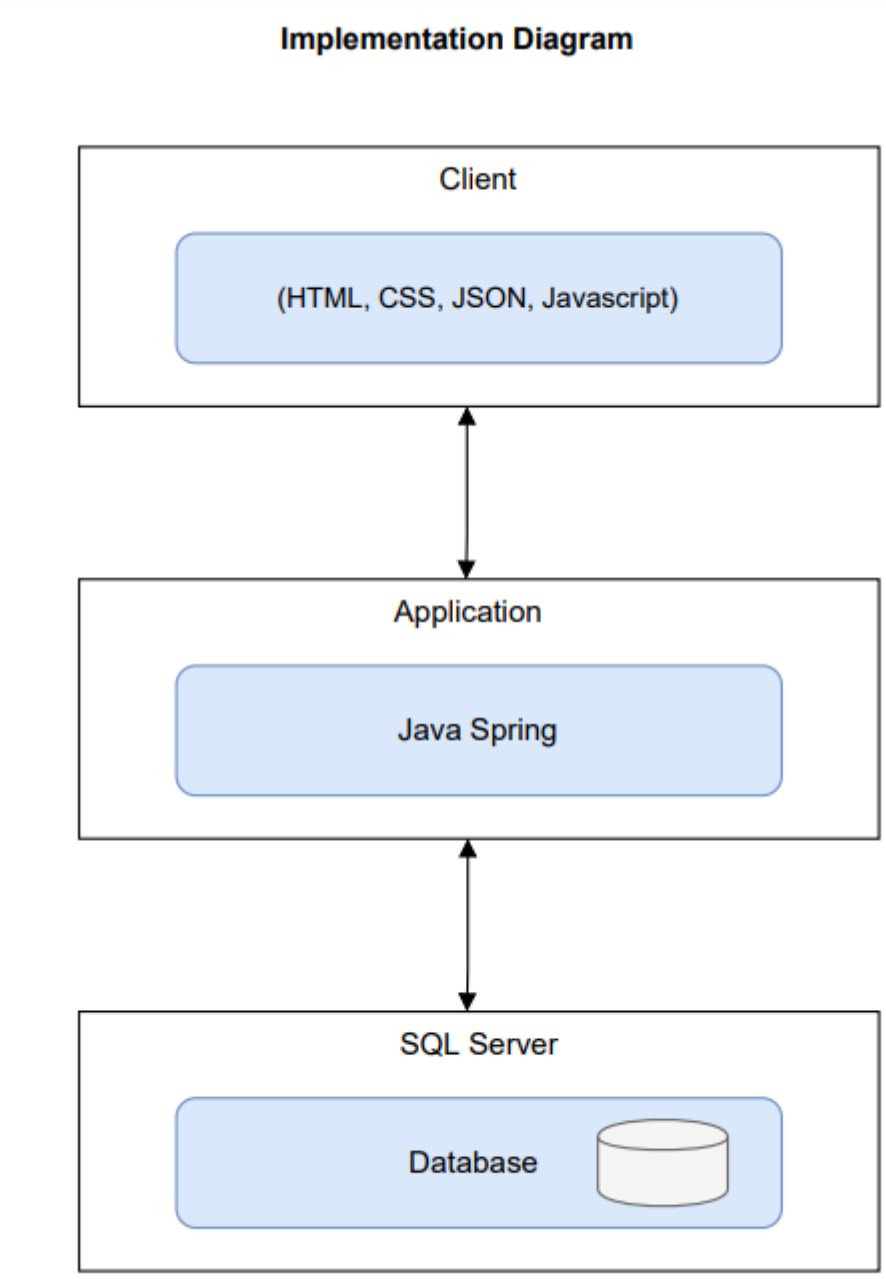


Executional Architecture



For the execution architecture, on the GUI the user will have access to a map and a dropdown list. From the dropdown list the user can select which facility (restaurants, hotels, gyms) he/she is looking for. After selecting the desired facility, the map will show all locations for the selected facility. The user can select a location and also find a route to the selected location. The data for each facility is stored in a Database, also with the data for each user.

Implementation Architecture



For the implementation architecture, the client relates to the application via browser through which it can create/request information. The web application is created with Java Spring and communicates with the database through a SQL server. In the database we keep the information about the facilities and the users that are requested or created.