

## Conceptual Diagram

### IDENTIFYING KEY CONCEPTS

1. The system shall allow users to register with unique credentials.
2. The system shall keep the data of the registered users.
3. The system shall provide data and information about the fitness centres in Skopje.
4. The system shall be available on a stable web browser.
5. The software shall be supported on Microsoft .Net 4.8.
6. The system shall have the ability to be presented in one language
7. The system shall inform the users about their registration via email.
8. The system shall have a search option.
9. The system shall provide an experience sharing and feedback section
11. The system shall provide technical support services for resolving any technical issues concerning the user's accounts.
12. The system shall backup and store the recovered data in a network system.

### Assigning concepts from the requirements to a category

**Stakeholders:** User, Admin

**Function:** Keep, Provide, Backup And Store

**Data:** Unique Credentials, Cached User Data

**Hardware:** Database

**System:** The Web App, .Net 4.8

**Abstract concept:** search option, nearest gym

## Component responsibilities

**Map**  
► ShowDetailedMap

**UserManager**  
► RegisterUser  
► LoginUser

**FitnessCenters**  
► AddGym  
► RemoveGym  
► SearchGym

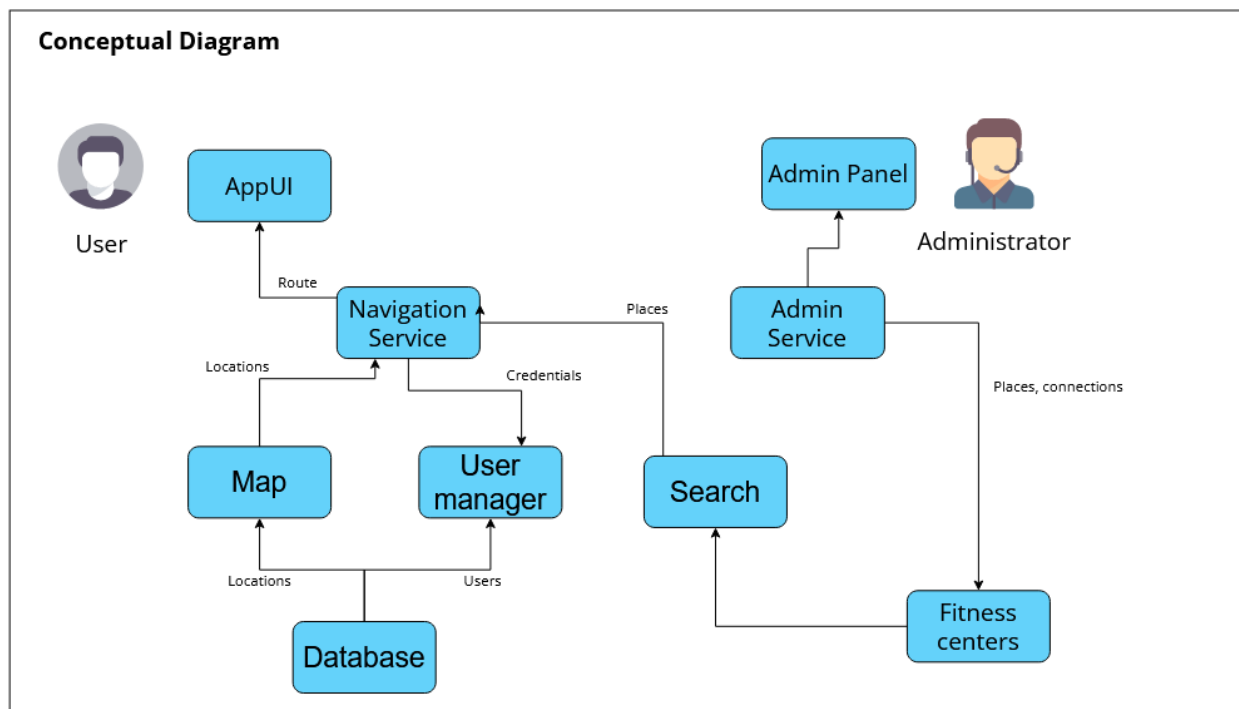
**Search**  
► SearchPlaces

**AppUI**  
► ShowListofNearbyGyms  
► DisplayMapWithGyms  
► DisplayGymInformation

**AdminPanel**  
► ListPlaces  
► ListConnections

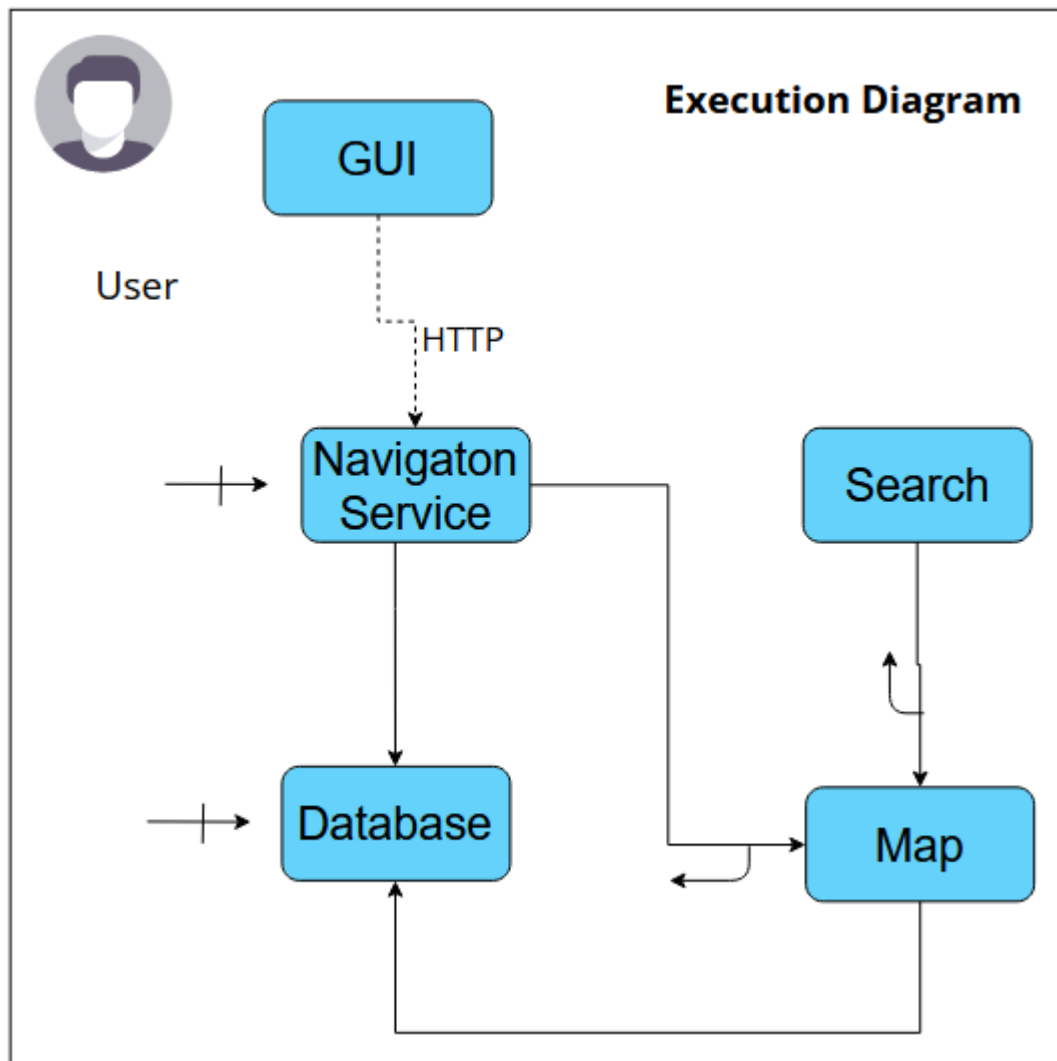
**NavigationService**  
► RecommendNearestGyms  
► DistanceComputed

**AdminService**  
► AddGymLocation  
► RemoveGymLocation



## Execution diagram

Through the GUI, the user of the application has access to the list of nearest gyms in town and some information about them, including their locations on map. This data is kept in a SQL Database. Also, the personal data about each user is kept in the database. If the desired gym is not shown on the list, the user has an option to search the database or the map using the name of the gym. On the map, the location of all the gyms from the list are shown.



## Implementation Diagram

The Web Application is created with the .NET 4.8 technology using the MVC pattern. The Client (User) can interact with the application through a web browser and can request/create information that is kept in a database.

The application communicates with the database through an SQL Server when there is a need to read/write data.

