

Chicago Social Hub

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PROJECT OVERVIEW STATEMENT

Search for places on a street and show divvy nearest dock stations for a selected place. And a Dashboard to show the daily and hourly average numbers of available of docks for every dock station based on the user selection for the past week, month and year; divvy data log stored on ElasticSearch server.

REQUIREMENTS

- 1) Search for places on a street or by zip code or both by street and zip code.
- 2) Accesses Yelp (ElasticSearch server) and Divvy server
- 3) Displays list of places
- 4) Show divvy nearest dock stations for a selected place (Using PostgreSQL)
- 5) Develop a Dashboard to show the daily and hourly average numbers of available docks for every dock station based on the user selection for the past week, month and year
- 6) The divvy data log is stored on ElasticSearch server

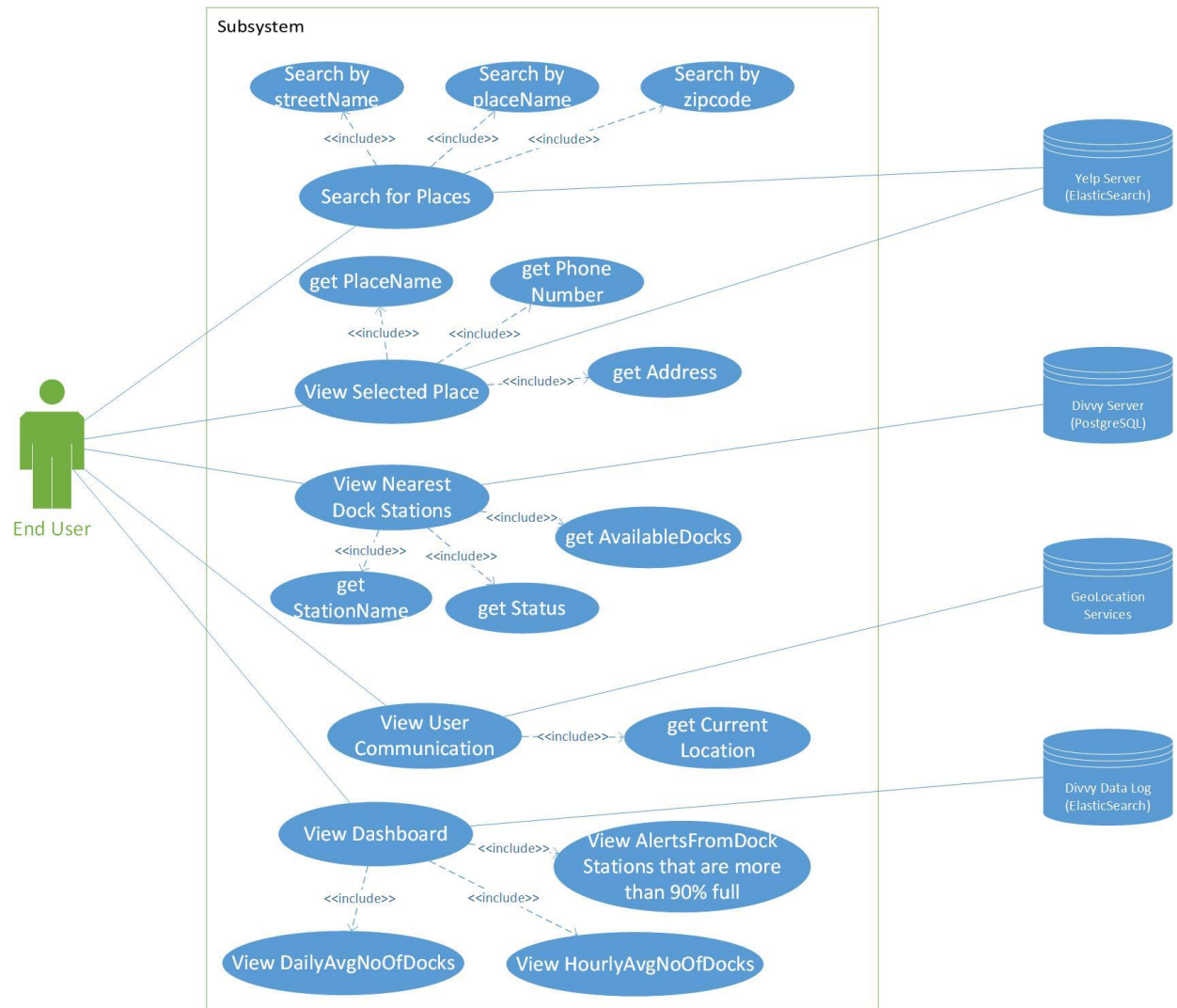
ADDITIONAL REQUIREMENTS

- 1) Detects User's current location
- 2) List of places can be sorted based on ratings and review counts
- 3) Create alerts from logstash from those Dock Stations that are more than 90% full

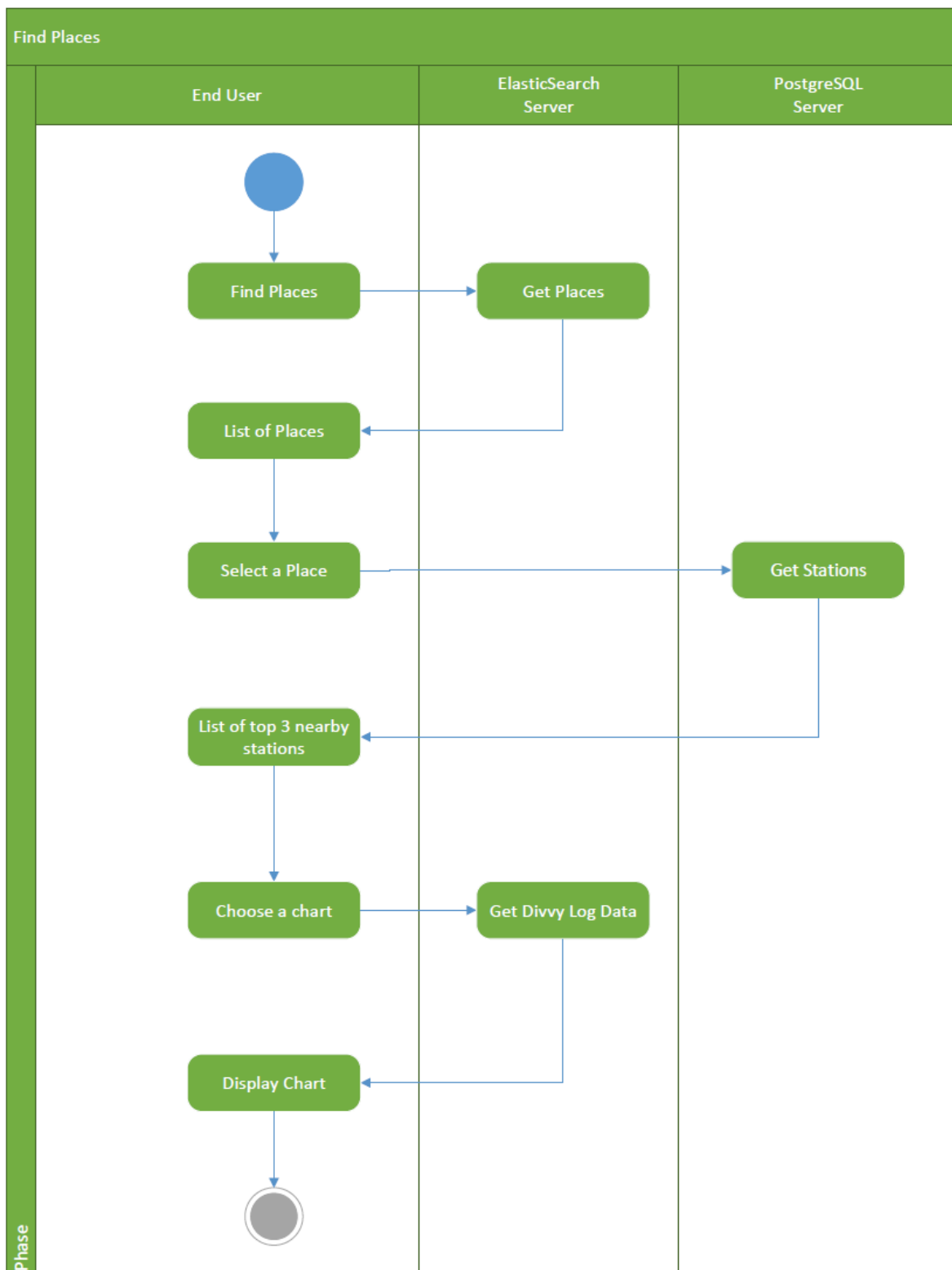
USE CASES

- Search for places
 - Search by street name
 - Search by place name
 - Search by zip code
- View selected place
 - Get PlaceName
 - Get PhoneNumber
 - Get Address
- View nearest Dock Station
 - Get StationName
 - Get Status
 - Get AvailableDocks
- View Dashboard
 - View DailyAvgNoOfDocks
 - View HourlyAvgNoOfDocks
 - View Alerts from Dock Stations that are more than 90% full
- View User Communication
 - Get Current Location

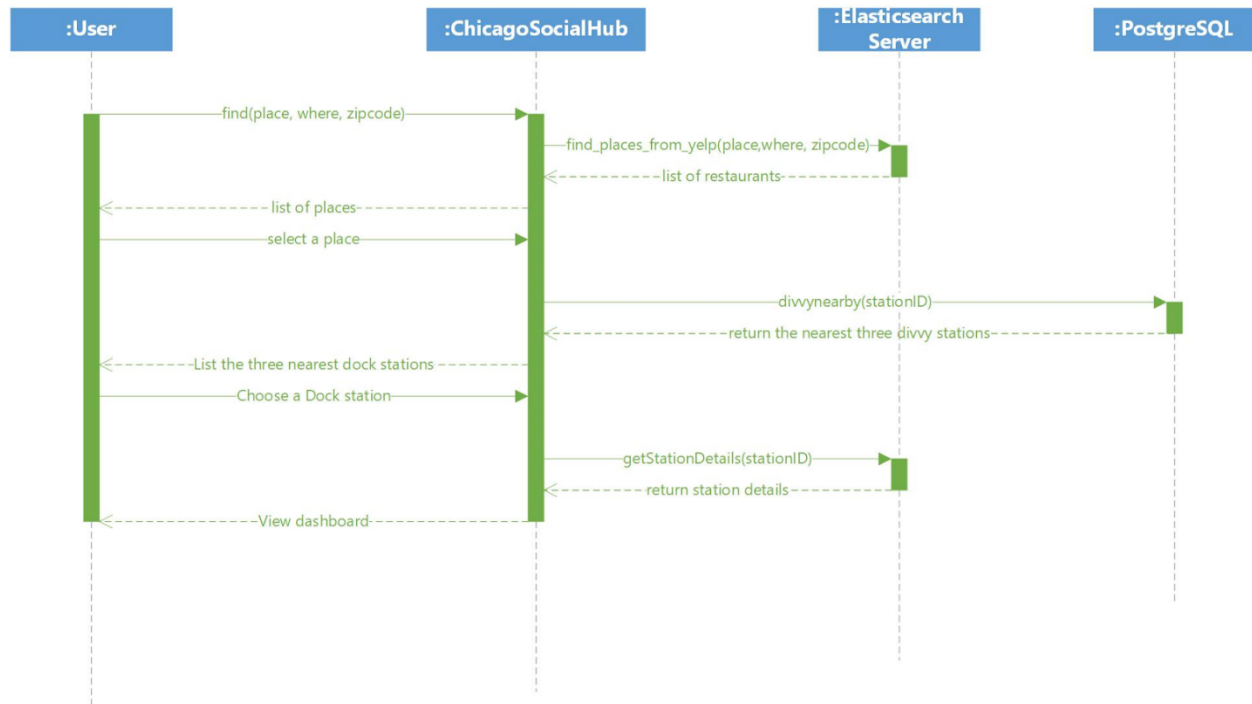
USE CASE DIAGRAM



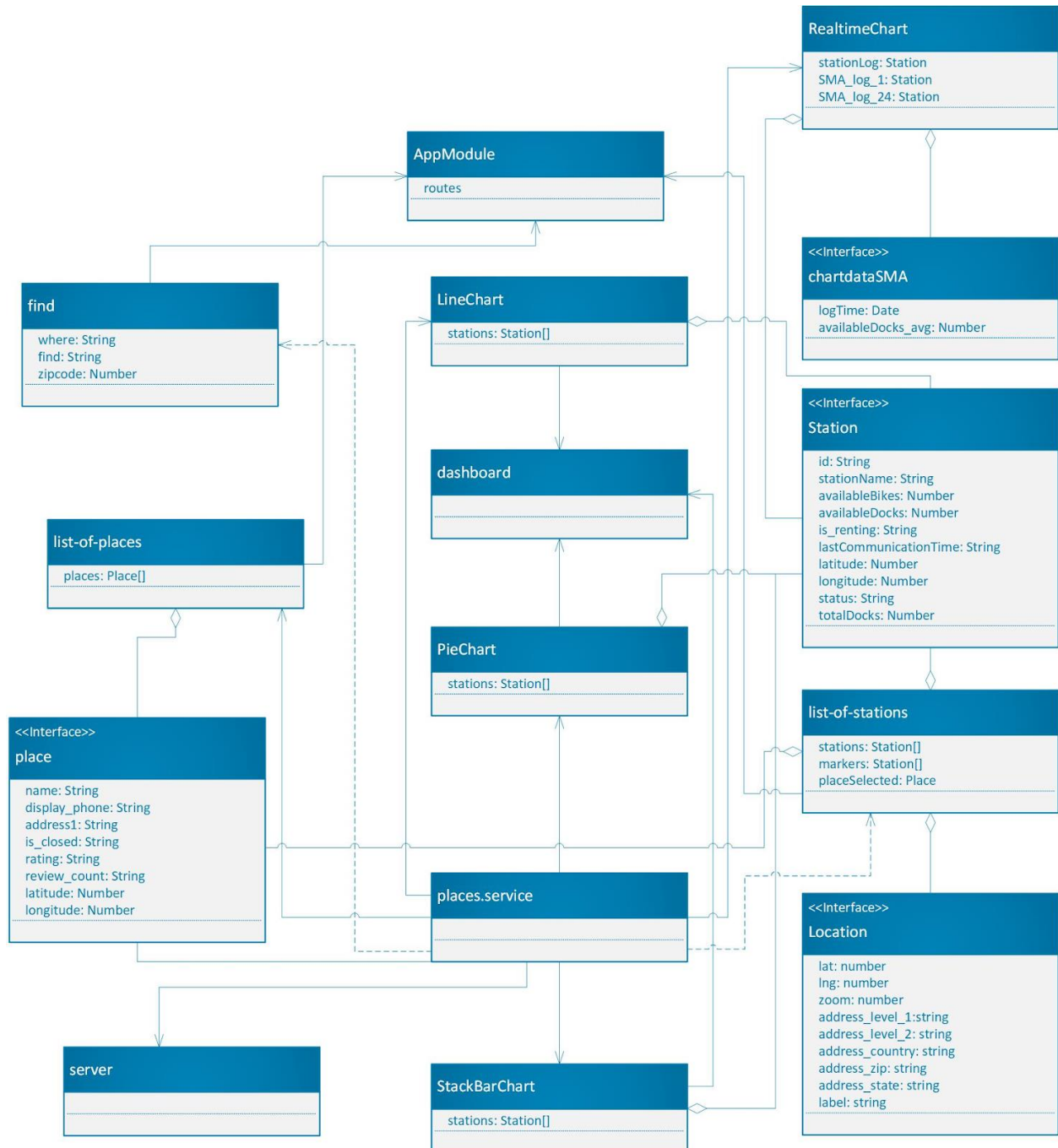
ACTIVITY DIAGRAMS



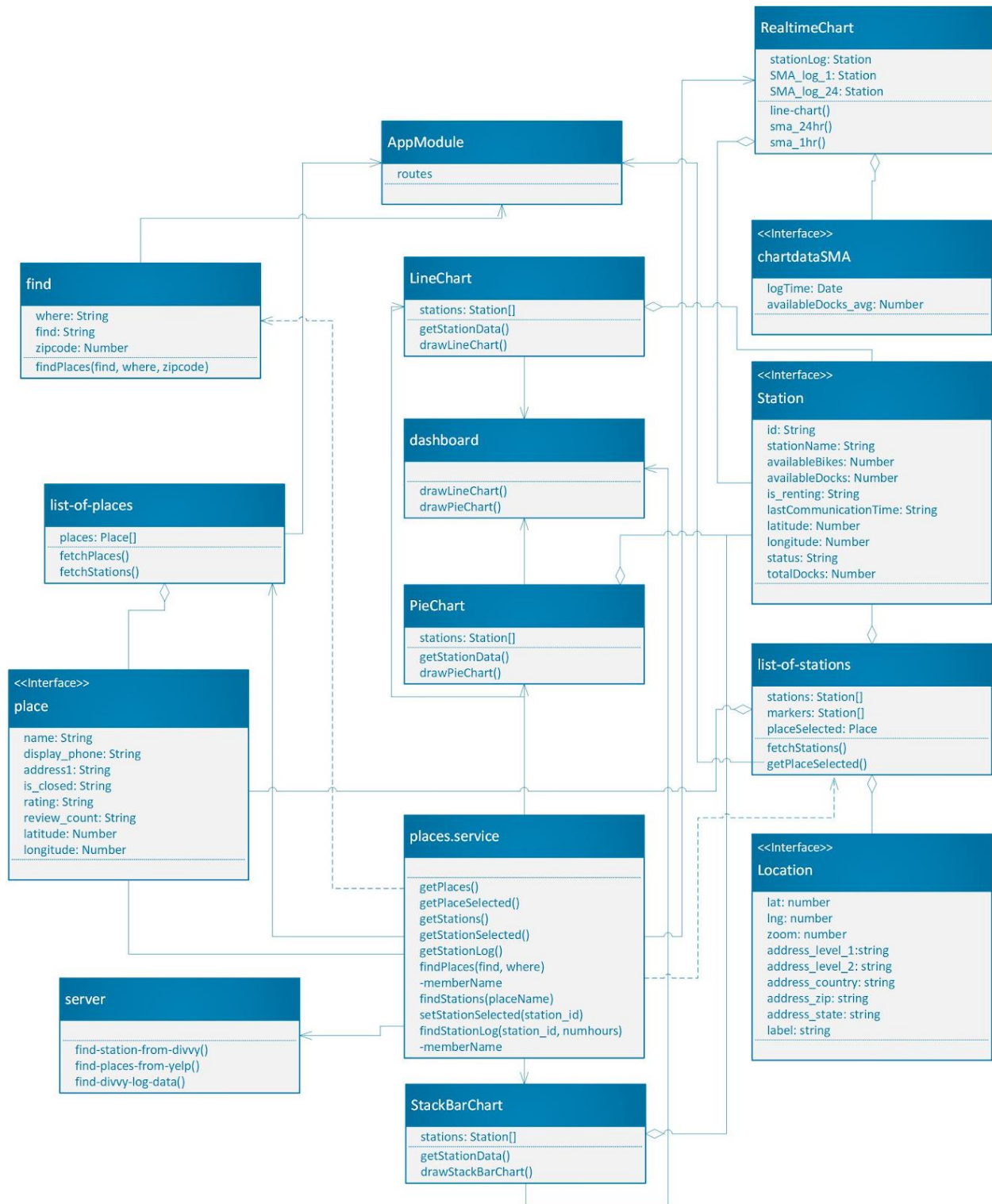
SEQUENCE DIAGRAMS



DOMAIN MODEL CLASS DIAGRAM

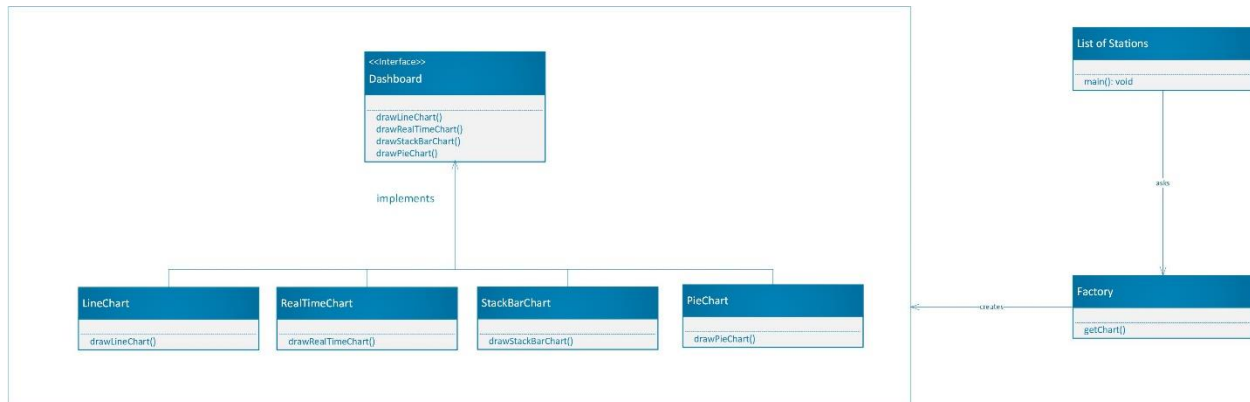


DESIGN MODEL CLASS DIAGRAM



DESIGN PATTERNS

Factory Method



We have implemented Factory Design Method in our project.

In the factory pattern, we create an object of the library/class. The end user uses this static function to create new instances and implement the functionality.

This enables the user to refer to the newly created instance using a common interface and we can hide the logic of the client.