I. Packages


```
P  ViewStationInfo-Class Diagram0 - Copy
   Class
      Actor
         Customer
      Controller
         ShowStationController
            searchStation
            notifyUserError
      Entity
         Bike
         Station
      Exception
         BikeIdNotExistException
         NoStationFoundException
         NotEBikeException
         StationIdNotExistException
      Interface
         UserInterface
            requestStationInfo
            requestBikeInfo
            searchStation
   Diagram
   Type
```

II. Class diagram

III. Class specification
1. Class Bike


```
            <<entity>>
              Bike

- id : String
- name : String
- type : String
- speed : int
- color : String
- weight : int
- battery : int
- description : String

+ getBikeInfo() : JSON
+ getExtraBikeInfo() : void
```
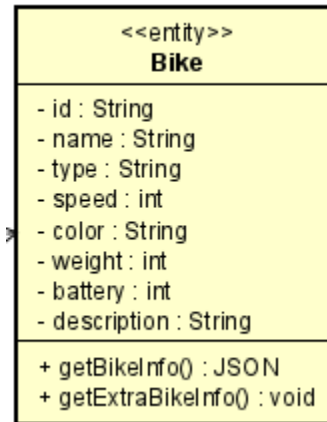
Attributes:

#	Name	Data Type	Default value	Description
1	id	String	Null	//
2	name	String	Null	//
3	type	String	Null	//
4	speed	int	Null	//
5	color	String	null	//

6	weight	int	Null	//
7	battery	String	Null	//
8	description	String	Null	//

Operations:

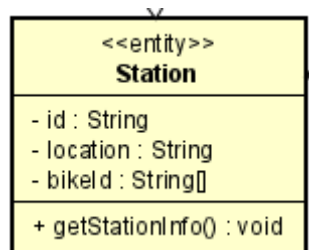| #	Name	Return Type	Description	Parameter	Exception
1	getBikeInfo	Json	get the bike attributes	null	null
2	getExtraBikeInfo	Json	get Ebike info, only work with Ebike	null	NotEBikeException– If bike is not Ebike

Method:

None

State:

None

2. Class Station

Attributes:

#	Name	Data Type	Default value	Description
1	stationId	String	Null	//
2	loaction	String	Null	//
3	bikeId	String []	Null	List of bikeId in the station

Operations:

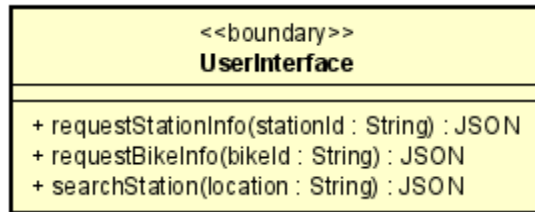| #	Name	Return Type	Description	Parameter	Exception
1	getStationInfo	Json	Get Station Info, including station id, location and its bike basic info	null	null

Method:

None

State:

None

3. Class UserInterface

Attributes:

None

Operations:

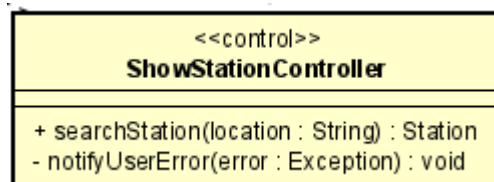| #	Name	Return Type	Description	Parameter	Exception
1	requestStationInfo	Json	//	stationId	StationIdNotExistException
2	requestBikeInfo	Json	The Bike is determined through station	bikeId	BikeIdNotExistException
3	searchStation	Json	Search station through user inputed location	location	NoStationFoundException

Method:

None

State:

None

4. Class ShowStationController

Attributes:

#	Name	Data Type	Default value	Description

Operations:

#	Name	Return Type	Description	Parameter	Exception
1	searchStation	Station	Search the station through user input info	location	NoStationFoundException

Method:

#	Name	Return Type	Description	Parameter	Exception
1	notifyUserError	void	Notify the user if there is an error occur	error	null

State:

None