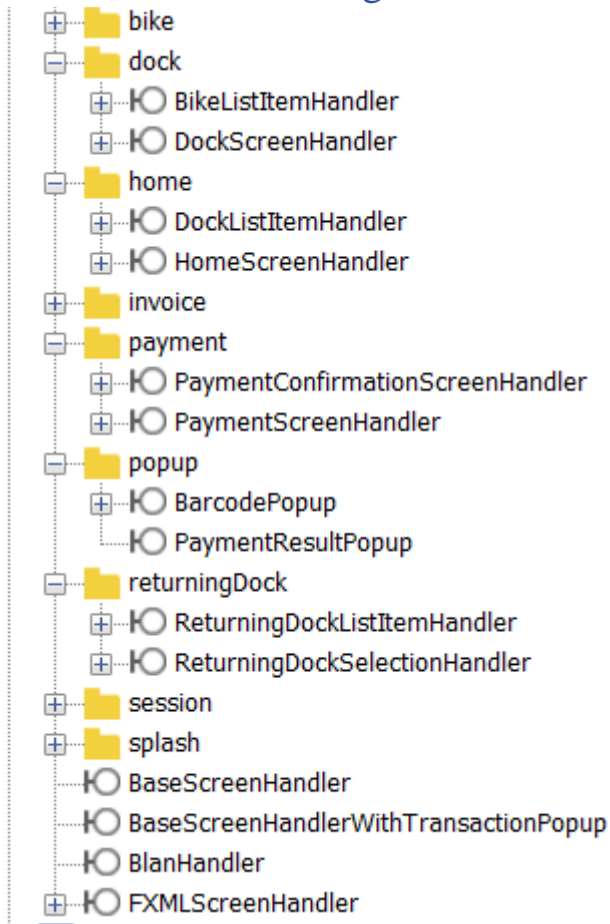
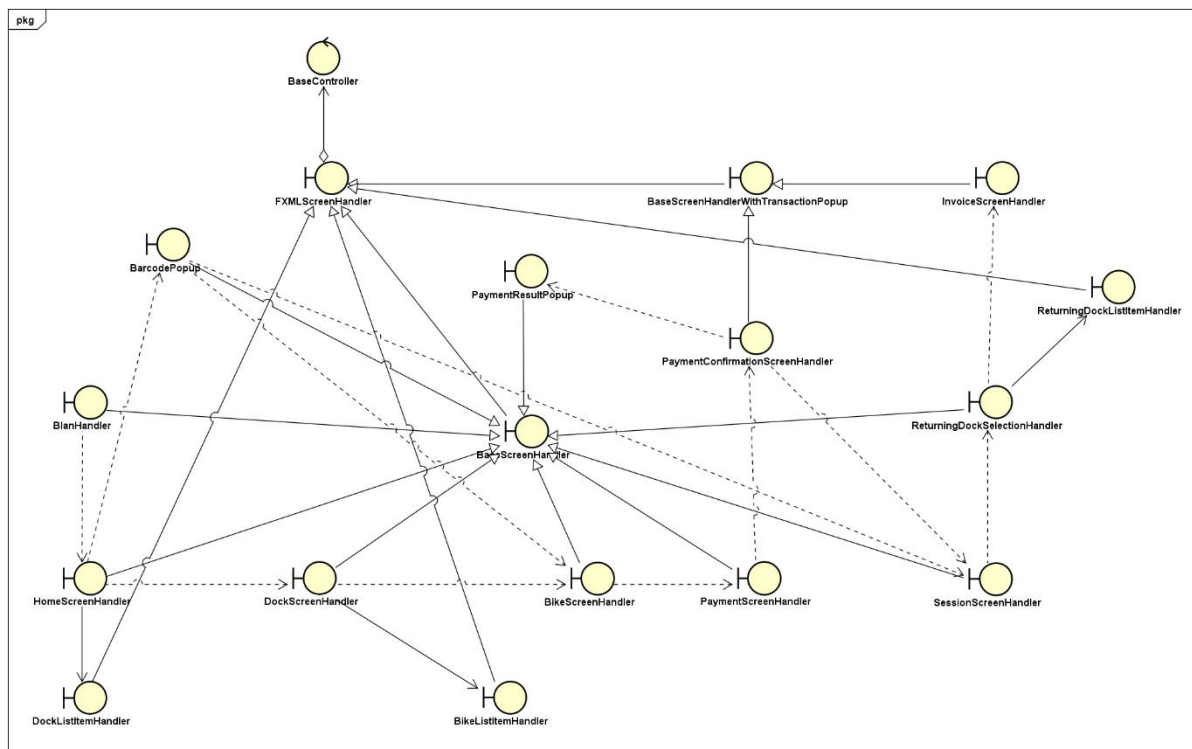


# Class Design - View

## 1. Create Initial Design Classes

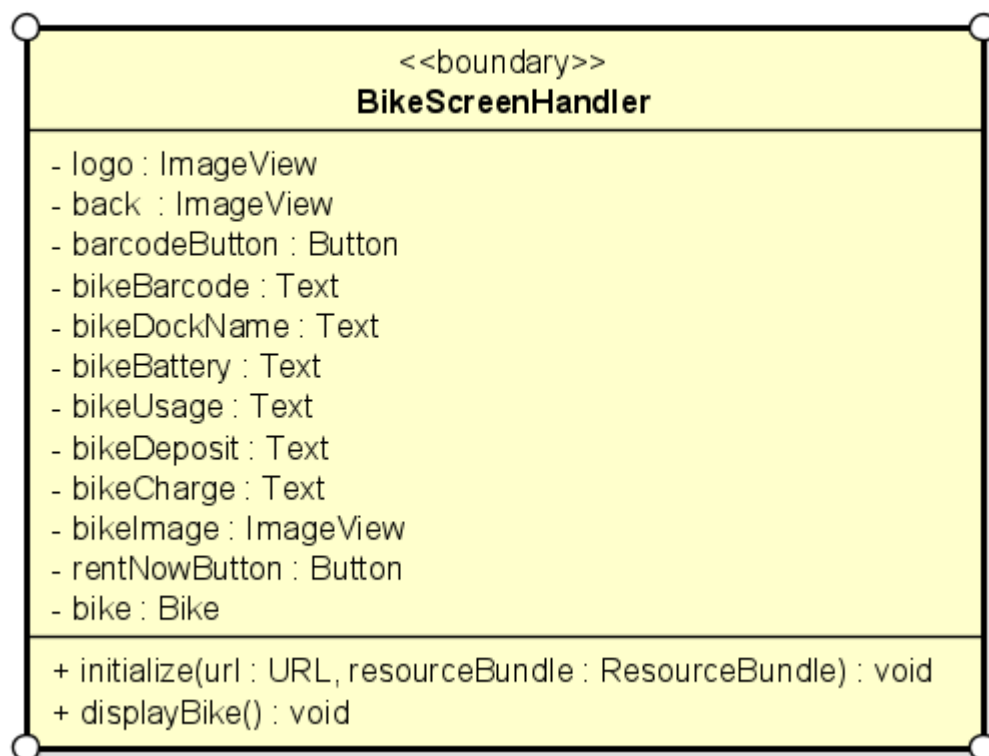


## 2. Define Relationships Between Classes



### 3. Class Design

### 3.1. Class “BikeScreenHandler”



## Attribute

#	Name	Data type	Default value	Description
---	------	-----------	---------------	-------------

1	logo	ImageView	NULL	Logo image fxml
2	back	imageView	NULL	Back image fxml
3	barcodeButton	Button	NULL	BarcodeButton fxml
4	bikeBarcode	Text	NULL	Bike barcode fxml
5	bikeDockName	Text	NULL	Dock name fxml
6	bikeDeposit	Text	NULL	Bike deposit fxml
7	bikeImage	ImageView	NULL	Bike image
8	rentNowButton	Button	NULL	Rent button fxml
9	bike	Bike	NULL	bike

## Operation

#	Name	Return type	Description
1	initialize	void	initialize
2	displayBike	void	Display bike info screen

Parameter:

URL

ResourceBundle

Exception:

None

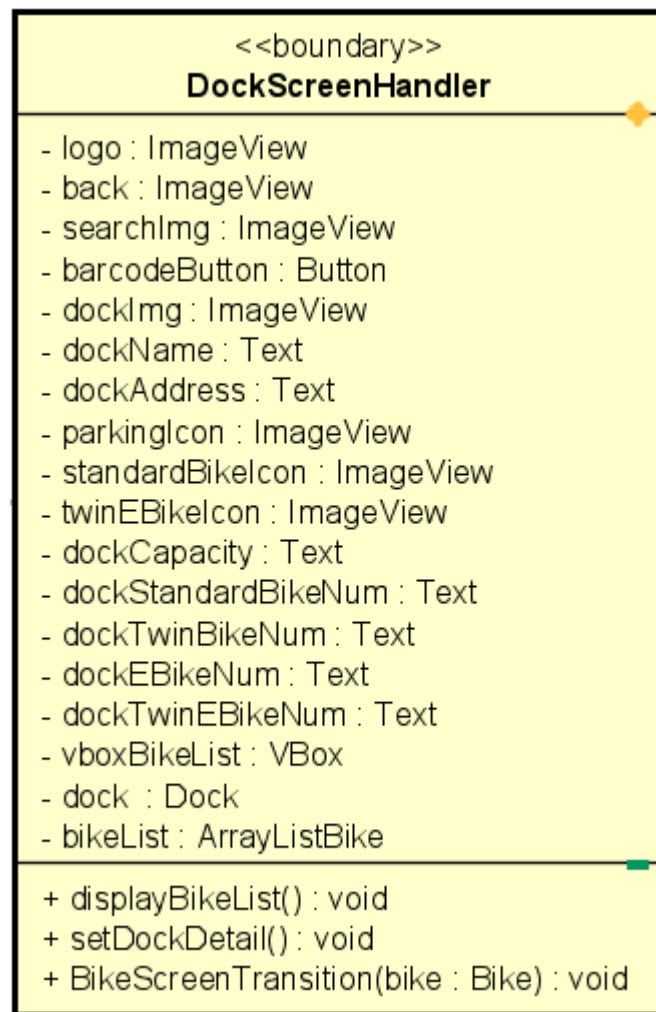
## Method

None

## State

None

### 3.2. Class “DockScreenHandler”



#### Attribute

#	Name	Data type	Default value	Description
1	logo	ImageView	NULL	Logo image fxml
2	back	imageView	NULL	Back image fxml
3	barcodeButton	Button	NULL	BarcodeButton fxml
4	dockName	Text	NULL	Dock name fxml
5	dockAddress	Text	NULL	Dock address fxml
7	dockImg	ImageView	NULL	Dock image fxml
8	dock	Dock	NULL	dock
9	bikeList	ArrayList<Bike>	NULL	Bike list in dock

#### Operation

#	Name	Return type	Description
1	displayBikeList	void	Display bike list
2	setDockDetail	void	Set dock detail
3	BikeScreenTransition	void	Transition to bike screen

Parameter:

bike

Exception:

None

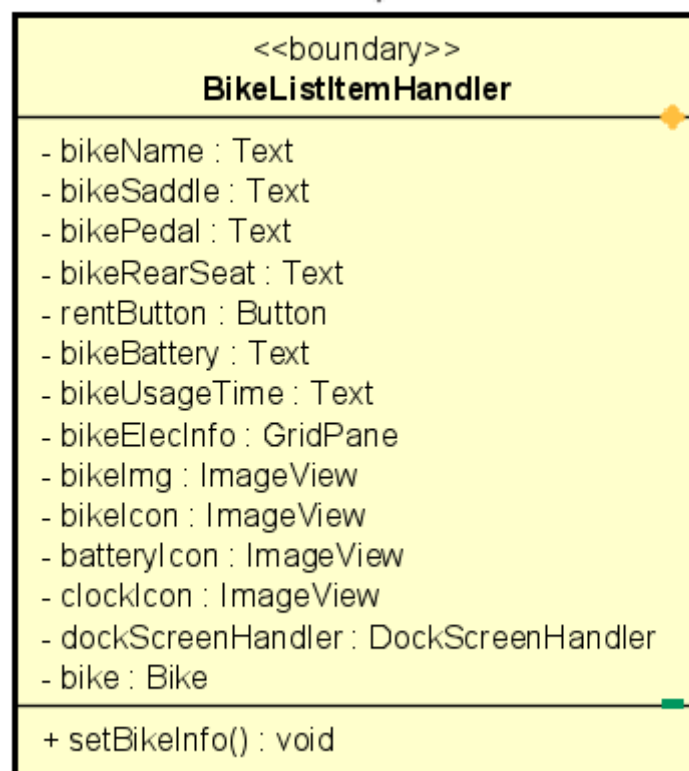
**Method**

None

**State**

None

### 3.3. Class “BikeListItemHandler”



#### Attribute

#	Name	Data type	Default value	Description
1	bikeImg	ImageView	NULL	Bike image fxml
2	bikeIcon	imageView	NULL	Bike image fxml
3	rentButton	Button	NULL	Rent button fxml
4	bikeName	Text	NULL	Bike name fxml
8	dockScreenHandler	DockScreenHandler	NULL	object
9	bike	Bike	NULL	object

#### Operation

#	Name	Return type	Description
1	setBikeInfo	void	Set bike info

Parameter:

none

Exception:

None

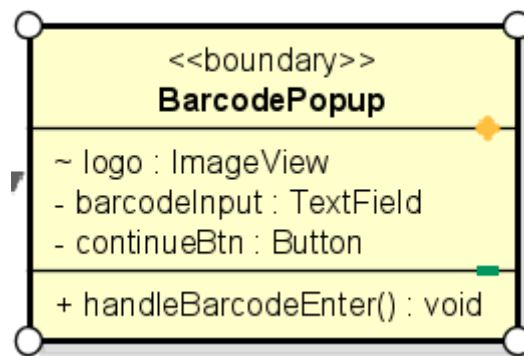
### Method

None

### State

None

### 3.4. Class “BarcodePopup”



### Attribute

#	Name	Data type	Default value	Description
1	logo	ImageView	NULL	logo image fxml
2	barcodeInput	TextField	NULL	Input field fxml
3	continueBtn	Button	NULL	Continue button fxml

### Operation

#	Name	Return type	Description
1	handleBarcodeEnter	void	Handle action “enter barcode”

Parameter:

none

Exception:

None

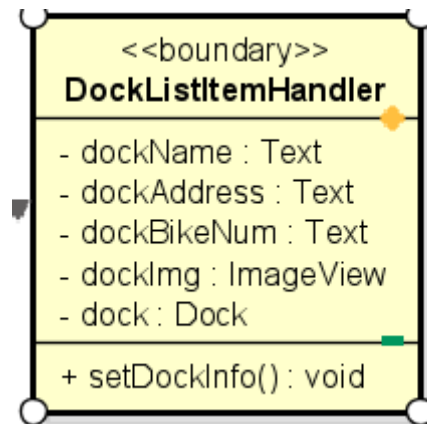
## Method

None

## State

None

### 3.5. Class “DockListItemHandler”



## Attribute

#	Name	Data type	Default value	Description
1	dockName	Text	NULL	Dock name
2	dockAddress	Text	NULL	Dock address
3	dockBikeNum	Text	NULL	Number of bikes in dock
4	dockImg	ImageView	NULL	Dock image
5	dock	Dock	NULL	dock

## Operation

#	Name	Return type	Description
1	setDockInfo	void	Set dock info

Parameter:

none

Exception:

None

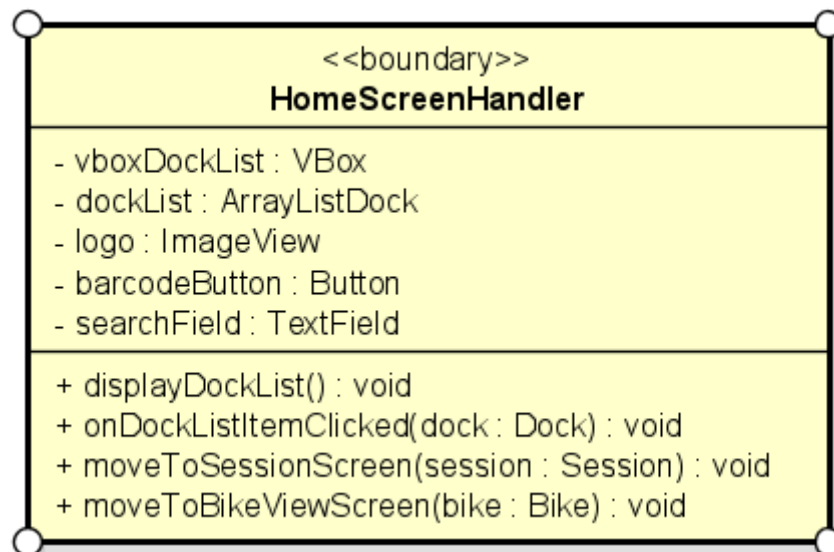
## Method

None

## State

None

### 3.6. Class “HomeScreenHandler”



#### Attribute

#	Name	Data type	Default value	Description
1	vboxDockList	VBox	NULL	Vbox fxml
2	dockList	ArrayList<Dock>	NULL	Dock list
3	logo	ImageView	NULL	Logo image fxml
4	BarcodeButton	Button	NULL	Barcode button fxml
5	searchField	TextField	NULL	Search field fxml

#### Operation

#	Name	Return type	Description
1	displayDockList	void	Display dock list
2	onDockListItemClicked	void	Handle action click item on dock list
3	moveToSessionScreen	void	Handle action click button
4	moveToBikeViewScreen	void	Handle action click bike

Parameter:

Dock

Session

Bike

Exception:

None

#### Method

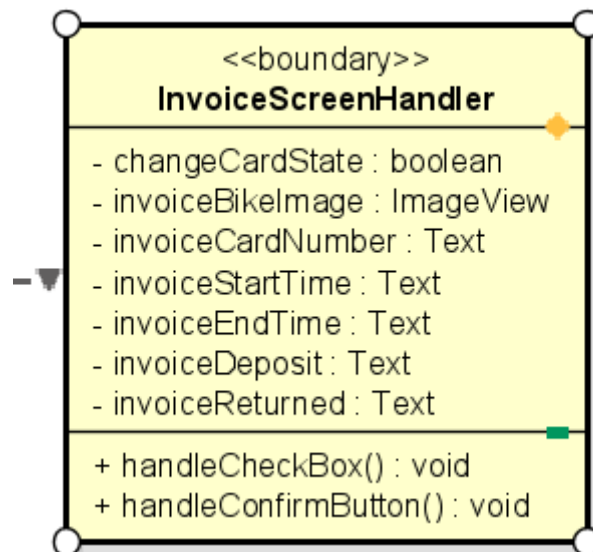
None

#### State



None

### 3.7. Class “InvoiceScreenHandler”



#### Attribute

#	Name	Data type	Default value	Description
1	changeCardState	boolean	NULL	Card state
2	invoiceBikeImage	ImageView	NULL	Bike image
3	invoiceCardNumber	Text	NULL	Invoice card number
4	invoiceStartTime	Text	NULL	Invoice start time
5	invoiceEndTime	Text	NULL	Invoice end time
6	invoiceDeposit	Text	NULL	Invoice deposit
7	invoiceReturned	Text	NULL	Invoice returned

#### Operation

#	Name	Return type	Description
1	handleCheckBox	void	Handle check box
2	handleConfirmButton	void	Handle confirm button

Parameter:

none

Exception:

None

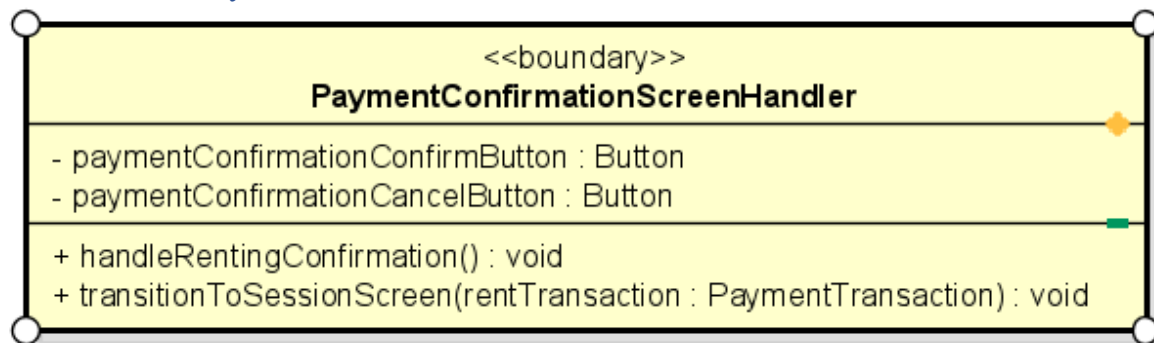
#### Method

None

#### State

None

### 3.8. Class “PaymentConfirmationScreenHandler”



#### Attribute

#	Name	Data type	Default value	Description
1	paymentConfirmationConfirmButton	Button	NULL	Confirm button fxml
2	paymentConfirmationCancelButton	Button	NULL	Cancel button fxml

#### Operation

#	Name	Return type	Description
1	handleRentingConfirmation	void	Handle confirmation action
2	transitionToSessionScreen	void	Transition to session screen

Parameter:

rentTransaction

Exception:

None

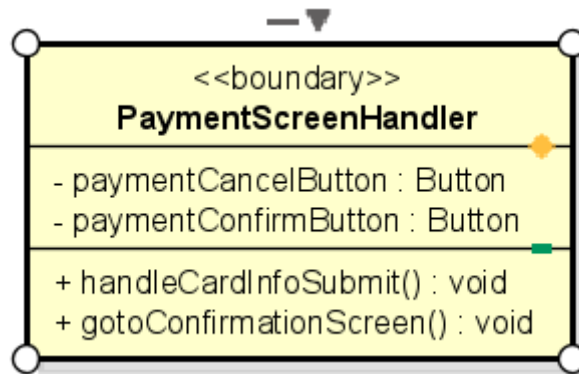
#### Method

None

#### State

None

### 3.9. Class “PaymentScreenHandler”



#### Attribute

#	Name	Data type	Default value	Description
1	paymentCancelButton	Button	NULL	Cancel button fxml
2	paymentConfirmButton	Button	NULL	Confirm button fxml

#### Operation

#	Name	Return type	Description
1	handleCardInfoSubmit	void	Handle action submit card
2	gotoConfirmationScreen	void	Transition to confirmation screen

Parameter:

None

Exception:

None

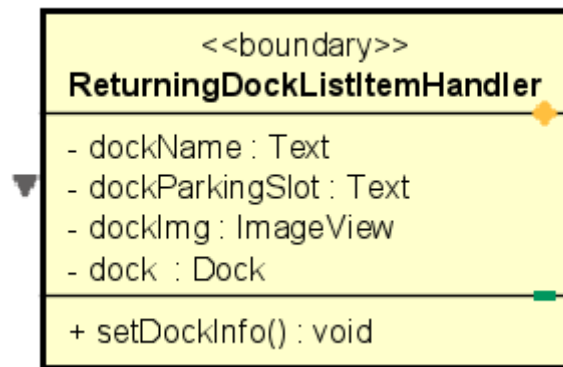
#### Method

None

#### State

None

### 3.10. Class “ReturningDockListItemHandler”



#### Attribute

#	Name	Data type	Default value	Description
1	dockName	Text	NULL	Dock name fxml
2	dockParkingSlot	Text	NULL	Dock parking slot fxml
3	dockImg	ImageView	NULL	Dock image fxml
4	dock	Dock	NULL	dock

#### Operation

#	Name	Return type	Description
1	setDockInfo	void	Set dock info

Parameter:

None

Exception:

None

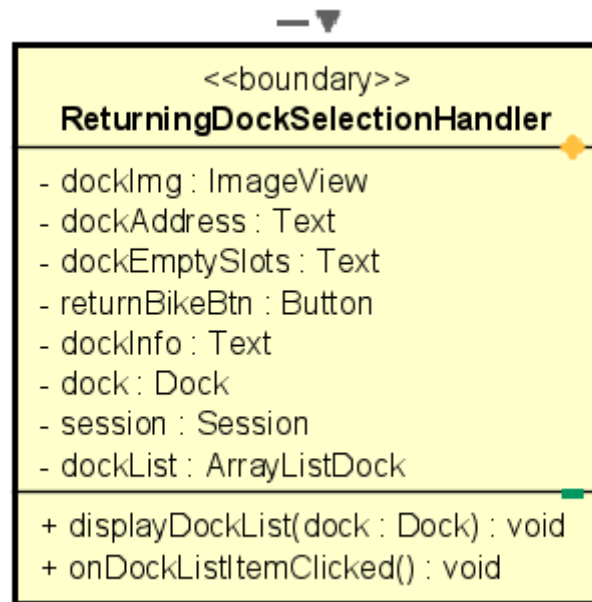
Method

None

State

None

### 3.11. Class “ReturningDockListSelectionHandler”



#### Attribute

#	Name	Data type	Default value	Description
1	dockName	Text	NULL	Dock name fxml
2	dockAddress	Text	NULL	Dock address fxml
3	dockImg	ImageView	NULL	Dock image fxml
4	dock	Dock	NULL	dock
5	returnBikeBtn	Button	NULL	Button fxml
6	session	Session	NULL	session
7	dockList	ArrayList<Dock>	NULL	Dock list

#### Operation

#	Name	Return type	Description
1	displayDockList	void	Display dock list
2	onDockListItemClicked	void	Handle action click an item on docklist

Parameter:

dock

Exception:

None

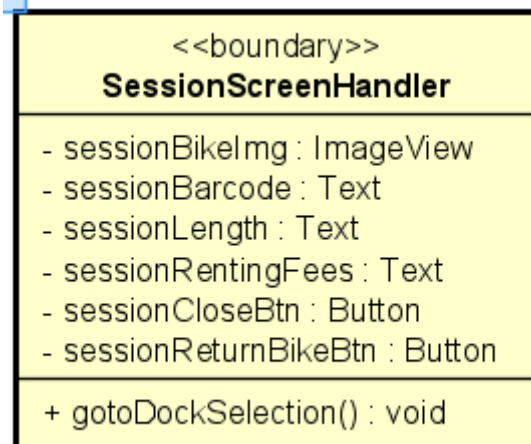
#### Method

None

## State

None

### 3.12. Class “SessionScreenHandler”



## Attribute

#	Name	Data type	Default value	Description
1	sessionBikeImg	ImageView	NULL	Bike image fxml
2	sessionBarcode	Text	NULL	Session barcode fxml
3	sessionLength	Text	NULL	Session length fxml
4	sessionRentingFees	Text	NULL	Session renting fees fxml
5	sessionCloseBtn	Button	NULL	Button fxml
6	sessionReturnBikeBtn	Button	NULL	Button fxml

## Operation

#	Name	Return type	Description
1	gotoDockSeletion	void	Transition to dock selection

Parameter:

None

Exception:

None

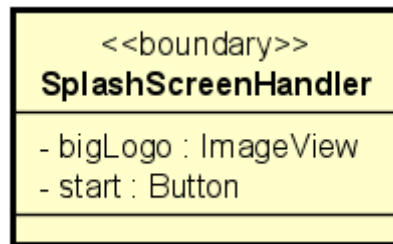
## Method

None

## State

None

### 3.13. Class “SplashScreenHandler”



## Attribute

#	Name	Data type	Default value	Description
1	bigLogo	ImageView	NULL	Logo image fxml
2	start	Button	NULL	Button fxml

## Operation

None

Parameter:

None

Exception:

None

## Method

None

## State

None

pkg

