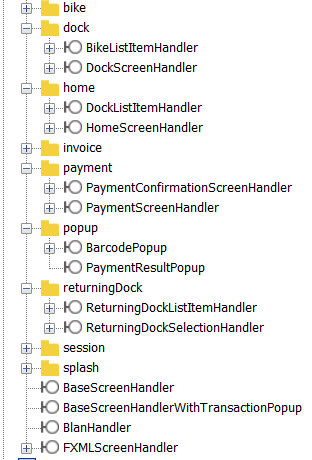
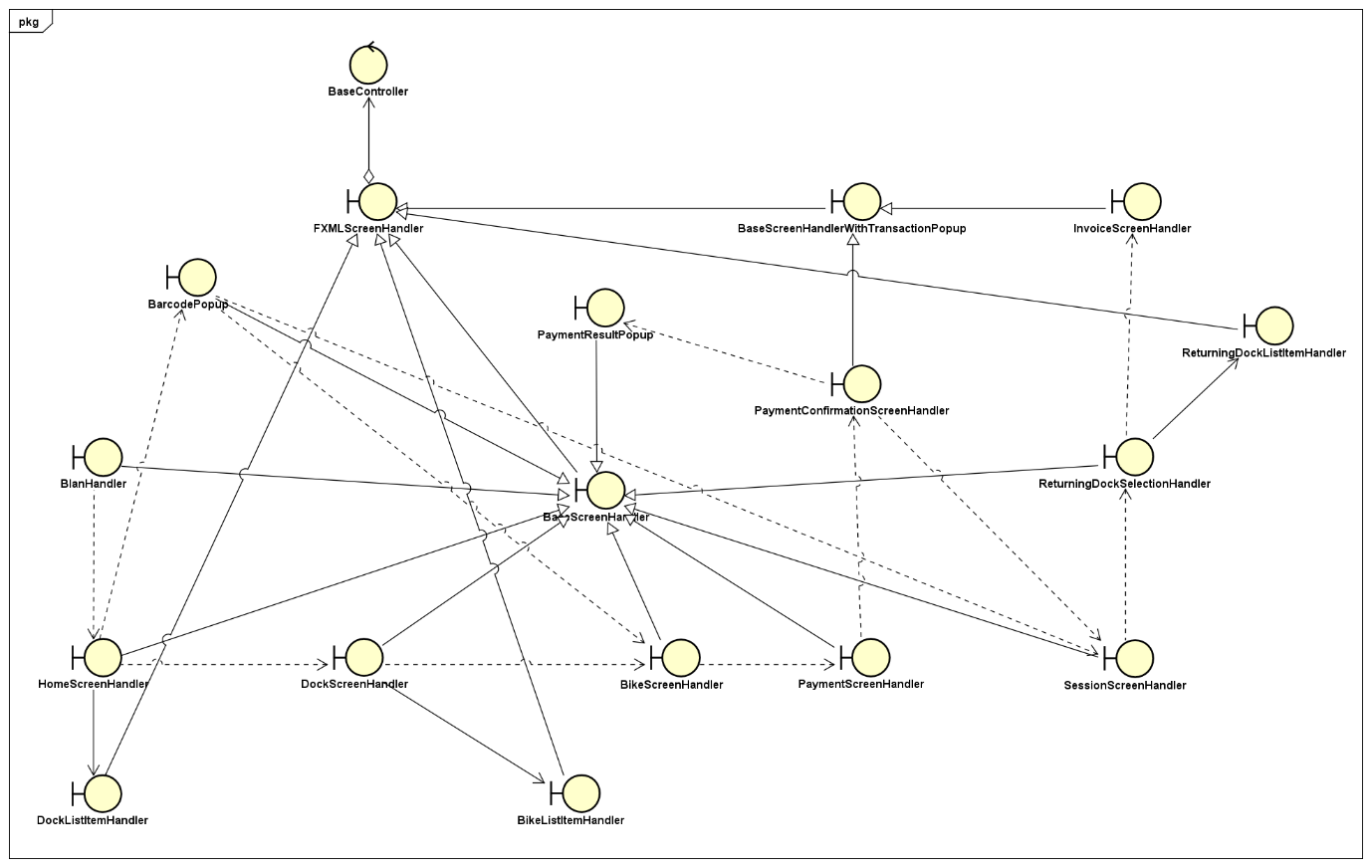
Class Design - View

# Create Initial Design Classes

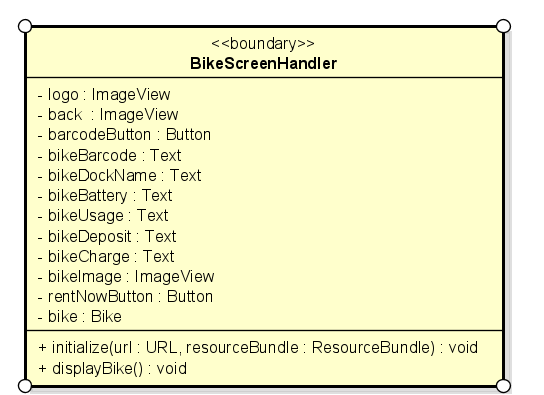


# Define Relationships Between Classes



# Class Design

## 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 | Desciption |
| 1 | initialize | void | initialize |
| 2 | displayBike | void | Display bike info screen |

Parameter:

URL

ResourceBundle

Exception:

None

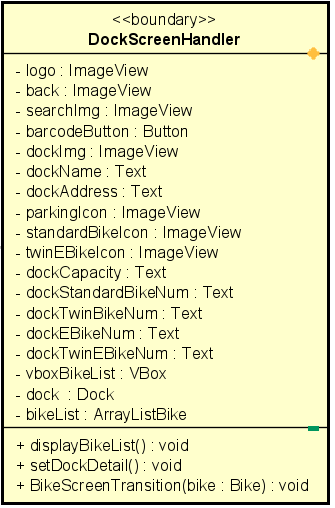
**Method**

None

**State**

None

## 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 | Desciption |
| 1 | displayBikeList | void | Display bike list |
| 2 | setDockDetail | void | Set dock detail |
| 3 | BikeScreenTransition | void | Transition to bike screen |

Parameter:

bike

Exception:

None

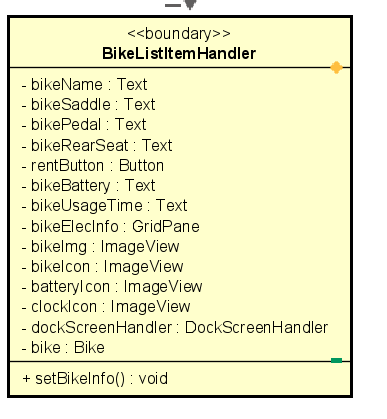
**Method**

None

**State**

None

## 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 | Desciption |
| 1 | setBikeInfo | void | Set bike info |

Parameter:

none

Exception:

None

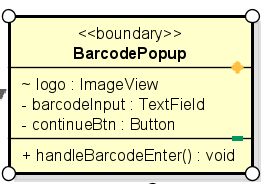
**Method**

None

**State**

None

## 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 | Desciption |
| 1 | handleBarcodeEnter | void | Handle action “enter barcode” |

Parameter:

none

Exception:

None

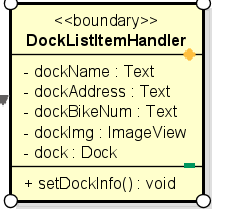
**Method**

None

**State**

None

## 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 | Desciption |
| 1 | setDockInfo | void | Set dock info |

Parameter:

none

Exception:

None

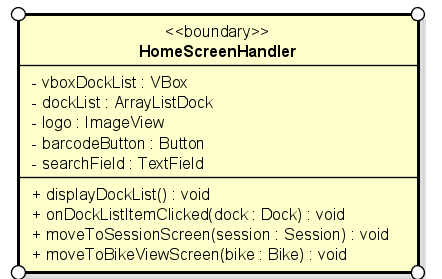
**Method**

None

**State**

None

## 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 | Desciption |
| 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

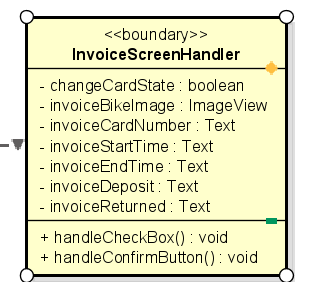
**Method**

None

**State**

None

## 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 | Desciption |
| 1 | handleCheckBox | void | Handle check box |
| 2 | handleConfirmButton | void | Handle confirm button |

Parameter:

none

Exception:

None

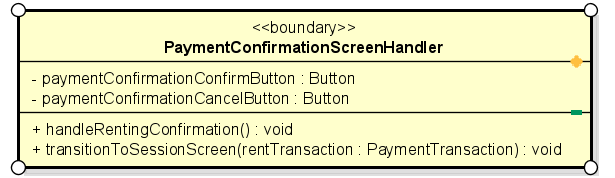
**Method**

None

**State**

None

## 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 | Desciption |
| 1 | handleRentingConfirmation | void | Handle confirmation action |
| 2 | transitionToSessionScreen | void | Transition to session screen |

Parameter:

rentTransaction

Exception:

None

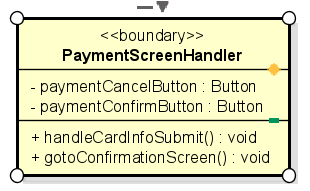
**Method**

None

**State**

None

## 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 | Desciption |
| 1 | handleCardInfoSubmit | void | Handle action submit card |
| 2 | gotoConfirmationScreen | void | Transition to confirmation screen |

Parameter:

None

Exception:

None

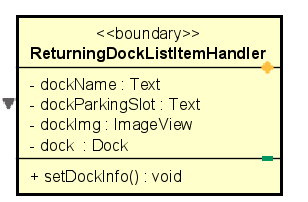
**Method**

None

**State**

None

## 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 | Desciption |
| 1 | setDockInfo | void | Set dock info |

Parameter:

None

Exception:

None

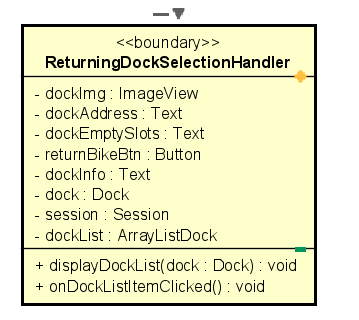
**Method**

None

**State**

None

## 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 | Desciption |
| 1 | displayDockList | void | Display dock list |
| 2 | onDockListItemClicked | void | Handle action click an item on docklist |

Parameter:

dock

Exception:

None

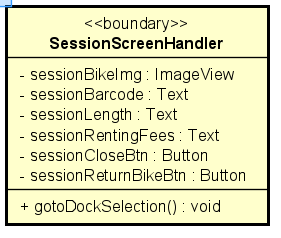
**Method**

None

**State**

None

## 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 | Desciption |
| 1 | gotoDockSeletion | void | Transition to dock selection |

Parameter:

None

Exception:

None

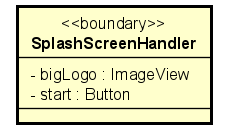
**Method**

None

**State**

None

## 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

# Class Diagram

