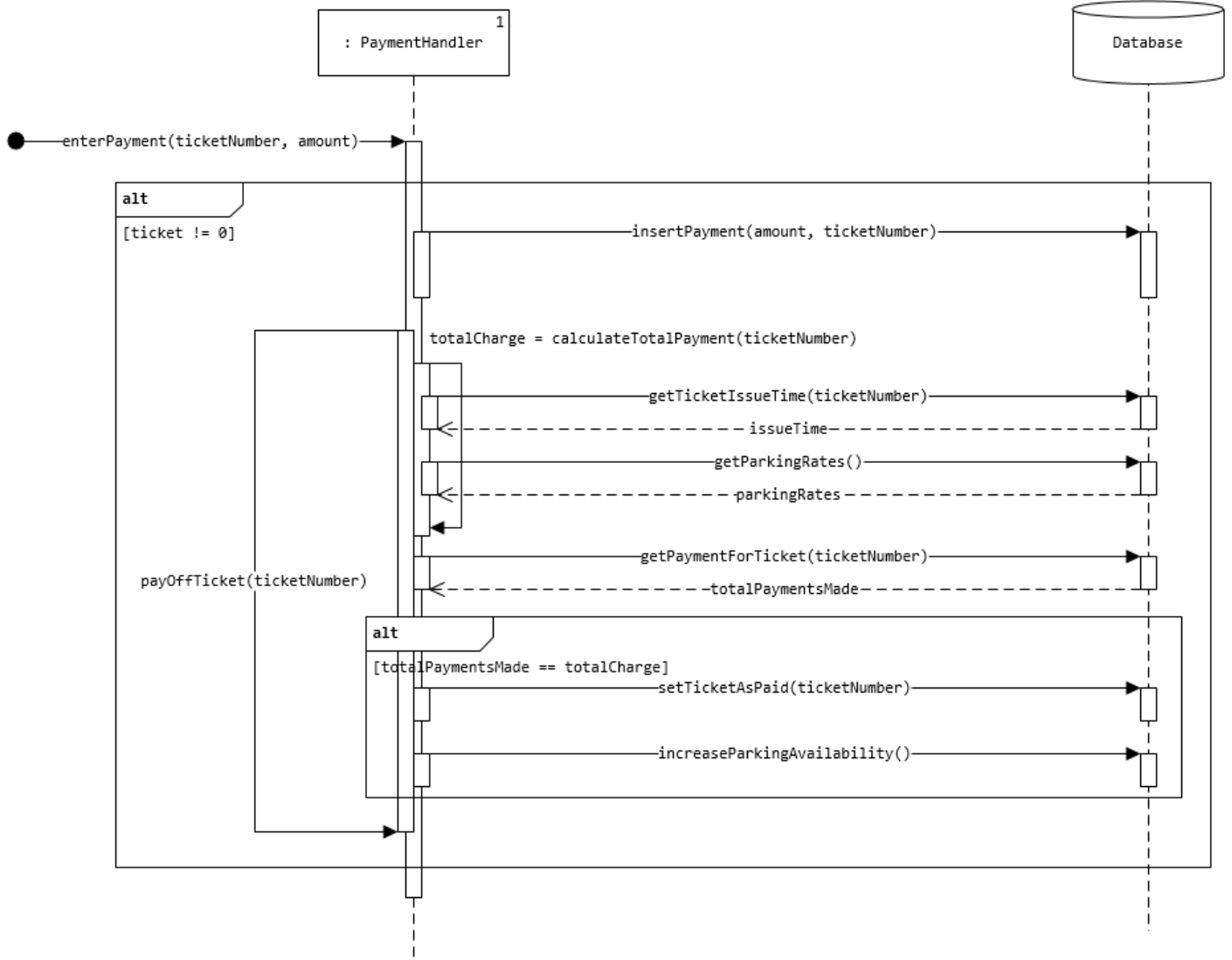


Basic Instructions on how to run the project:

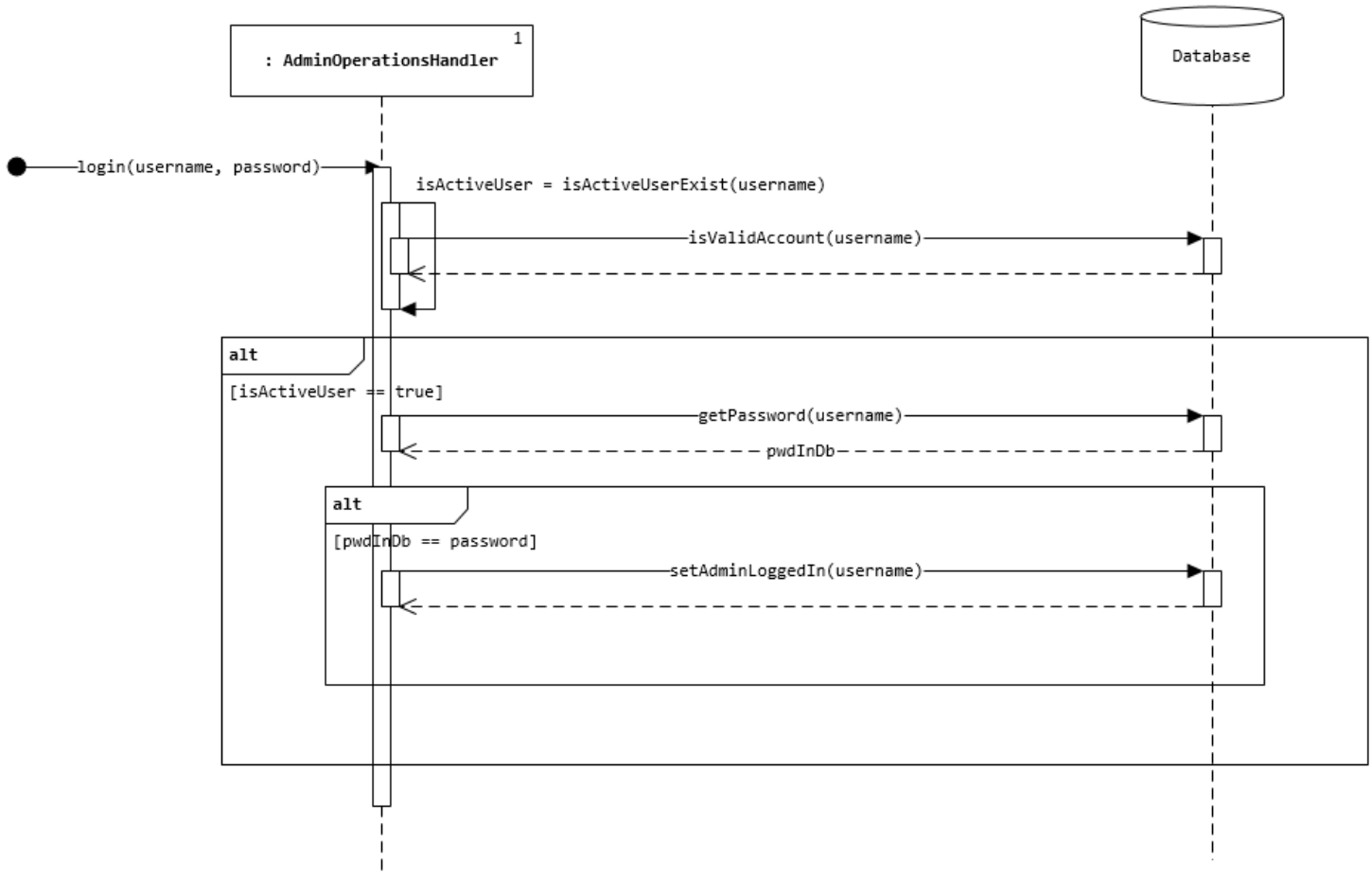
- The main class to run is in the MainController class under controller package in src.
- If database has already been populated with tables, run the CleanupDBScript in the database package. Currently this script runs before initialization of the system, which can be commented out.
- To populate the database with some historic data, the PopulateDBScript in the database package is executed at the time of initialization. To enter more data on initialization, please look at the queries already added to this script and reuse them.
- The sql connector jar for jdbc is also added to the jar with the source code in case our versions are different and if that matters.

UML Sequence Diagrams

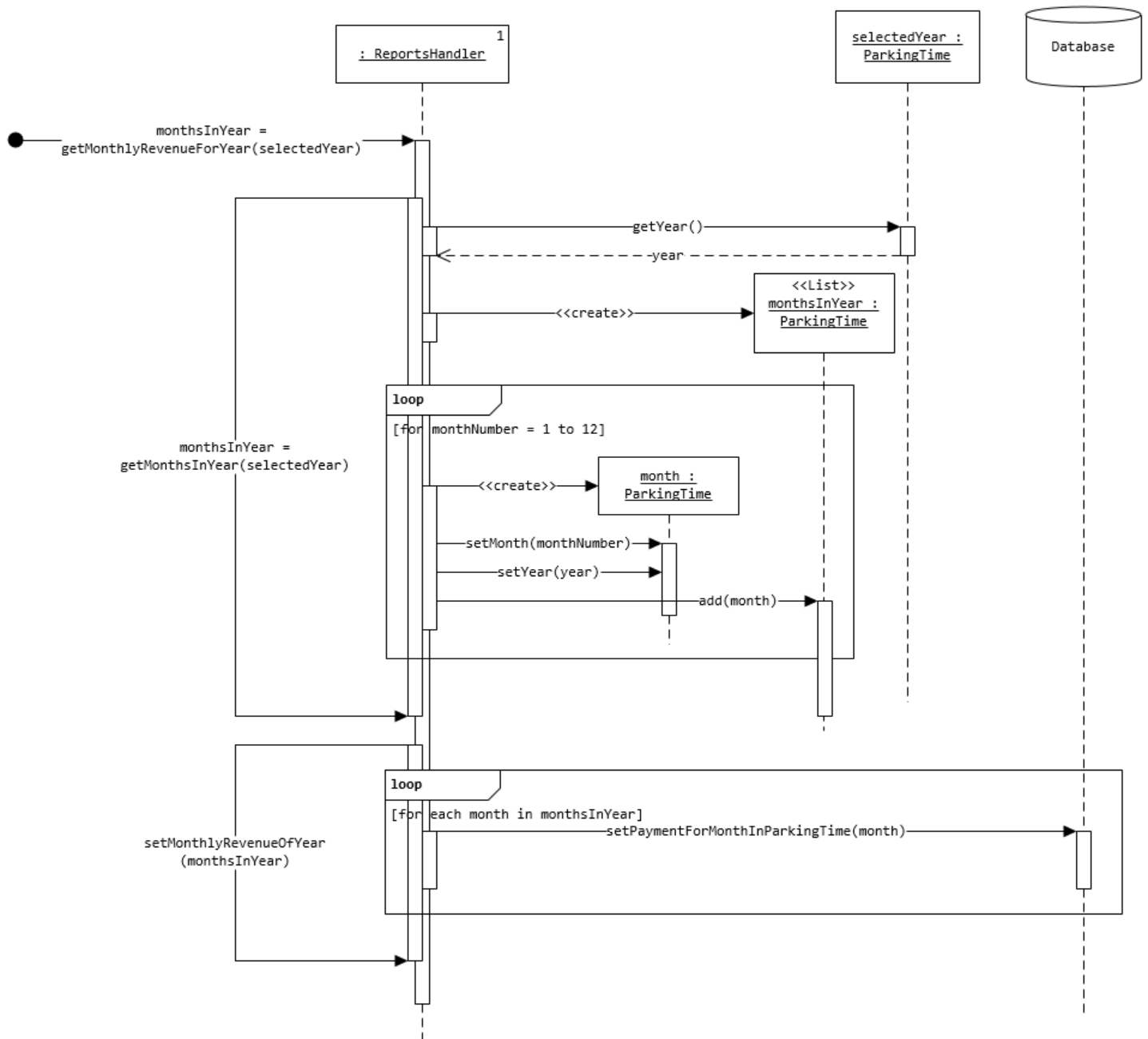
1) enterPayment



2) login



3) getMonthlyRevenueForYear



Design Class Diagram

Parking System Test Plan

Test Cases

| | |
|---------------------|--|
| Test Case No. | 1 |
| Test Description | Enter Parking when parking space is available |
| Module being Tested | Enter Parking |
| Importance | Parking can be entered only when parking space is available. |
| Test Steps | View Parking Availability. Parking space is available. Click on Enter Parking. |
| Expected Results | Enter Parking screen should be displayed. Current Parking Rates should be displayed. Get Ticket and Go Back buttons should be available. |
| Actual Results | Enter Parking screen is displayed which contains the current parking rates, Get Ticket and Go Back buttons. |

| | |
|---------------------|---|
| Test Case No. | 2 |
| Test Description | Enter Parking when parking space is not available |
| Module being Tested | Enter Parking |
| Importance | Parking can be entered only when parking space is available. |
| Test Steps | View Parking Availability. Parking space is not available. Click on Enter Parking. |
| Expected Results | Enter Parking screen should not be displayed. The main screen should display message that no parking space is available. |
| Actual Results | Main application screen does not change and no availability message is displayed. |

| | |
|---------------------|---|
| Test Case No. | 3 |
| Test Description | Get Ticket |
| Module being Tested | Enter Parking |
| Importance | Parking should be entered without any errors. |
| Test Steps | Enter Parking screen is visible. Click on Get Ticket. After getting ticket, click on OK. |
| Expected Results | Message should be displayed with next ticket number in sequence. Entry gate should be opened. After clicking on OK, main application screen should be displayed. The parking availability should be updated. |
| Actual Results | Ticket number is unique and next in the sequence of ticket numbers. Entry gate is opened. Main application screen is displayed with updated availability. |

| | |
|---------------------|---|
| Test Case No. | 4 |
| Test Description | Go Back from Enter Parking screen. |
| Module being Tested | Enter Parking |
| Importance | Driver can decide not to get ticket and not park in the parking lot. |
| Test Steps | Enter Parking screen is visible. Click on Go Back. |
| Expected Results | Main application screen should be displayed. Ticket should not be dispensed. Parking Availability should remain same as before. Entry gate should not be opened. |
| Actual Results | Ticket number is not displayed. Entry gate is not opened. Main application screen is displayed with unchanged parking availability. |

| | |
|---------------------|--|
| Test Case No. | 5 |
| Test Description | Exit Parking when parking lot has occupants. |
| Module being Tested | Exit Parking |
| Importance | Parking can only be exited by someone inside the parking lot. |
| Test Steps | Current Availability is not zero. Click on Exit Parking. |
| Expected Results | Exit Parking screen should be displayed along with current Parking rates. Driver should be able to enter ticket number. Submit, Lost (Ticket) and Go Back buttons should be available. |
| Actual Results | Main application screen does not change and no availability message is displayed. |

| | |
|---------------------|--|
| Test Case No. | 6 |
| Test Description | Exit Parking when parking lot is empty. |
| Module being Tested | Exit Parking |
| Importance | Parking can only be exited by someone inside the parking lot. |
| Test Steps | Current Availability is zero. Click on Exit Parking. |
| Expected Results | Main application screen should have message saying parking is empty. Exit Parking screen should not be displayed. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 7 |
| Test Description | Enter invalid ticket value. |
| Module being Tested | Exit Parking |
| Importance | Driver should not be able to enter invalid ticket and fool the system. |
| Test Steps | Exit Parking screen is displayed. Enter alphabets, special characters as ticket number. Click on Submit. |
| Expected Results | Error should be displayed. |
| Actual Results | Error is displayed asking driver to enter six digit ticket number. |

| | |
|---------------------|---|
| Test Case No. | 8 |
| Test Description | Enter unissued ticket. |
| Module being Tested | Exit Parking |
| Importance | Driver should not be able to enter invalid ticket and fool the system. |
| Test Steps | Exit Parking screen is displayed. Enter ticket that has never been issued by the system. Click on Submit. |
| Expected Results | Error should be displayed. |
| Actual Results | Error is displayed for invalid ticket number. |

| | |
|---------------------|--|
| Test Case No. | 9 |
| Test Description | Enter already submitted ticket. |
| Module being Tested | Exit Parking |
| Importance | Driver should not be able to enter invalid ticket and fool the system. |
| Test Steps | Exit Parking screen is displayed. Enter ticket that has already been submitted. Click on Submit. |
| Expected Results | Error should be displayed. |
| Actual Results | Error is displayed for invalid ticket number. |

| | |
|---------------------|---------------------|
| Test Case No. | 10 |
| Test Description | Enter valid ticket. |
| Module being Tested | Exit Parking |

| | |
|------------------|--|
| Importance | Driver should be able to pay and exit the parking if valid ticket is submitted. |
| Test Steps | Exit Parking screen is displayed. Enter valid six digit ticket number. Click on Submit. |
| Expected Results | Payment section should be displayed. Current Parking rates should be displayed. Total parking fee should be displayed as well as amount due now. Payment options should be displayed for payment by Cash as well as by Credit card. No payment button should be available. Driver should not be able to submit another ticket. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 11 |
| Test Description | Verify payment options |
| Module being Tested | Exit Parking |
| Importance | Payments can be made in different ways. |
| Test Steps | Exit Parking screen is displayed. Valid ticket has been submitted. Click on Payment types. |
| Expected Results | When payment type is Cash, Driver should be able to enter cash and click on Submit Cash button. When payment type is Credit, Driver should be able to enter name, address, credit card number, security code, expiration date and click on Submit credit card details. For both options, No Payment button should be available. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 12 |
| Test Description | Enter invalid values for cash. |
| Module being Tested | Exit Parking |
| Importance | Driver cannot submit non-monetary things as payment and fool the system. |
| Test Steps | Exit Parking screen is displayed. Valid ticket has been submitted. Click on Payment type: Cash. Enter invalid values for cash such as nothing, alphabets, dots, etc. Click on Submit Cash. |
| Expected Results | Error should be displayed. Payment should not be processed. |
| Actual Results | As expected. |

| | |
|------------------|---|
| Test Case No. | 13 |
| Test Description | Make full payment by Cash |
| Importance | Driver can exit the parking by making full cash payment. |
| Test Steps | Exit Parking screen is displayed. Valid ticket has been submitted. Click on Payment type: Cash. Enter exact amount due. Click on Submit Cash. |
| Expected Results | Message should be displayed that payment is received in full. Exit Gate should be opened. After exit gate is closed, main application screen should be displayed with updated parking availability. |
| Actual Results | As expected. |
| Cleanup | None |

| | |
|---------------------|---|
| Test Case No. | 14 |
| Test Description | Make partial payment by Cash |
| Module being Tested | Exit Parking |
| Importance | Driver can enter payment by cash in installments. |
| Test Steps | Exit Parking screen is displayed. Valid ticket has been submitted. Click on Payment type: Cash. Enter some amount less than the total amount due. Click on Submit Cash. |
| Expected Results | Amount due should be updated. Total charge should not change. Exit Gate should not be opened. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 15 |
| Test Description | Make payment by Credit Card with valid details. |
| Module being Tested | Exit Parking |
| Importance | Driver can make payment by Credit Card. |
| Test Steps | Exit Parking screen is displayed. Valid ticket has been submitted. Click on Payment type: Credit. Enter valid name, address, 16 digit credit card number, 3 digit security code and expiration month and year in the future. Click on Submit Credit Card Details. |
| Expected Results | Message should be displayed that payment is received in full. Exit Gate should be opened. After exit gate is closed, main application screen should be displayed with updated parking availability. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 16 |
| Test Description | Make payment by Credit Card with invalid details. |
| Module being Tested | Exit Parking |
| Importance | Driver cannot enter incorrect credit card details for payment. |
| Test Steps | Exit Parking screen is displayed. Valid ticket has been submitted. Click on Payment type: Credit. Enter invalid values for Credit card details such as numeric name, numeric address. Credit card number which has alphabets or is not 16 digit long. Security code which has alphabets or is not 3 digit long. Expiration month and year which may be current month or in the past. Or not in mm-yyyy format. Click on Submit Credit Card Details. |
| Expected Results | Error should be displayed. Exit gate should not be opened. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 17 |
| Test Description | Make partial payment by Cash and partial payment by Credit Car. |
| Module being Tested | Exit Parking |
| Importance | Driver can make partial payments by cash and credit card. |
| Test Steps | Exit Parking screen is displayed. Valid ticket has been submitted. Click on Payment type: Cash. Enter some amount less than amount due. Click on Submit Cash. |

| | |
|------------------|--|
| | Click on Payment type: Cash. Enter valid credit card details. Click on Submit Credit Card Details. |
| Expected Results | After clicking on Submit Cash, amount due should be updated. After submission of Credit Card details, message should be displayed that payment has been made in full. Exit Gate should be opened. After exit gate is closed, main application screen should be displayed with updated parking availability. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 18 |
| Test Description | Do not make payment to exit parking. |
| Module being Tested | Exit Parking |
| Importance | Driver cannot exit without payment without giving name and license number. |
| Test Steps | Exit Parking screen is displayed. Valid ticket has been submitted. Click on No Payment. Enter name and license number. Click on Submit Exception. |
| Expected Results | After clicking on No Payment, driver should be able to enter name and license number. After clicking on Submit Exception, Exit Gate should be opened. No Payment Exception should be recorded in the system with the amount due. After exit gate is closed, main application screen should be displayed with updated parking availability. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 19 |
| Test Description | Incomplete details entered for No Payment Exception. |
| Module being Tested | Exit Parking |
| Importance | Driver cannot exit without payment without giving name and license number. |
| Test Steps | Exit Parking screen is displayed. Valid ticket has been submitted. Click on No Payment. Do not enter name or/and license number. Click on Submit Exception. |
| Expected Results | After clicking on Submit Exception, error should be displayed. Exit gate should not be opened. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 20 |
| Test Description | Make partial payment with Cash and then submit No Payment Exception. |
| Module being Tested | Exit Parking |
| Importance | Driver can pay some amount out of the total amount due and submit exception. |
| Test Steps | Exit Parking screen is displayed. Valid ticket has been submitted. Enter cash amount less than amount due. Submit Cash. Click on No Payment. Enter name and license number. Click on Submit Exception. |
| Expected Results | After submitted cash, amount due should be updated. After submitting No Payment Exception, an exception should be created with the name, license number and the updated amount due. Exit gate should be opened. |

| | |
|----------------|--|
| | Main application screen should be displayed with updated parking availability. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 21 |
| Test Description | Lost Ticket |
| Module being Tested | Exit Parking |
| Importance | Driver can report lost ticket. |
| Test Steps | Exit Parking screen is displayed. Click on Lost. |
| Expected Results | Payment section should be displayed. Current Parking rates should be displayed. Maximum amount for the day is displayed as total charge as well as amount due. Payment options should be displayed for payment by Cash as well as by Credit card. No payment button should be available. Driver should not be able to submit ticket. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 22 |
| Test Description | Enter payment for Lost Ticket |
| Module being Tested | Exit Parking |
| Importance | Driver can report lost ticket and still pay for parking. |
| Test Steps | Exit Parking screen is displayed. Click on Lost. Pay by either Cash or Credit or click on Payment. |
| Expected Results | Payment is recorded in the system without the ticket number if paid by Cash or Credit Card. No Payment Exception is entered with the maximum parking fee for the day. Exit gate should be opened. Main application screen should be displayed with updated parking availability. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 23 |
| Test Description | Go Back from Exit Parking screen |
| Module being Tested | Exit Parking |
| Importance | Driver can return back into the parking lot and not exit. |
| Test Steps | Exit Parking screen is displayed. Click on Go Back. |
| Expected Results | Exit gate should not be opened. Main application screen should be displayed with same parking availability as before. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 24 |
| Test Description | View Current Parking rates |
| Module being Tested | View Parking Rates |
| Importance | Driver or admin can view accurate parking rates. |
| Test Steps | Click on View Parking Rates. |
| Expected Results | Current Parking Rates should be displayed. |
| Actual Results | Current Parking Rates are displayed. |

| | |
|---------------------|---|
| Test Case No. | 25 |
| Test Description | Go Back from View Current Parking rates screen |
| Module being Tested | View Parking Rates |
| Importance | Driver or admin can go back to main screen after viewing the parking rates. |
| Test Steps | Current Parking Rates are displayed. |

| | |
|------------------|---|
| | Click on Go Back. |
| Expected Results | Main application screen should be displayed with same parking availability as before. |
| Actual Results | Main application screen is displayed without any change. |

| | |
|---------------------|---|
| Test Case No. | 26 |
| Test Description | Login Screen |
| Module being Tested | Login |
| Importance | Admin can login to the system and get admin privileges. |
| Test Steps | Click on Login. |
| Expected Results | Login screen should be displayed. User should be able to enter username and password and submit them. Forgot password option should be available. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 27 |
| Test Description | Enter incorrect login details. |
| Module being Tested | Login |
| Importance | User cannot enter bogus values and gain access to admin privileges. |
| Test Steps | Click on Login from main application screen. a) Do not enter username and/or password. Click on Login. b) Enter non alphanumeric characters in username and/or password. Click on Login. c) Enter invalid username and password. Click on Login. d) Enter valid username but incorrect password. Click on Login. |
| Expected Results | Error should be displayed. User should not be logged in. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 28 |
| Test Description | Forgot Password Screen |
| Module being Tested | Login |
| Importance | Admin can reset password if forgotten. |
| Test Steps | Click on Login from main application screen. Enter valid username. Click on Forgot Password. |
| Expected Results | Security question should be displayed for that user. User should be able to enter Security Answer and Verify identity. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 29 |
| Test Description | Incorrect usage of Forgot Password |
| Module being Tested | Login |
| Importance | User cannot misuse Forgot Password option and reset password. |
| Test Steps | Click on Login from main application screen. Enter no/invalid username. Click on Forgot Password. |
| Expected Results | Error should be displayed. User should not be logged in. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 30 |
| Test Description | Incorrect Security Answer. |
| Module being Tested | Login |
| Importance | User cannot misuse Forgot Password option and reset password. |
| Test Steps | Click on Login from main application screen. |

| | |
|------------------|--|
| | Enter valid username. Click on Forgot Password. Enter incorrect Security answer. |
| Expected Results | Error should be displayed. User should not be logged in. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 31 |
| Test Description | Correct usage of Forgot Password. |
| Module being Tested | Login |
| Importance | User can use Forgot Password option to regain ability to login. |
| Test Steps | Click on Login from main application screen. Enter valid username. Click on Forgot Password. Enter correct Security answer. |
| Expected Results | User should be able to enter new password. Change password button should be displayed. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 32 |
| Test Description | Invalid new Password after Forgot Password |
| Module being Tested | Login |
| Importance | User cannot misuse Forgot Password option and reset password. |
| Test Steps | Click on Login from main application screen. Enter valid username. Click on Forgot Password. Enter correct Security answer. Enter no/invalid password such as non-alphanumeric characters. |
| Expected Results | Error should be displayed. User should not be logged in. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 33 |
| Test Description | Go Back from Login or Forgot Password screen |
| Module being Tested | Login |
| Importance | |
| Test Steps | a) Click on Login from main application screen Click on Go Back. b) Click on Forgot Password. Click on Go Back. |
| Expected Results | Main application screen should be displayed as before. User should not be logged in. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 34 |
| Test Description | Go Back from Login or Forgot Password screen |
| Module being Tested | Login |
| Importance | User can go back to main screen if doesn't want to log in. |
| Test Steps | a) Click on Login from main application screen Click on Go Back. b) Click on Forgot Password. Click on Go Back. |
| Expected Results | Main application screen should be displayed as before. User should not be logged in. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 35 |
| Test Description | Login as Admin |
| Module being Tested | Login |
| Importance | Admin can login to the system and get admin privileges. |
| Test Steps | Click Login on main application screen. Enter correct username and password. Click on Login. |

| | |
|------------------|---|
| Expected Results | Admin should be logged into the system. Admin screen should be displayed with options to add another account, disable account, change password, configure parking size and parking rates and to generate reports. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 36 |
| Test Description | Login as Admin after resetting password through Forgot Password option. |
| Module being Tested | Login |
| Importance | Admin can login to the system after resetting/changing password. |
| Test Steps | Click Login on main application screen. Change password by using Forgot Password option. Click Login again on the main application screen. Enter correct username and newly changed password. Click on Login. |
| Expected Results | Admin should be logged into the system. Admin screen should be displayed with options to add another account, disable account, change password, configure parking size and parking rates and to generate reports. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 37 |
| Test Description | Configure Parking Rates. |
| Module being Tested | Configure Parking Rates |
| Importance | Admin can configure parking rates. |
| Test Steps | Admin clicks on Configure Parking Rates. Enter new parking rates in decimal format on the screen. Click on Update Rates. |
| Expected Results | Message should be displayed that parking rates are updated and they should be updated in the system. Admin screen should be displayed again. These new rates should now be displayed for Enter Parking, Exit Parking and View Parking Rates. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 38 |
| Test Description | Configure Parking Rates with invalid values. |
| Module being Tested | Configure Parking Rates |
| Importance | Admin cannot enter invalid values for new parking rates. |
| Test Steps | Admin clicks on Configure Parking Rates. Enter invalid parking rates, such as alphabets, special characters, or integers in non-decimal format. Click on Update Rates. |
| Expected Results | Error should be displayed to enter valid parking rates. Parking rates should not be updated. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 39 |
| Test Description | Configure Parking Size. |
| Module being Tested | Configure Parking Size |
| Importance | Admin can configure parking size. |
| Test Steps | Admin clicks on Configure Parking Size. Enter valid new size. Click on Update Parking Size. |
| Expected Results | Message should be displayed that parking size has been updated and it should be updated in the system. Admin screen should be displayed again. |

| | |
|----------------|--------------|
| Actual Results | As expected. |
|----------------|--------------|

| | |
|---------------------|--|
| Test Case No. | 40 |
| Test Description | Configure Parking Size with invalid values. |
| Module being Tested | Configure Parking Size |
| Importance | Admin cannot enter invalid value for new parking size. |
| Test Steps | Admin clicks on Configure Parking Size. Enter invalid new size, such as alphabets, special characters, decimal numbers. Invalid size also includes zero and integer less than current occupied slots. Click on Update Parking Size. |
| Expected Results | Error should be displayed to enter valid parking size. Parking size should not be updated. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 41 |
| Test Description | Add Account |
| Module being Tested | Add Account |
| Importance | Admin can add another admin account. |
| Test Steps | Admin clicks on Add Account. Enter valid username, password, security question and security answer. Click on Create Account. |
| Expected Results | New account should be added in the system and message should be displayed for the same. Admin Screen should be displayed again. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 42 |
| Test Description | Add Account with invalid values |
| Module being Tested | Add Account |
| Importance | Admin cannot add another account with invalid details. |
| Test Steps | Admin clicks on Add Account. Enter invalid username, password, security question and security answer: a) Username that already exists in system. b) Non alphanumeric characters for any of the four fields. c) No value for any of the fields. Click on Create Account. |
| Expected Results | Error should be displayed. New account should not be added in the system. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 43 |
| Test Description | Login using new account added by Add Account option. |
| Module being Tested | Add Account |
| Importance | New admin can login to the system after account has been created. |
| Test Steps | Admin adds another account. Login using new account username and password. |
| Expected Results | Admin should be logged into the system. Admin screen should be displayed with options to add another account, disable account, change password, configure parking size and parking rates and to generate reports. |
| Actual Results | As expected. |

| | |
|------------------|-----------------|
| Test Case No. | 44 |
| Test Description | Disable Account |

| | |
|---------------------|---|
| Module being Tested | Disable Account |
| Importance | Admin can disable another admin account. |
| Test Steps | Admin clicks on Disable Account. Enter valid username. Click on Confirm Disable Account. |
| Expected Results | Account entered should be disabled. Audit record should be entered by system for account disabled, active admin who disabled the account and the current time. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 45 |
| Test Description | Login using account that has been disabled using the Disable Account option. |
| Module being Tested | Disable Account |
| Importance | Admin cannot login to the system after account has been disabled by another admin. |
| Test Steps | Admin has disabled another account. Login using disabled account. |
| Expected Results | User should not be logged in. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 46 |
| Test Description | Disable account with invalid username. |
| Module being Tested | Disable Account |
| Importance | Admin cannot disable his own account, or account that doesn't exist. |
| Test Steps | Admin clicks on Disable Account. Enter invalid username, such as no value, non-alphanumeric characters or non-existing or disabled username. Invalid username also includes logged-in admin's username. Click on Confirm Disable Account. |
| Expected Results | Error should be displayed to enter correct username for disabling. No account is disabled. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 47 |
| Test Description | Change Password. |
| Module being Tested | Change Password. |
| Importance | Admin can change password. |
| Test Steps | Admin clicks on Change Password. Enter correct current password. Enter valid values for new password. Enter same values for both new password and re-enter new password fields. Click on Confirm Change Password. |
| Expected Results | Message should be displayed that password has been changed. Password should be updated in the system for the logged-in admin. Admin screen should be displayed. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 48 |
| Test Description | Change Password with invalid values |
| Module being Tested | Change Password. |
| Importance | Admin cannot change password to invalid values. |
| Test Steps | Admin clicks on Change Password. Enter invalid values for the password: a) Incorrect current password. b) Non alphanumeric characters in any field. |

| | |
|------------------|---|
| | c) New password does not match value in Re-enter new password field. Click on Confirm Change Password. |
| Expected Results | Error should be displayed. Password should not be updated in the system for the logged-in admin. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 49 |
| Test Description | Generate Reports screen |
| Module being Tested | Generate Reports. |
| Importance | Admin can generate accurate reports. |
| Test Steps | Admin clicks on Generate Reports. |
| Expected Results | Reports screen should be displayed for the admin. Reports available should be Hourly Revenue Report for a particular day, Daily Revenue Report for a particular month, Monthly Revenue Report for a particular year, Most and Least used hours in last month, Maximum Revenue day in last month and Daily Occupancy counts for last month. Go Back and logout options should also be available. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 50 |
| Test Description | Hourly Revenue Report for a particular day |
| Module being Tested | Generate Reports. |
| Importance | Admin can generate accurate reports. |
| Test Steps | Admin clicks on Get Hourly Revenue Report for a particular day. Enter day in format mm-dd-yyyy for a day in the past. |
| Expected Results | Accurate Hourly Report for Revenue should displayed for the chosen day in the past. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 51 |
| Test Description | Hourly Revenue Report for invalid day, today or future day. |
| Module being Tested | Generate Reports. |
| Importance | Admin cannot generate inaccurate reports. |
| Test Steps | Admin clicks on Get Hourly Revenue Report for a particular day. a) Enter day in format other than mm-dd-yyyy for a day in the past. b) Enter value in incorrect format. c) Enter today's date. d) Enter day in future. |
| Expected Results | Error should be displayed. Report screen is displayed. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 52 |
| Test Description | Daily Revenue Report for a particular month |
| Module being Tested | Generate Reports. |
| Importance | Admin can generate accurate reports. |
| Test Steps | Admin clicks on Get Daily Revenue Report for a particular month. Enter month in format mm-yyyy for a completed month in the past. |
| Expected Results | Accurate Daily Report for Revenue should be displayed for the chosen month in the past. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 53 |
| Test Description | Daily Revenue Report for invalid month, current month or a future month. |
| Module being Tested | Generate Reports. |

| | |
|------------------|---|
| Importance | Admin cannot generate inaccurate reports. |
| Test Steps | Admin clicks on Get Daily Revenue Report for a particular month. a) Enter month in format other than mm-yyyy for a completed month in the past. b) Enter value in incorrect format. c) Enter current month. d) Enter month in future. |
| Expected Results | Error should be displayed. Report screen is displayed. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 54 |
| Test Description | Monthly Revenue Report for a particular year |
| Module being Tested | Generate Reports. |
| Importance | Admin can generate accurate reports. |
| Test Steps | Admin clicks on Get Monthly Revenue Report for a particular year. Enter year in format yyyy for a completed year in the past. |
| Expected Results | Accurate Monthly Report for Revenue should be displayed for the chosen year in the past. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 55 |
| Test Description | Monthly Revenue Report for invalid year, current year or a future year. |
| Module being Tested | Generate Reports. |
| Importance | Admin cannot generate inaccurate reports. |
| Test Steps | Admin clicks on Get Monthly Revenue Report for a particular year. a) Enter month in format other than yyyy for a completed year in the past. b) Enter value in incorrect format. c) Enter current year. d) Enter year in future. |
| Expected Results | Error should be displayed. Report screen is displayed. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 56 |
| Test Description | Generate report for Most and least used hours in last month |
| Module being Tested | Generate Reports. |
| Importance | Admin can generate accurate reports. |
| Test Steps | Admin clicks on Get Most and Least used hours in last month. |
| Expected Results | Accurate Most and Least used hours in last month should be displayed along with the day and occupancy percentage. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 57 |
| Test Description | Generate report for Maximum Revenue day in last month |
| Module being Tested | Generate Reports. |
| Importance | Admin can generate accurate reports. |
| Test Steps | Admin clicks on Get Maximum Revenue day in last month. |
| Expected Results | Accurate Maximum Revenue day in last month should be displayed along with total revenue for that day. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 58 |
| Test Description | Generate report for daily occupancy counts for last month |
| Module being Tested | Generate Reports. |

| | |
|------------------|--|
| Importance | Admin can generate accurate reports. |
| Test Steps | Admin clicks on Get Daily Occupancy Counts for last month. |
| Expected Results | Accurate Daily Occupancy Counts for last month should be displayed with day and corresponding occupancy count. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 59 |
| Test Description | Go Back from any Admin screen. |
| Module being Tested | Login |
| Importance | Admin can go back to main admin screen. |
| Test Steps | Admin clicks on Go Back. |
| Expected Results | Admin Screen should be displayed with all the Admin related options. |
| Actual Results | As expected. |

| | |
|---------------------|---|
| Test Case No. | 60 |
| Test Description | Go Back from any Report screen. |
| Module being Tested | Generate Reports. |
| Importance | Admin can go back to report screen. |
| Test Steps | Admin clicks on Go Back to Reports. |
| Expected Results | Reports Screen should be displayed with all the report options. |
| Actual Results | As expected. |

| | |
|---------------------|--|
| Test Case No. | 61 |
| Test Description | Logout from any admin screen. |
| Module being Tested | Login. |
| Importance | Admin can log out of the system. |
| Test Steps | Admin clicks on Logout. |
| Expected Results | Admin is logged out of the system. Main application screen is displayed. |
| Actual Results | As expected. |

GitHub Commit Log:

commit abeb6efa0812f5fb2c90c25f665a6bee83213acc
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 29 23:31:26 2014 -0400

changes + test plan

commit d3e5625c7793572ef61aa954569e38e93e927fa5
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 29 19:40:05 2014 -0400

Added diagrams to submission doc

commit cbc669516e728dca4e84fc32876ca355402570d2
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 29 19:39:47 2014 -0400

zip folder containing source code and lib

commit ac9c1a6d4d177cc9a75fbb1465ac1b90e18ee174
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 29 17:12:37 2014 -0400

Design Sequence Diagrams added

commit 2aa9dec2276ec699a815160e9a2ef99e1c3fb7b4
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 29 17:12:20 2014 -0400

Design class diagram added

commit 7cec05c5107899e8ef4f5086a8e610df032470c6
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 29 17:12:03 2014 -0400

cleanup

commit 0ffec916929ebb0d3df387c531f45b09986e183b
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 29 17:10:18 2014 -0400

renamed

commit f86aadff5669b574f8503d6d912f57678832d1db
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 29 17:01:14 2014 -0400

updated plan

commit aa0877a722ef4c728b8627b24403914ad8dd16ed
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 29 17:01:07 2014 -0400

Removed eclipse project for class modeling

commit 46cea73e28f7505139aaefb6a4afd0c7e3c3bd5
Author: masterf89 <farheenmaster@gmail.com>
Date: Tue Oct 28 22:41:09 2014 -0400

removing unnecessary imports

commit 331acad803631cfef4e69507c12f19f21ce2ab7e
Author: masterf89 <farheenmaster@gmail.com>
Date: Tue Oct 28 22:35:43 2014 -0400

deleted by mistake

commit 56c58366bb77d880986d8d1b6580d4afc825b785
Author: masterf89 <farheenmaster@gmail.com>
Date: Tue Oct 28 22:34:25 2014 -0400

commit

commit ec1cbf50f876ac8d95ae08f010082eb3f4def9e8
Author: masterf89 <farheenmaster@gmail.com>
Date: Tue Oct 28 22:06:50 2014 -0400

added db scripts and method to populate database

commit b0c7eafbf1565084a2d31312a6575eb2abf367cd
Author: masterf89 <farheenmaster@gmail.com>
Date: Tue Oct 28 21:02:56 2014 -0400

Added test plan

commit 65de938f4a023a7ad954dc57cd1b579a3908a484
Author: masterf89 <farheenmaster@gmail.com>
Date: Tue Oct 28 20:37:48 2014 -0400

comments and cleanup

commit 7b98bd9e478c5d7e0124e0ab5f2e74a7ad440a22
Author: masterf89 <farheenmaster@gmail.com>
Date: Tue Oct 28 20:25:56 2014 -0400

deleted

commit 7eba251146a28851b9654350c99460f7017c6b14
Author: masterf89 <farheenmaster@gmail.com>
Date: Tue Oct 28 20:25:13 2014 -0400

sequence diagram added

commit a8d54c9bb12285582b5f20ad91be9bc9e73fb87e
Author: masterf89 <farheenmaster@gmail.com>
Date: Tue Oct 28 20:24:56 2014 -0400

changes to project

commit cee90368d698d4a99c4e6beaecf08db2dfa01362
Author: masterf89 <farheenmaster@gmail.com>
Date: Mon Oct 27 22:44:26 2014 -0400

Code completed

commit 1d36fd0f03e2e8ac3c4627534b116180c77fc1a
Author: masterf89 <farheenmaster@gmail.com>

Date: Sat Oct 25 12:15:20 2014 -0400

Fixed AdminUI classes

commit 7ef384de5dcf507ef40fe4c129584b74da7e2799
Author: masterf89 <farheenmaster@gmail.com>
Date: Sat Oct 25 12:15:02 2014 -0400

Added operations

commit 441938a7644b6ba96b04f33f66781c979925cb33
Author: masterf89 <farheenmaster@gmail.com>
Date: Fri Oct 24 23:11:10 2014 -0400

Added viewRates Ui

commit d1532cf66f4f895ea4c8fecaa0f68d6812803402
Author: masterf89 <farheenmaster@gmail.com>
Date: Fri Oct 24 23:11:01 2014 -0400

Adding Payment handling classes

commit 48be253985dff52cf755d19da88ce55cb001b94c
Author: masterf89 <farheenmaster@gmail.com>
Date: Fri Oct 24 23:10:44 2014 -0400

Updates to mainUI

commit fa57701fbcfb5239358b9b5e409ef609c531b06
Author: masterf89 <farheenmaster@gmail.com>
Date: Fri Oct 24 23:10:32 2014 -0400

Changes to main controller

commit d5ef62600b741ca6d57e4164eb0ddbd49c7211e0
Author: masterf89 <farheenmaster@gmail.com>
Date: Fri Oct 24 23:10:15 2014 -0400

Added database operations

commit 7c93857a9d16c806db46c671cf46cfd2aede51e1
Author: masterf89 <farheenmaster@gmail.com>
Date: Fri Oct 24 23:09:59 2014 -0400

Added admin related classes

commit f78589d3f4cd31f6d2b8a2517aed41c1b9d1b2bb
Author: masterf89 <farheenmaster@gmail.com>
Date: Fri Oct 24 23:09:12 2014 -0400

Added parking related classes

commit 732e76fb7759b9b32fe33bb96e46cec9e7c0947d
Author: masterf89 <farheenmaster@gmail.com>
Date: Thu Oct 23 12:04:37 2014 -0400

EnterParking UI Handler

commit b3b13de13e3e76d7e77c902fcac64b348c547534

Author: masterf89 <farheenmaster@gmail.com>
Date: Thu Oct 23 12:03:51 2014 -0400

Added Exit Parking and View Parking Rates

commit 6b6e99b69afef3098f15d1e6a95255a4bcb17c60
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 22 11:49:17 2014 -0400

Changes to Parking System

commit ec20289727ba32e2eb1160b74dcb19441fe2b5cf
Author: masterf89 <farheenmaster@gmail.com>
Date: Wed Oct 8 17:14:45 2014 -0400

Added ParkingGarage project

commit 8a8c74919376410ebfac16c5477a84846b3a772d
Author: masterf89 <farheenmaster@gmail.com>
Date: Tue Oct 7 09:25:58 2014 -0400

Added Design Class Model

commit 80e16876d5cbd65512b7261ee2f1c5b5f2040241
Author: masterf89 <farheenmaster@gmail.com>
Date: Fri Oct 3 11:24:37 2014 -0400

Planning updated with dates

commit d615bf8e767d341187fadea17d6616ed2c500ad2
Author: masterf89 <farheenmaster@gmail.com>
Date: Fri Oct 3 11:05:02 2014 -0400

Update README.md

commit 858bc228e63eb58892553167c779f11ec381e5fd
Author: masterf89 <farheenmaster@gmail.com>
Date: Thu Oct 2 14:13:31 2014 -0400

Reorg

commit 00e7beff6765062637658270067ffb2f7d95aeb
Merge: 360c9d3 b93a84b
Author: masterf89 <farheenmaster@gmail.com>
Date: Thu Oct 2 13:48:54 2014 -0400

Merge branch 'master' of <https://github.com/masterf89/Parking-System>

commit 360c9d39f17d0a58d238b1fdf00b0c463b12cff0
Author: masterf89 <farheenmaster@gmail.com>
Date: Thu Oct 2 13:48:37 2014 -0400

Reorg

commit b93a84b652036077db3b26c4ab7fc57a0461e61b
Author: masterf89 <farheenmaster@gmail.com>
Date: Thu Oct 2 13:42:47 2014 -0400

Create README.md

commit 72749a2ae39aa33de498df1944376d9378dd224d
Author: masterf89 <farheenmaster@gmail.com>
Date: Thu Oct 2 13:39:40 2014 -0400

Added Class Model Project

commit b29a931850a1080d314e6fac2414eaf74d285f9b
Author: masterf89 <farheenmaster@gmail.com>
Date: Thu Oct 2 13:34:53 2014 -0400

Adding Domain Model Project

commit 5b09bbf0a142cc7fa08d4528ad2ae70157da1977
Author: masterf89 <farheenmaster@gmail.com>
Date: Thu Oct 2 11:56:18 2014 -0400

Adding Diagrams

commit 96cd08a122a3e3faaf6b9f5de62c8eb8721a4242
Author: masterf89 <farheenmaster@gmail.com>
Date: Thu Oct 2 11:46:49 2014 -0400

:tada: Added .gitattributes & .gitignore files