**4. DATA DESIGN**

**4.1 Data Description**

Problems that can be solved by the transformation of information domains in the system into data structures:

* Code that looped through the result set of a SQL response and filtered items. Inserted the items into an array to return by re-dimensioning the array to hold 1 more item each time.
* Poorly written, custom code to compare two arrays of data.
* Using lists to store unique keyed data instead of a dictionary or hash map, and then not handling the duplicated data resulting in exceptions being thrown.
* Array List abuse and not thought through loops causing poor run times.

**4.2 Data Dictionary**

## **Table structure for admin**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Tip** | **Nul** | **Implicit** |
| ***id*** | int(11) | Nu |  |
| UserName | varchar(100) | Nu |  |
| Password | varchar(100) | Nu |  |
| updationDate | timestamp | Nu | 0000-00-00 00:00:00 |

## **Table structure for tblusers**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Tip** | **Nul** | **Implicit** |
| ***id*** | int(11) | Nu |  |
| FullName | varchar(120) | Da | NULL |
| EmailId | varchar(100) | Da | NULL |
| Password | varchar(100) | Da | NULL |
| ContactNo | char(11) | Da | NULL |
| dob | varchar(100) | Da | NULL |
| Address | varchar(255) | Da | NULL |
| City | varchar(100) | Da | NULL |
| Country | varchar(100) | Da | NULL |
| RegDate | timestamp | Da | current\_timestamp() |
| UpdationDate | timestamp | Da | NULL |

## **Table structure for tblbrands**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Tip** | **Nul** | **Implicit** |
| ***id*** | int(11) | Nu |  |
| BrandName | varchar(120) | Nu |  |
| CreationDate | timestamp | Da | current\_timestamp() |
| UpdationDate | timestamp | Da | NULL |

## **Table structure for tblbooking**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Tip** | **Nul** | **Implicit** |
| ***id*** | int(11) | Nu |  |
| userEmail | varchar(100) | Da | NULL |
| VehicleId | int(11) | Da | NULL |
| FromDate | varchar(20) | Da | NULL |
| ToDate | varchar(20) | Da | NULL |
| message | varchar(255) | Da | NULL |
| Status | int(11) | Da | NULL |
| PostingDate | timestamp | Nu | current\_timestamp() |

## **Table structure for tblvehicles**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Tip** | **Nul** | **Implicit** |
| ***id*** | int(11) | Nu |  |
| VehiclesTitle | varchar(150) | Da | NULL |
| VehiclesBrand | int(11) | Da | NULL |
| VehiclesOverview | longtext | Da | NULL |
| PricePerDay | int(11) | Da | NULL |
| FuelType | varchar(100) | Da | NULL |
| ModelYear | int(6) | Da | NULL |
| SeatingCapacity | int(11) | Da | NULL |
| Vimage1 | varchar(120) | Da | NULL |
| Vimage2 | varchar(120) | Da | NULL |
| Vimage3 | varchar(120) | Da | NULL |
| Vimage4 | varchar(120) | Da | NULL |
| Vimage5 | varchar(120) | Da | NULL |
| AirConditioner | int(11) | Da | NULL |
| PowerDoorLocks | int(11) | Da | NULL |
| AntiLockBrakingSystem | int(11) | Da | NULL |
| BrakeAssist | int(11) | Da | NULL |
| PowerSteering | int(11) | Da | NULL |
| DriverAirbag | int(11) | Da | NULL |
| PassengerAirbag | int(11) | Da | NULL |
| PowerWindows | int(11) | Da | NULL |
| CDPlayer | int(11) | Da | NULL |
| CentralLocking | int(11) | Da | NULL |
| CrashSensor | int(11) | Da | NULL |
| LeatherSeats | int(11) | Da | NULL |
| RegDate | timestamp | Nu | current\_timestamp() |
| UpdationDate | timestamp | Da | NULL |

## **Table structure for tblcontactusinfo**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Tip** | **Nul** | **Implicit** |
| ***id*** | int(11) | Nu |  |
| Address | tinytext | Da | NULL |
| EmailId | varchar(255) | Da | NULL |
| ContactNo | char(11) | Da | NULL |

## **Table structure for tblpages**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Tip** | **Nul** | **Implicit** |
| ***id*** | int(11) | Nu |  |
| PageName | varchar(255) | Da | NULL |
| type | varchar(255) | Nu |  |
| detail | longtext | Nu |  |

## **Table structure for tblcontactusquery**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Tip** | **Nul** | **Implicit** |
| ***id*** | int(11) | Nu |  |
| name | varchar(100) | Da | NULL |
| EmailId | varchar(120) | Da | NULL |
| ContactNumber | char(11) | Da | NULL |
| Message | longtext | Da | NULL |
| PostingDate | timestamp | Nu | current\_timestamp() |
| status | int(11) | Da | NULL |