**Version 1.0**

**29/08/2018**

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**Release & Iteration Plan**

**Group 39**

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# **Release Plan**

## **Release 1**

Delivery Date: **October 2018**  Total Story Points: **64**

**Provide the initial back-end database integration into a simple dashboard which allows users to create an account, Log in and interact with the database to search for customer information and generate reports.**

### **LOG IN**

Users can register and Log into their account saving their personal information.

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | | Story Points |
| S01 | Log in | | 8 |
|  | | Story Point Sub-Total: 8 | |

## 

### **SEARCH**

Users of Administrative privilege can search for car and customer information stored in the database and be provided with suggestions.

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | | Story Points |
| S06 | Search for customer | | 8 |
| S02 | Search for Car | | 8 |
| S15 | Suggested Car | | 4 |
|  | | Story Point Sub-Total: 20 | |

## 

### **REPORTING**

Users with Administrative privilege are able to generate a report identifying business trends identified within the data (Amount of cars rented out, most popular car, percentage of cars picked up and returned, percentage of cars returned damaged, top 5 frequent customer names, average car hire duration, most profitable car type).

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | | Story Points |
| S03 | Reports | | 8 |
|  | | Story Point Sub-Total: 8 | |

## 

### **DASHBOARD**

Users with working privileges can interact with a navigational dashboard that provides connections to searching, report generation, fleet management and account management features. Displays key sales information including: sales made, sales target for given month, the difference, amount of new customers, rate of customer return.

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | | Story Points |
| S07 | Dashboard | | 16 |
|  | | Story Point Sub-Total: 16 | |

## 

### **MANAGE FLEET**

Administrative users are able to add/edit/remove database statistics regarding cars in physical stock company wide.

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | | Story Points |
| S04 | Fleet management | | 8 |
|  | | Story Point Sub-Total: 8 | |

## 

### **CUSTOMER MANAGEMENT**

Users with Administrative privileges are able to access all gathered Customer Relations information stored within the database.

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | |  |
| S20 | CRM | | 4 |
|  | | Story Point Sub-Total: 4 | |

## 

## **Release 2**

Delivery Date: **To be Negotiated**  Total Story Points: **40**

**Provides front-end services to further enhance customer experience and accessibility as well as providing additional Administrative management ability in advertising, employee and customer relations.**

### **LOCATION SERVICES**

Users are provided with the ability to see store locations geographically to them. Area demographic data provided by the user are then able to be saved and displayed by Administrative users.

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | | Story Points |
| S10 | Store Locator | | 4 |
| S11 | Area demographics | | 4 |
| S14 | Journey Planner | | 8 |
|  | | Story Point Sub-Total: 16 | |

### **ADVERTISING**

Administrative users are able to collate a mailing list composed of emails stored within the database from user registration, which can be used to send advertising emails to the masses. Any user is able to provide or view a review of a vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | |  |
| S05 | Mailing List | | 4 |
| S12 | Reviews | | 4 |
|  | | Story Point Sub-Total: 8 | |

### 

### **RESERVATION MANAGEMENT**

Users with working privileges are able to create, cancel or edit the details of a reservation for a vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | |  |
| S08 | Manage Reservation | | 4 |
|  | | Story Point Sub-Total: 4 | |

### 

### **INFORMATION**

Users are able to view frequently asked questions and key store information (contact and location details, opening hours, search form and results)

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | |  |
| S09 | FAQ | | 2 |
| S13 | Store Portal | | 2 |
|  | | Story Point Sub-Total: 4 | |

### 

### **EMPLOYEE MANAGEMENT**

Users with Administrative privileges are able to monitor and communicate with their employees.

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | |  |
| S16 | Employee access monitoring | | 4 |
| S17 | Internal Announcements | | 4 |
|  | | Story Point Sub-Total: 8 | |

### 

## 

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## **Release 3**

Delivery Date: **To be Negotiated**  Total Story Points: **24**

**Release of Booking features which allow the company to take their car booking onto the online domain and work coherently with Travel Agencies.**

### **EXTERNAL BOOKINGS**

Users are able to directly make bookings for themselves, and authorised travel agent accounts are able to make bookings for their own customers, potentially widening the customer base of the business.

|  |  |  |  |
| --- | --- | --- | --- |
| Story ID | Story Title | | Story Points |
| S18 | Travel agent booking | | 8 |
| S19 | Customer Online Booking | | 16 |
|  | | Story Point Sub-Total: 24 | |

## 

## 

## **Delivery Schedule**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
| Sprint 1 | | | | Sprint 2 | | | |
| Release 1 | | | | | | | |

**Estimated Velocity:** 33

*Calculation:*

Days per sprint \* number of members = 20\*5 = 100 ideal days

Buffer = 0.33

Velocity = ideal days \* buffer = 100 \* 0.33 = 33

Min = hours in an ideal day\* Sprint length = 10 \* 20 = 200

Max hours = velocity \* hours in an ideal day = 33\* 10 = 330

# 

# 

# **Sprint Plan**

## **Sprint 1**

Total Story Points**: 32**  Total Hours: **231**

Current Velocity: ***Undetermined***

### **Story 01: User Access Control (Log In)**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T01 | Model user input | 1.5 | 2 |
| T02 | Create DB tables for users | 2.5 | 3.5 |
| T03 | Normalise database | 2.5 | 2 |
| T04 | Write queries | 9 | 7 |
| T05 | Design interface | 5 | 6 |
| T06 | Create front end login in page with input text fields and login/register buttons | 6 | 8 |
| T07 | Write back end function to insert, retrieve & verify login information | 15 | 18 |
| T08 | Write test cases | 5 | Incomplete |
| T09 | Run test cases and modify code to pass test case | 9 | Incomplete |
| T10 | Verify story is complete (acceptance criteria) | 0.5 | Incomplete |
| Story Points: 8 Total hours: 56 | | | |

### 

### **Story 07: Dashboard**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T11 | Build queries | 10 | 12 |
| T12 | Model graphic user interface | 2.5 | 4 |
| T13 | Design interface | 6 | 6 |
| T14 | Code front end tabbed menu system | 10 | 8 |
| T15 | Create a filter to modify data shown and a filter combobox | 7 | Revised |
| T16 | Code viewport system | 15 | 13 |
| T17 | Code KPI graph view | 10 | Revised |
| T18 | Code employee announcement view | 5 | 6 |
| T19 | Code available car list view | 5 | 4 |
| T20 | Code booked car list view | 5 | 4.5 |
| T21 | Code customer count graph view | 5 | Revised |
| T22 | Code sales graph view | 7 | 9 |
| T23 | Code earning vs expenses graph view | 7 | Revised |
| T24 | Write test cases | 5 | Incomplete |
| T25 | Run test cases and modify code to pass test case | 12 | Incomplete |
| T26 | Verify story is complete (acceptance criteria) | 0.5 | Incomplete |
| Story Points: 16 Total hours: 112 | | | |

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### **Story 03: Reports**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T27 | Create DB tables sales information | 2.5 | 2 |
| T28 | Normalize database | 2.5 | 1.5 |
| T29 | Build queries | 9 | 8 |
| T30 | Design user interface | 7 | 4 |
| T31 | Create a reports page with a report selection drop down and generate button | 5 | 7 |
| T32 | Write code to retrieve reporting items from database | 6 | 4 |
| T33 | Code to generate store sales report in tabular format | 4 | 6 |
| T34 | Code to generate local region sales report in tabular format | 4 | 2 |
| T35 | Code to generate country sales report in tabular format | 4 | Revised |
| T36 | Code to generate report on vehicle statistics | 5 | 6 |
| T37 | Write test cases | 5.5 | Incomplete |
| T38 | Run test cases and modify code to pass test case | 5 | Incomplete |
| T39 | Verify story is complete (acceptance criteria) | 0.5 | Incomplete |
| Story Points: 8 Total hours: 60 | | | |

### 

# **Sprint Plan**

## **Sprint 2**

Total Story Points**: 64**  Total Hours: 197.5

Current Velocity: ***64***

**After Sprint 1, the writing and implementation of Test Cases was incomplete therefore causing the story to be considered incomplete. However, they are a matter of priority and have been brought forward to the beginning of Sprint 2. In addition, from consultation with the client representative, in order to save time and focus on more meaningful content for Sprint 2, it was agreed to omit some features from the release as noted on the Sprint 1 plan. The client also saw value in the need for a Customer Relations Management (CRM) system, so it was also brought forward from Release 2, to the second Sprint of Release 1.**

### **Story 01: User Access Control (Log In)**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T08 | Write test cases | 5 | 6 |
| T09 | Run test cases and modify code to pass test case | 9 | 7 |
| T10 | Verify story is complete (acceptance criteria) | 0.5 | 0.5 |
| Story Points: 8 Total hours: 14.5 | | | |

### 

### **Story 07: Dashboard**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T24 | Write test cases | 5 | 6 |
| T25 | Run test cases and modify code to pass test case | 12 | 8 |
| T26 | Verify story is complete (acceptance criteria) | 0.5 | 0.5 |
| Story Points: 16 Total hours: 17.5 | | | |

### 

### **Story 03: Reports**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T37 | Write test cases | 5.5 | 5 |
| T38 | Run test cases and modify code to pass test case | 5 | 4 |
| T39 | Verify story is complete (acceptance criteria) | 0.5 | 0.5 |
| Story Points: 8 Total hours: 11 | | | |

### **Story 06: Search for customer**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T40 | Normalise Database | 2.5 | 2 |
| T41 | Build Queries | 2.5 | 3 |
| T42 | Add Navigation Tab | 2 | 1 |
| T43 | Add Search Form | 6 | 8.5 |
| T44 | Input Sanitization | 4 | 5 |
| T45 | Design Interface | 2 | 2 |
| T46 | Code Displaying Results | 3 | 4 |
| T47 | Write Test Cases | 3 | 4 |
| T48 | Implement Test Cases | 4 | 4 |
| T49 | Verify Story Complete | 0.5 | 0.5 |
| Story Points: 8 Total hours: 29.5 | | | |

### 

### **Story 02: Search for Car**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T50 | Normalise Database | 2.5 | 2 |
| T51 | Build Queries | 2.5 | 3 |
| T52 | Add Navigation Tab | 2 | 1 |
| T53 | Add Search Form | 6 | 6 |
| T54 | Input Sanitization | 4 | 4 |
| T55 | Design Interface | 2 | 1 |
| T56 | Code Displaying Results | 3 | 3 |
| T57 | Write Test Cases | 3 | 2 |
| T58 | Implement Test Cases | 4 | 3 |
| T59 | Verify Story Complete | 0.5 | 0.5 |
| Story Points: 8 Total hours: 29.5 | | | |

### 

### **Story 15: Suggested Car**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T50 | Normalise Database | 2.5 | 1 |
| T51 | Build Queries | 2.5 | 2 |
| T52 | Develop Algorithm for Car Suggestion | 6 | 5 |
| T53 | Integrate Into Dashboard | 4 | 3.5 |
| T54 | Write Test Cases | 3 | 2 |
| T55 | Implement Test Cases | 4 | 1 |
| T56 | Verify Story is Complete | 0.5 | 0.5 |
| Story Points: 4 Total hours: 22.5 | | | |

### **Story 04: Fleet Management**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T57 | Normalise Database | 2.5 | 1 |
| T58 | Build Queries | 2.5 | 1.5 |
| T59 | Code to Display Fleet of Vehicles | 6 | 5 |
| T60 | Code Add vehicle Form | 5 | 4 |
| T61 | Code Edit vehicle form | 5 | 4 |
| T62 | Apply Changes to database (add, edit or remove) | 6 | 6 |
| T63 | Design Interface | 3 | 3 |
| T64 | Write Test Cases | 3 | 3 |
| T62 | Implement Test Cases | 4 | 3.5 |
| T63 | Verify Story is Complete | 0.5 | 0.5 |
| Story Points: 8 Total hours: 37.5 | | | |

### 

### **Story 20: CRM**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| T64 | Normalise Database | 2.5 | 1 |
| T65 | Build Queries | 2.5 | 2 |
| T66 | Design Interface | 3 | 4 |
| T67 | Code Display of Customer Information | 4 | 5 |
| T68 | Code Add Customer Form | 5 | 7 |
| T69 | Code Edit Customer Form | 5 | 7.5 |
| T70 | Apply Changes to database (add, edit or remove) | 6 | 4 |
| T71 | Write Test Cases | 3 | 2 |
| T72 | Implement Test Cases | 4 | 3 |
| T73 | Verify Story is Complete | 0.5 | 0.5 |
| Story Points: 4 Total hours: 35.5 | | | |