**GROUP 6**



**PROG8060- DEVELOPING QUALITY APPLICATION**

**TEST STRATEGY**

**FOR**

**CAR DEALERSHIP BOT**

**Group Members**

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**Purpose:**

This document is the test strategy for “Car Dealership” SMS bot. The application aims to gather the customer needs, answer their queries by building interaction with them and covey the gathered data to the salesperson. Our Bot helps the customers by eliminating their wait time by visiting to our showroom. Instead, make sure every customer receives fast support from our showroom.

**Traceability Matrix:**

|  |  |
| --- | --- |
| ID | User Story |
|  | As a Product owner, I want to collect the customer information so that I can track the conversation. |
|  | As a Customer, I want to book an appointment so that I can get an appointment agreement for a consultation appointment easily by just chatting with sales rep. |
|  | As a Customer, I want to schedule a test drive so that it becomes easier and hassle-free for users to schedule a test drive without any waiting time. |
|  | As a Customer, I want to get information about car delivery so that the user can exactly know when the car will be delivered to them. |
|  | As a Customer, I want to change booking so that I can update the convenient date and time of the scheduled test drive. |

**Risks:**

The risks associated with the Car Dealer Bot (chatbot) can be divided into several categories. We shall talk briefly about these components.

* **Technical Risks**:

The risks consist of system failure security breach and data loss are few examples of the technical design. It is connected to the software and hardware. that are used to build and operate chatbot.

* **Compliance Risks:**

The chatbot should abide with the applicable laws and regulation such as GDPA (General Data Protection Regulation) which will help introduce risks, if in case the chatbot fails to associate with these regulations.

* **Privacy Risks:**

As a user is sharing their personal information to the chatbot. It’s storing up the data into its database server. It is susceptible to hacking and data breaches which can result in data of customer might get stolen or used inappropriately.

* **Operational Risks:**

The risks are like misunderstanding and prejudice. These risks are related to chatbots design, training, and use.

* **Reputation Risks:**

If a user doesn't give 5 stars to our customer service, then we are at a loss. When chatbots don't give accurate information to the consumer, this will. damage our car dealer bot (chatbot) reputation.

**Testing Priorities:**

We have prioritized used story based on the risk associated with it.

|  |  |
| --- | --- |
| Priority | User Story |
|  | As a Product owner, I want to collect the customer information so that I can track the conversation. |
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|  | As a Customer, I want to schedule a test drive so that it becomes easier and hassle-free for users to schedule a test drive without any waiting time. |
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**Risk owner Roles and Responsibilities:**

* **Store/Car Dealership Owner:**
* Business leader/ financial decision maker.
* Responsible to handle high volume of customer requests.
* Responsible for improving customer service.
* Responsible for generating leads.
* **Customer Service:**
* Provide technical support.
* Responsible for making sure the appointments are scheduled correctly so that customers are not overlapped with each other while visiting the store.
* Responsible for engaging with customers 24/7, not speaking over the phone.

**Test Levels:**

* **Unit Testing:**

This testing will be performed as soon as the development is completed against the .net framework to make sure that all individual components are working as expected. Below are the few scenarios that will be covered as part of unit testing.

* User should be able to initiate the chat.
* User should be able to send messages.
* Chatbot should be able to respond to the message.
* User should be able to receive messages.
* User should be able to book appointment for consultation.
* User should be able to schedule test drives.
* User should be able to get information about car delivery, reused.
* **User Acceptance testing:**

This testing is performed at the end in User Acceptance Test environment by end users/business to ensure the chatbot is working as expected and it is acceptable by users. Below are the few scenarios that will be covered as part of unit testing.

* User should be able to easily access the chatbot and communicate with sales rep.
* User should be able to chat 24/7
* Customer should be satisfied with complete process of chatting with sales rep and getting the information that they are looking for.

**Environmental Requirements**

Below are the testing environmental requirements:

|  |  |
| --- | --- |
| **Phases** | **Tools Used** |
| Test Planning | Trello |
| Test Development | N unit, Selenium |
| Test Execution | Test Explorer is used for unit testing |
| Test Reporting | Jira |
|  |  |

**Acceptance Criteria:**

All the user stories successfully passed acceptance test without any outstanding issues.

The cyclomatic complexity is less than10 proving high testability and good code coverage.

No high priority bugs, less than 2 high severity bugs and less than 5 low priority bugs.

**References:**

<https://www.kaspersky.com/resource-center/preemptive-safety/chatbots>