|  |  |
| --- | --- |
| General Information | |
| **Use Case Name\Number:** UC 100 Chatbot  **Subject Area:** User-Chatbot Interaction  **Description:** User ask questions and get responses from the chatbot | **Responsible Analyst:** Jihyuk Chung |

|  |  |
| --- | --- |
| Requirements/Feature Trace | |
| **REQ#** | Requirements Name and / or Short Description |
| 05 | User must be able to ask questions to the chatbot |
| 10 | Chatbot must answer or give a response to the user |
| 15 | User must be able to send unanswered questions to associated professors |
| 20 | User must be able to delete their chat history |

|  |  |  |
| --- | --- | --- |
| Revision History | | |
| Author | **Date** | **Comments** |
| Jihyuk Chung | Oct 05, 2020 | First Draft |
|  |  |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| **Insertion Points in other Use Cases (Adds Only)** | | |
| Use Case Name | **Use Case Number** | **Step Inserted After** |
| N/A | N/A | N/A |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| **Actors** | | |
| **Actor Name** | **Person/System** | **Brief Description** |
| Users | Person | Users with valid login with a question |
| Chatbot AI | System | An interactive chatbot answers questions given |
|  |  |  |

|  |  |
| --- | --- |
| **Pre-Conditions** | |
| **#** | **Description** |
| 1 | Welcome screen is displayed |
| 2 | User is logged in |
| 3 | User selects the chatbot page |

|  |
| --- |
| **Start Stimulus** |
| User enters a question to the chat box |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Main Course Steps** | | | |
| **Number** | **Description** | **Adds/Alt Name/Number** | **Bus Rule#** |
| 01 | User selects the chatbot page |  |  |
| 02 | Chatbot gives a greeting or shows previous chat |  |  |
| 03 | User asks a question |  |  |
| 04 | Writes the question to the DB |  |  |
| 05 | Chatbot answers the question or make a response |  |  |
| 06 | Writes the answer to the DB |  |  |
| 07 | User rates the answer as unanswered or incorrect |  |  |
| 08 | Popup asks the user to resubmit the question to an associated professor or professional |  |  |
| 09 | User sees the response |  |  |
| 10 | User deletes the chat history |  |  |
|  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Exception Conditions** | | |
| **Exception Situations** | **Action(s) on Exception** | **Adds\Alt UC #** |
| Invalid text | Chatbot response with inability to understand the question |  |
| No answers | Chatbot response with inability to find a valid answer |  |
| No internet connection | Website/app shows an error message |  |
| No permission | Website/app response with permission required |  |

|  |  |
| --- | --- |
| Post-Conditions | |
| **#** | **Description** |
| 1 | Chat page is updated |
| 2 | Chatbot greets users when no previous history is found |

|  |  |  |
| --- | --- | --- |
| **Candidate Objects** | | |
| **Class/Object Name** | **Descriptions** | **Possible Attributes** |
| Users | Can ask questions to chatbot and professors. Can read previous chat history. | UserID, Name, Email, Position |
| Chat | Holds chat history | UserID, Chat, Date, Time, |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Assumptions** | | | | | |
| **#** | **Assumption** | **Date Raised** | **Raised By** | **Date Verified** | **Verified By** |
| 1 | Language is in English | Oct 5, 2020 | Chung |  |  |
|  |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Issues** | | | | | |
| **#** | **Issue** | **Date Raised** | **Raised By** | **Date Verified** | **Verified By** |
| 1 | Need to enter a question to the chat box | Oct 5, 2020 | Chung |  |  |
|  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Other Comments** | | |
| **Author** | **Comment** | **Date** |
| N/A | N/A | N/A |
|  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Frequency of Execution | | | | | |
| **Frequency:** | Minimum: N/A | Maximum: 20,000 | Average: N/A | (OR)Fixed: |  |
| **Per:** | Hour: | Day: | Week: | Month: | Other: |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Timing Information** | | | | | | | |
| **#** | **At/**  **Between** | **Step(s)** | **Timing**  **Unit** | **Minimum** | **Average** | **Maximum** | **Comments** |
| 1 | Between | (01) Loads the chat history | S | N/A | N/A | 2 | Pagination |
| 2 | Between | (04) Bot makes a response | S | N/A | N/A | 5 | AI Calculation |
| 3 | Between | (08) Deletes chat history | S | N/A | N/A | 5 | Recursive |
|  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Volume Information** | | | | | | |
| **#** | **Step #** | **Unit of**  **Measure** | **Minimum** | **Average** | **Maximum** | **Comments** |
| 1 | 02, 09 | Gigabyte | N/A | N/A | <1 | Maximum free Firebase storage |
| 2 | 04, 05 | Megabyte | N/A | N/A | <=1 | Maximum Firebase document size |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Alternate Course General Information** | | |
| Alternate Course Name\Number: |  | |
| Description: |
| Reason for Execution: | Non Exception: | Exception: |

|  |
| --- |
| Insertion Point |
| Step Inserted After |
|  |

|  |  |
| --- | --- |
| Pre-Conditions | |
| 1. |  |
| 2. |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Alternate Course Steps | | | |
| **#** | **Step Description** | **Adds Use Case #** | **Business Rule(s)#** |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
| 4. |  |  |  |

|  |  |
| --- | --- |
| Post-Conditions | |
| 1. |  |
| 2. |  |