**Test Plan & ICD:**

**“Cyber Fitness” Application**

**CMSC 495 6381**

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**Test Plan**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case Number** | **Requirement Number** | **Test Description** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | N/A | The administrator starts the program. | The program starts. The web server begins listening for users to connect on a default. |  |  |
| 2 | 10001  10002 | User connects to the website and creates new user with required criteria. | The program queries the database and adds a new user to the database. |  |  |
| 4 | 10001  10002 | User connects to the website and creates new user without required criteria. | The program queries the database and rejects new user. |  |  |
| 5 | 10004 | User connects to the website and logs into an existing account and display class data. | The program queries the database and authenticates the user. |  |  |
| 5 | N/A | User connects to the website and logs into a non-existing account. | The program queries the database and rejects the user. |  |  |
| 6 | 10003  10005  10007 | User adds or removes a class and fitness goal. | The program queries the database and adds or removes class and fitness data to the database. |  |  |
| 7 | 10006 | User queries class and fitness goal. | The program queries the database and returns class and fitness goal to the user. |  |  |
| 8 | 10008 | User reaches fitness goal. | The program queries the database and returns a “congrats message” to the user. |  |  |
| 9 | N/A | User navigates to unreachable webpages | The program displays an appropriate HTTP error code |  |  |
| 10 | N/A | The administrator shuts down the program. | The program gracefully shutdown. |  |  |

**Interface Control Document**

**Main to Web Subsystem**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Value Range** | **Default Value** |
| host | String | “0.0.0.0” to “255.255.255.255” | 0.0.0.0 |
| port | int | 0-65535 | 8080 |

**Web Subsystem to Database Subsystem**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Value Range** | **Default Value** |
| username | String | 1-10 Characters | “” |
| password | String | 8-12 Characters | “” |
| fitness\_goal | int | 1-3  (1 = weight  2 = # of classes to complete  3 = calories to burn) | 1 |
| goal\_reached | Bool (Boolean) | True or False | False |
| class\_schedule | Class (contains class information) | None, or filled | None |

**Greeting Subsystem to Output Subsystem**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Value Range** | **Default Value** |
| Username | String | 1-10 Characters | “” |
| time\_of\_day | Datetime | 1970-01-01 to 2030-01-01 | Current date |
| pretty\_print\_greeting | String | Username, other information, date, etc | “” |

**Fitness Subsystem to Output Subsystems**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Value Range** | **Default Value** |
| username | String | 1-10 Characters | “” |
| fitness\_goal | int | 1-3  (1 = weight  2 = # of classes to complete  3 = calories to burn) | 1 |
| goal\_reached | Bool (Boolean) | True or False | False |
| class\_schedule | Class (contains class information) | None, or filled | None |

**Input Subsystem to Fitness/More Classes Subsystem**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Value Range** | **Default Value** |
| username | String | 1-10 Characters | “” |
| fitness\_goal | int | 1-3  (1 = weight  2 = # of classes to complete  3 = calories to burn) | 1 |
| class\_schedule | Class (contains class information) | None, or filled | None |
| join\_class | Bool | True or False | False |
| leave\_class | Bool | True or False | False |