**Interface Control Document**

**CMSC 495 #6380**

**9/22/20**

**Group #5**

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**David Roberts**

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# **Revision History**

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| --- | --- | --- | --- |
| **Version** | **Date** | **Revisor** | **Changes made** |
| 1.0 | 9/20/20 | Nicholas Crown | Initial creation of document, including title page, table of contents page, and revision history table. |
| 1.1 | 09/22/20 | Tiago Feitosa | Creation of the ICD tables |
| 1.2 | 9/22/20 | Nicholas Crown | Updated ICD tables |

# **Interface Control Document for Martial Arts Attendance Tracking Application**

Note: Default values listed as “Required” are inputs by the user and are required to generate new records unless otherwise specified. Default values listed as “Null” do not have a requirement for input and are left blank.

*Data between Login Subsystem and Validation Subsystem*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| From | To | Name | Type | Value Range | Default Value |
| Login | Validation | User  Password | Varchar  Varchar | (A-Z)(a-z)(0-9)  (A-Z)(a-z)(0-9)  (!"#$%&'()\*+,-.  /:;<=>?@[\]^\_`  {|}~) | Required  Required |
| Validation | Login | Authenticate() | Boolean | True/False | False |

*Data between the Validation Subsystem and the Database Subsystem*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| From | To | Name | Type | Value Range | Default Value |
| Validation | Database | User  PasswordHash | Varchar  Varchar | (A-Z)(a-z)(0-9)  (A-Z)(a-z)(0-9)  (!"#$%&'()\*+,-.  /:;<=>?@[\]^\_`  {|}~) | Required  Required |
| Database | Validation | AccountID  PasswordHash | Integer  Varchar | (0-9999)  (A-Z)(a-z)(0-9)  (!"#$%&'()\*+,-.  /:;<=>?@[\]^\_`  {|}~) | Null  Null |

*Data between Calendar Subsystem and Database*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| From | To | Name | Type | Value Range | Default Value |
| Calendar | Database | Month | Integer | 1-12 | Current month numeric (1-12) |
| Database | Calendar | CalClasses | Record | Records of classes within specified month | Records of classes within specified month |

*Data between Account Subsystem and Database*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| From | To | Name | Type | Value Range | Default Value |
| Account | Database | FirstName  LastName  Instructor  ParentalContact  DateOfBirth  PhoneNumber  Address  Email  Belt  Status  Notes  AccountID  Username  PasswordHash | String  String  Boolean  String  Date  String  String  String  Integer  Boolean  String  Integer  String  String | (A-Z)(a-z)  (A-Z)(a-z)  True-False  (A-Z)(a-z)  (Jan-Dec)(1-31)  (0-9)(-())  (A-Z)(a-z)(0-9)(.,)  (A-Z)(a-z)(0-9)(.@)  1-17  True-False  (ASCI-II)  (0-9999)  (A-Z)(a-z)(0-9)  (!"#$%&'()\*  +,-./:;<=>?  @[\]^\_`{|}~) | Required  Required  False  Null  Required  Null  Null  Null  1  True  Null  Required  Null  Null |
| Database | Account | LastAccountID  Accounts | Integer  Record | (0-9999)  Account Records | Required\*  Account Records |

\*Required as part of account creation.

*Data between Classes Subsystem and Database*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| From | To | Name | Type | Value Range | Default Value |
| Classes | Database | Name  StartTime  EndTime  Date  ClassID | String  Time  Time  Date  Integer | (A-Z)(a-z)(0-9)  (00:00-23:59)  (00:00-23:59)  Date  (0-9999) | Required  Required  Required  Required  Required |
| Database | Classes | LastClassID  Classes | Integer  Record | (0-9999)  Class records | Required\*  Class records |

\*Required as part of class creation.

*Data between Attendance Subsystem and Database*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| From | To | Name | Type | Value Range | Default Value |
| Attendance | Database | ClassID  Instructors  Students | Integer  Integer[]  Integer[] | (0-9999)  (0-9999)  (0-9999) | Required  Null  Null |
| Database | Attendance | Classes | Record | Class records | Class records |