COS 497: Capstone II

User Guide
UMaine Athletic Department Inventory Management System

Version 1.0
Team IMSG
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Introduction

This is a user guide for the IMSG Athletic Department Inventory Management System. This is a capstone project for the University of Maine Athletics Department. Our group of five computer science students has developed a web application to assist in the management and tracking of the University of Maine Athletic Department equipment and item inventory. The key stakeholders for our project are Jude Killy, Nick Fox, and Kevin Ritz. Jude Killy submitted the project on behalf of the athletic department to combat the issue of an inefficient inventory management process.

1.2 Purpose

The purpose of this document is to inform user's how to best utilize our system. The purpose of our system is to manage and track the equipment belonging to the UMaine Athletic Department.

1.3 Intended Readership

The intended readers of this document are users who will be cataloging orders, equipment, and teams and users who will be viewing equipment assignments. The two user types will be known as Admin User and General Users. This document is not intended to be used by System Administrators in replacement of the Administrator Manual.

1.4 User Relevance

The relevant sections for the two users are as follows:

Admin User

- All sections
- Administration Manual

General User

- Overview
- Instructions

1.5 Non-English Readers

The application and application documentation are not designed for non-English reading users.

Applicability Statement

This document is relevant to product Version 1.0 published on April 24, 2024.

Related Documents

The following documents are helpful to read and understand to use the system effectively:

Document	URL
Administator Manual	https://github.com/gsb02/IMSG_Capstone/blob/main/Artifacts/AM_IMSG_S24.docx.pdf
GitHub	https://github.com/gsb02/IMSG_Capstone/tree/main
Critical Design Review Document	https://github.com/gsb02/IMSG_Capstone/blob/main/Artifacts/CDRD_IMSG_F23.docx.pdf
Code Inspection Review Document	https://github.com/gsb02/IMSG_Capstone/blob/main/Artifacts/Code%20Inspection%20Review.pdf
System Design Document	https://github.com/gsb02/IMSG_Capstone/blob/main/Artifacts/SDD_IMSG_F23.docx.pdf
Software Requirements Specification	https://github.com/gsb02/IMSG_Capstone/blob/main/Artifacts/SRS_IMSG_F23.docx.pdf
User Interface Design Document	https://github.com/gsb02/IMSG_Capstone/blob/main/Artifacts/UIDD_IMSG_F23.docx.pdf

How to Use this Document

This section describes an overview of each section in the document.

Introduction

The introduction provides a brief overview of the project, client, and software. It has subsections for the purpose and how to use the document appropriately. It also defines potential users for the system along with the software versions that this document applies to.

Overview

The overview provides a general description of each functional module in the present software. It is broken up into three primary sections, covering each of the main pages in our software, the Teams page, the Equipment page, and the Logging page.

Instructions

The instruction section of this document describes, in detail, how to use all present functionality of the web application.

Note for future developers: Some functionality of the application is only present in the backend, and has not been implemented into the frontend of the application.

Reference Section

This section of the document describes, in detail, how each functionality present works, as well as what is expected for each field.

Using the reference section will allow the user to understand what they are entering into the application, and what, if anything, can go wrong inside of those fields.

Problem Reporting Instructions

If you are looking for more information to run the system, we suggest the following resources.

1. Docker Docs
    a. https://docs.docker.com/manuals/
2. MySQL Docs
    a. https://dev.mysql.com/doc/
3. Node.js Docs
    a. https://nodejs.org/docs/latest/api/
4. React Docs
    a. https://react.dev/
5. Contact Previous Capstone Developers
    a. Sean Radel
        i. sean.radel@maine.edu
        ii. 207-604-2044
    b. Graham Bridges
        i. gsbdd02@gmail.com
        ii. (207) 251-7995
    c. Gabriel Poulin
        i. gabriel.poulin@maine.edu
        ii. 207-992-3918

Overview

The application will allow users to view, create, edit, and delete equipment items, sports teams, and players. It will also allow quantities of equipment to be assigned to players. It is expected

that the user has some level of familiarity with web applications and can fill out a web form with text fields, dropdown menus, and date fields.

From the home page, the user can navigate to Teams, Equipment, and Logs. The Teams page will allow users to create teams, view the list of teams they have created, and perform actions, including editing and deleting the teams. Teams also come with the ability to add a player and view the roster. Adding a player to a team will update the team's roster. Users can assign equipment to players while viewing a team's roster.

The Equipment page allows users to create apparel, accessories, shoes, and jersey equipment items. Once created, the user will be shown the list of equipment items in inventory. These equipment items come with the ability to edit and delete.

The Log page allows the user to view a history of all previous actions performed in the application, including the creation and deletion of players, teams, and equipment. It will also log when equipment is assigned to a player.

Instructions

This section will go over the operations users can perform on the IMSG Athletic Department Inventory Management System. Each operation will be given step-by-step instructions for how users can perform them. To find more detailed information on a given operation, see the Reference Section below.

1. Adding a Team

1.1. Click on "Add Team" from the teams page

UMaine Sports Teams

Add Team

Team Name	Actions

localhost:3001/addTeam

1.2. Fill in each field on the page

Back

Team Name:

Mens Basketball

Team Description:

The University of Maines Mens Basketball Team fo

Select Sport:

Basketball

Gender:

M

Year:

1.3. When finished, click "Add Team" at the bottom of the page

Team Name:

Mens Basketball

Team Description:

The University of Maines Mens Basketball Team fo

Select Sport:

Basketball

Gender:

M

Year:

2024

Add Team

1.4. The user will be redirected to the teams page with the new team successfully added

to the database and being displayed

| Home | Teams | Equipment | Logs |

UMaine Sports Teams

Add Team

Team Name	Actions
Mens Basketball	Add Player	View Roster	Edit	Delete

2. Viewing a Team's Roster

2.1. From the teams page, click on "View Roster" in the row of a given team

| Home | Teams | Equipment | Logs |

UMaine Sports Teams

[Add Team]

Team Name	Actions
Mens Basketball	[Add Player] [View Roster] [Edit] [Delete]

2.2. The user will be directed to the roster page of the given team

| Home | Teams | Equipment | Logs |

Mens Basketball Players

[Add Player] [All Classes ▾] [Filter by name] [Filter by age]

Name	Age	Class	Team ID	Coach	Jersey Number	Actions

3. Adding a Player to a Team

3.1. From the teams page, click the "Add Player" button for the team you wish to add a player to. Alternatively, click "Add Player" from the team roster page

| Home | Teams | Equipment | Logs |

UMaine Sports Teams

Add Team

Team Name	Actions
Mens Basketball	Add Player · View Roster · Edit · Delete

| Home | Teams | Equipment | Logs |

Mens Basketball Players

Add Player   All Classes ⌄   Filter by name   Filter by age

Name	Age	Class	Team ID	Coach	Jersey Number	Actions

3.2. Fill in each field on the page

Back

Player Name:

John Doe

Age:

20

Grade:

Sophomore (SO)

Coach:

No

Jersey Number:

3.3. When finished, click "Add Player" at the bottom of the page

Player Name:

John Doe

Age:

20

Grade:

Sophomore (SO)

Coach:

No

Jersey Number:

25

Add Player

3.4. The user will be redirected to the given team's roster page with the new player successfully added to the database and being displayed

Home	Teams	Equipment	Logs

Mens Basketball Players

[Add Player] [All Classes ⌄] [Filter by name] [Filter by age]

Name	Age	Class	Team ID	Coach	Jersey Number	Actions
John Doe	20	SO	7	No	25	[Assign Equipment] [Edit] [Delete]

4. Adding Equipment

4.1. From the equipment page, click "Add Equipment"

Home	Teams	Equipment	Logs

Equipment List

[Add Equipment] [Assign Equipment to Team]

Equipment	Equipment Type	Stored Quantity	Distributed Quantity	Last Ordered	Last Distributed

4.2. Select the category of equipment you wish to add

Add New Equipment

Equipment: [Select a type ▽]

Select a type
Apparel
Accessory
Shoes
Jersey

4.3. Fill in each field on the page

Add New Equipment

Equipment: [Jersey ▽]

Equipment Name:

[Blue Away Track Jerseys]

Quantity Stored:

[45]

Quantity Distributed:

[0]

Last Ordered Date:

[04/23/2024]

4.4. Click "Add" at the bottom of the page

04/23/2024

Last Distributed Date:

04/23/2024

Quantity of Small Jerseys:

10

Quantity of Medium Jerseys:

15

Quantity of Large Jerseys:

15

Quantity of X-Large Jerseys:

5

Color of Jerseys:

Blue

Add
Equipment

4.5. The user will be redirected to the equipment page with the new equipment successfully added to the database and being displayed

| Home | Teams | Equipment | Logs |

Equipment List

Add
Equipment   Assign Equipment to
Team

Equipment	Equipment Type	Stored Quantity	Distributed Quantity	Last Ordered	Last Distributed	
Blue Away Track Jerseys	4	45	0	2024-04-23T00:00:00.000Z	2024-04-23T00:00:00.000Z	Delete

5. Filtering Team Roster

5.1. On the team roster page, click on "All Classes" for a dropdown to select the grade you want to filter players by

Home		Teams		Equipment		Logs

Mens Basketball Players

Add Player   Senior ⌄   Filter by name   Filter by age

All Classes
Freshman
Sophomore
Junior
Senior

Name	Age		eam ID	Coach	Jersey Number	Actions
Graham Bridges	21			No	23	Assign Equipment Edit Delete
Brennan Poitras	22	SR	7	No	16	Assign Equipment Edit Delete

5.2. On the team roster page , click on "Filter by name" and type in a name to filter players by that name

Home		Teams		Equipment		Logs

Mens Basketball Players

Add Player   All Classes ⌄   Se   Filter by age

Name	Age	Class	Team ID	Coach	Jersey Number	Actions
Sean Radel	20	JR	7	Yes	43	Assign Equipment Edit Delete

5.3. On the team roster page, click on "Filter by age" and type in a number to filter players by that age

| Home | Teams | Equipment | Logs |

Mens Basketball Players

| Add Player | All Classes ∨ | Filter by name | 18 |

Name	Age	Class	Team ID	Coach	Jersey Number	Actions
Collin Rodrigue	18	FR	7	No	11	Assign Equipment Edit Delete

6. Assigning Equipment to a Player

6.1. From the team roster page, select "Assign Equipment" on the player you would like to assign equipment to

Mens Basketball Players

[Add Player]   [All Classes ⌄]   [Filter by name]   [Filter by age]

Name	Age	Class	Team ID	Coach	Jersey Number	Actions
John Doe	20	SO	7	No	25	Assign Equipment Edit Delete
Graham Bridges	21	SR	7	No	23	Assign Equipment Edit Delete
Sean Radel	20	JR	7	Yes	43	Assign Equipment Edit Delete
Collin Rodrigue	18	FR	7	No	11	Assign Equipment Edit Delete
Brennan Poitras	22	SR	7	No	16	Assign Equipment Edit Delete

6.2. On the assign equipment page, enter the quantity of the equipment you would like to assign to the player and click "Add"

Back

Assign Equipment to John Doe

Assigned Equipment

Equipment	Equipment Type	Stored Quantity	Quantity to Assign	Actions
Blue Away Track Jerseys	4	45	4	Add

6.3. The selected equipment will appear at the top of the screen under assigned equipment for the player

Back

Assign Equipment to John Doe

Assigned Equipment

- Blue Away Track Jerseys - 4 [_____] [Remove]

Equipment	Equipment Type	Stored Quantity	Quantity to Assign	Actions
Blue Away Track Jerseys	4	41	[_____]	[Add]

7. Removing Equipment from a Player

7.1. On the assign equipment page for a player, click "Remove" next to the assigned equipment you want to remove from the player

Back

Assign Equipment to John Doe

Assigned Equipment

- Blue Away Track Jerseys - 4 [_____] [Remove]

Equipment	Equipment Type	Stored Quantity	Quantity to Assign	Actions
Blue Away Track Jerseys	4	41	[_____]	[Add]

7.2. The equipment will be removed from the player and no longer be displayed under assigned equipment

Home	Teams	Equipment	Logs

Back

Assign Equipment to John Doe

Assigned Equipment

Equipment	Equipment Type	Stored Quantity	Quantity to Assign	Actions
Blue Away Track Jerseys	4	41		Add

8. Removing Equipment

8.1. On the equipment page, select "Delete" on the row of the equipment you wish to remove
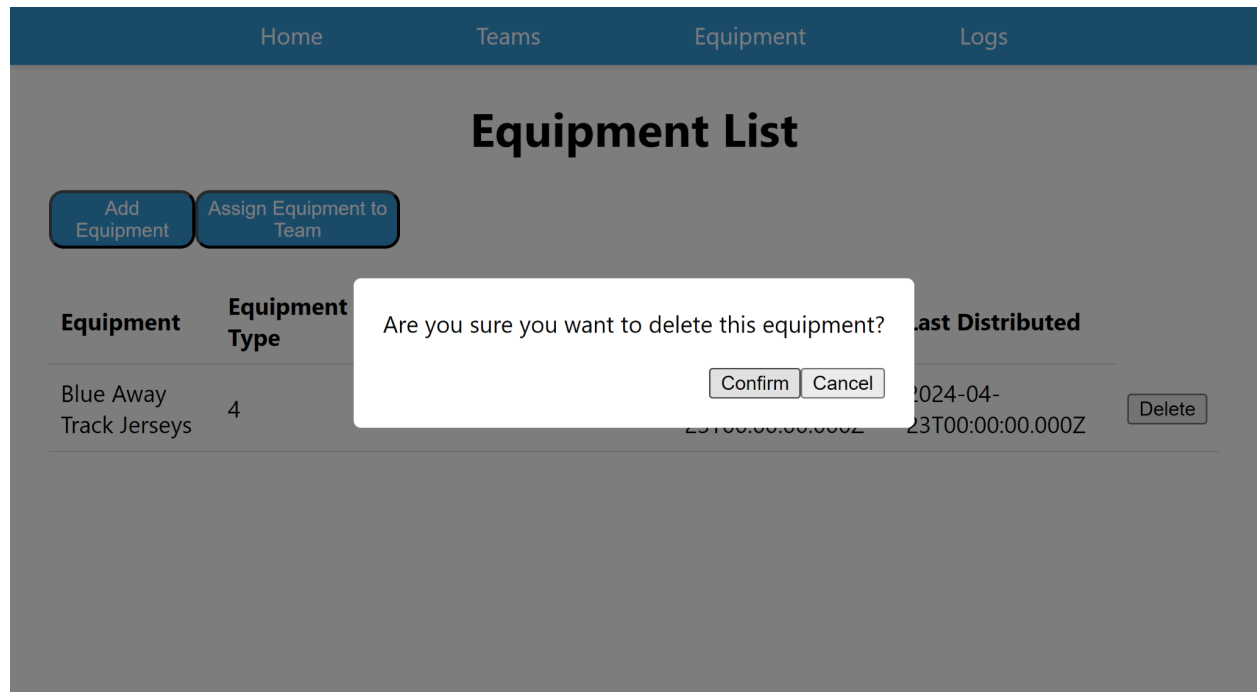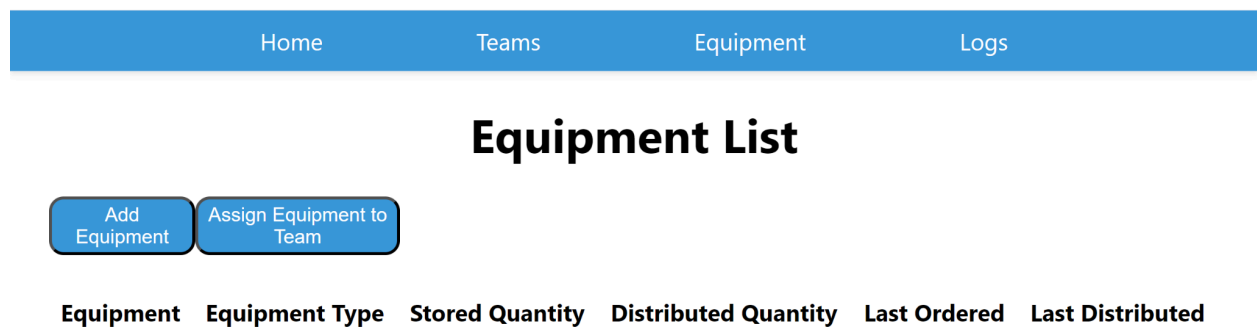
Home	Teams	Equipment	Logs

Equipment List

[Add Equipment] [Assign Equipment to Team]

Equipment	Equipment Type	Stored Quantity	Distributed Quantity	Last Ordered	Last Distributed	
Blue Away Track Jerseys	4	41	4	2024-04-23T00:00:00.000Z	2024-04-23T00:00:00.000Z	Delete

8.2. Click "Confirm" in the pop up

8.3. The selected equipment will be removed from the database and will no longer be displayed on the page

9. Removing a Player from a Team

9.1. Before deleting a player, you must remove all equipment assigned to them

9.2. On a team roster page, click "Delete" on the row of the player you wish to remove

	Home	Teams	Equipment	Logs

Mens Basketball Players

[Add Player]   [All Classes ⌄]   [Filter by name]   [Filter by age]

Name	Age	Class	Team ID	Coach	Jersey Number	Actions
John Doe	20	SO	7	No	25	[Assign Equipment] [Edit] [Delete]
Graham Bridges	21	SR	7	No	23	[Assign Equipment] [Edit] [Delete]
Sean Radel	20	JR	7	Yes	43	[Assign Equipment] [Edit] [Delete]
Collin Rodrigue	18	FR	7	No	11	[Assign Equipment] [Edit] [Delete]
Brennan Poitras	22	SR	7	No	16	[Assign Equipment] [Edit] [Delete]

9.3. Click "Confirm" in the pop up

	Home	Teams	Equipment	Logs

Mens Basketball Players

[Add Player]   [All Classes ⌄]   [Filter by name]   [Filter by age]

Name	Age	Clas				tions

Are you sure you want to delete this player?

[Confirm] [Cancel]

John Doe	20	SO				sign Equipment Edit Delete
Graham Bridges	21	SR				ssign Equipment Edit Delete
Sean Radel	20	JR	7	Yes	43	Assign Equipment Edit Delete
Collin Rodrigue	18	FR	7	No	11	Assign Equipment Edit Delete
Brennan Poitras	22	SR	7	No	16	Assign Equipment Edit Delete

9.4. The selected player will be removed from the database and will no longer be displayed on the page

| Home | Teams | Equipment | Logs |

Mens Basketball Players

[Add Player]   [All Classes ▾]   [Filter by name]   [Filter by age]

Name	Age	Class	Team ID	Coach	Jersey Number	Actions
Graham Bridges	21	SR	7	No	23	[Assign Equipment] [Edit] [Delete]
Sean Radel	20	JR	7	Yes	43	[Assign Equipment] [Edit] [Delete]
Collin Rodrigue	18	FR	7	No	11	[Assign Equipment] [Edit] [Delete]
Brennan Poitras	22	SR	7	No	16	[Assign Equipment] [Edit] [Delete]

10. Removing a Team

10.1. Before deleting a team, you must remove all players added to it

10.2. On the teams page, click "Delete" on the row of the team you wish to remove

10.3. Click "Confirm" in the pop

10.4. The selected team will be removed from the database and will no longer be displayed on the page

UMaine Sports Teams

Add Team

Team Name   **Actions**

Reference Section

This section covers all of the functions in the application that require input fields or button presses beyond just pressing and navigation.

1. **Adding a Team**
   a. **Adding a team will register a team into the MySQL database for viewing and modification.**
   b. **Ensure that all fields are filled out correctly when adding a team.**
   c. **Adding a team is required before adding any players. Upon entering the teams page, you will be greeted with the "Add Team" button. Entering the "add team" page you will see five required fields to either fill out or select in a drop down. All fields including: Team Name, Team Description, Select Sport, Gender and Year; are all required to add a team successfully. The year requires only numbers, in YYYY format. Gender requires a "M" or "F" format. Ensure that there are no characters other than alphanumeric in any field.**
   d. **Error messages will not be displayed, but if the page does not route to the teams page to view the new team, check that the specifications above for each field are correct.**
   e. **When trying to delete a team, ensure that all players are removed from the team before attempting to delete.**

2. **Deleting a Team**
   a. **Deleting a team will remove all data from the MySQL database, and no longer be able to be viewed.**
   b. **Ensure that all players are removed from the team before deleting the team.**
   c. **Deleting the team is as simple as pressing the "Delete" button, confirming, and reloading the page.**
   d. **Error messages are not displayed, but if the page does not automatically refresh, manually do so. If the team does not delete, ensure all players are removed from the team.**
3. **Adding a Player**
   a. **Adding a player will create a player object in the MySQL database that is connected to the team it is created under.**
   b. **Ensure that all fields are filled in correctly when adding a player.**
   c. **All fields are required. The "Name" takes in only alphanumeric characters, and the "Age" and "Jersey Number" fields take in only numbers. The two drop down selections must be selected.**
   d. **If the page does not route to the roster, ensure that all fields are filled in correctly.**
4. **Deleting a Player**
   a. **Deleting a player will remove all records from the database**
   b. **Just make sure to refresh the page if the record is not removed immediately.**
   c. **Deleting a player is just like deleting a team, but this time it needs to be done before deleting a team.**
   d. **If the page does not refresh automatically, make sure to do that before attempting to delete again.**
   e. **This needs to be done before deleting a team the player is connected to.**
5. **Adding Equipment**
   a. **Adding equipment will create an equipment reference in the MySQL database for use and viewing.**
   b. **Ensure that all fields for the equipment being added are filled correctly, fields that should be numbers should be numbers only. All fields present are required.**
   c. **If the page does not return to the main equipment table page, ensure that all fields are filled correctly and the database is running correctly.**
6. **Deleting Equipment**
   a. **Deleting equipment is similar to other delete functions, requiring you to confirm the deletion.**
   b. **Other than pressing the delete and confirming, no requirements for this operation. Given that there is actual equipment.**
   c. **If the page does not automatically refresh, ensure that the database and React page are running correctly.**
7. **Assigning Equipment to Player**

a. **Assigning equipment to a player is as simple as selecting the equipment and entering how much to assign to the player.**
b. **Requirements are having a player to assign to and equipment to assign, with a stored quantity of at least one.**
c. **Ensure that the equipment has some stored quantity to assign. The only field is the amount to assign, which is required with an integer.**
8. **Removing Equipment from a Player**
    a. **Removing equipment from a player is as simple as filling the amount to remove and pressing the remove button.**
    b. **Ensure that the field is within the actual amount of equipment that is assigned to the player.**
    c. **The assignment page should automatically update when the equipment is removed, if not, ensure that there are no error codes and/or that the database is running correctly.**

Error Messages and Recovery Procedures

The most common error messages in our system are typically encountered when creating and deleting objects in the system. If difficulty is encountered while performing these actions, the first suggestion is to check the console in the browser for the presence of an error message. The error codes in the console will primarily be error code 500.

Error Code 500: This is the most common error encountered in our application. This error means that the information successfully reached the server but an error occurred during processing. This error could have a few different causes depending on the action being taken.

- **Creation:** If this error is encountered while creating an object it is likely the result of a mismatched data type in the input. The user should check that text fields contain only alphanumeric characters. The data in the form should match the formats provided in the user guide.

- **Deletion:** If this error is encountered while deleting an object, it is likely that the object still has existing relationships in the system. For example, a player cannot be deleted from the system unless the player's assigned equipment is deleted first. This is typically handled automatically by the system but in some cases the user may be required to perform the actions manually.

Appendix A – Team Review Sign-off

Team IMSG has thoroughly reviewed the User Guide document for the Athletic Inventory System and has agreed that the following information is accurate. Collectively we have no major contentions in the information stated in the document. By signing this agreement, one acknowledges all the terms and conditions outlined in the document and understands the importance of effective team collaboration, communication, and shared accountability when achieving the goals of the project. By signing below, we pledge our dedication to the success of the team and the project we plan to undertake. We agree to work collaboratively, and support each other to uphold the guidelines and expectations of this project.

Signature:	Date:	Printed:
X: *Collin Rodrigue*	4/24/2024	Collin Rodrigue
X: *Gabriel Poulin*	4/24/2024	Gabriel Poulin
X: *Brennan Poitras*	4/24/2024	Brennan Poitras
X: *Sean Radel*	4/24/2024	Sean Radel
X: *Graham Bridges*	4/24/2024	Graham Bridges

Appendix B – Document Contributions

Name	Date	Contribution	Version
Graham Bridges	04/23/24	Instructions	1.0.0
Sean Radel	04/23/24	Introduction	1.0.0
Brennan Poitras	04/23/24	Overview, Error Message and Recovery	1.0.0
Gabriel Poulin	04/24/24	Reference Section	1.0.0
Sean Radel	04/24/24	Problem Reporting, Related Documents	1.0.0