

# **PocketSports**

## **A Digital Coaching App**

### **Progress Evaluation**

#### **Milestone 1**

#### **Team Members:**

Garrett Gmeiner - [ggmeiner2021@my.fit.edu](mailto:ggmeiner2021@my.fit.edu)

Tyler Ton - [tton2021@my.fit.edu](mailto:tton2021@my.fit.edu)

Parker Cummings - [pcummings2021@my.fit.edu](mailto:pcummings2021@my.fit.edu)

Taylor Carlson - [tcarlson2021@my.fit.edu](mailto:tcarlson2021@my.fit.edu)

#### **Faculty Advisor:**

Fitzroy Nembhard - [fnembhard@fit.edu](mailto:fnembhard@fit.edu)

#### **Client:**

Brad MacArthur - [bmacarthur@fit.edu](mailto:bmacarthur@fit.edu)

Florida Institute of Technology

9/30/2024

<b>1. Progress of current Milestone (progress matrix)</b>	<b>3</b>
<b>2. Discussion of each accomplished task (and obstacles) for the current Milestone (at least a few sentences, ie a paragraph)</b>	<b>3</b>
2.1 Create Website Wireframe	3
2.2 Roadmap for Web Socket Creation	3
2.3 Create a Database Schema	4
2.4 Test Plan	6
2.5 Design Plan	6
2.6 Requirements Document	6
<b>3. Discussion of contribution of each team member to the current Milestone</b>	<b>7</b>
3.1 Garrett Gmeiner	7
3.2 Tyler Ton	7
3.3 Taylor Carlson	7
3.4 Parker Cummings	7
<b>4. Plan for the next Milestone (task matrix)</b>	<b>8</b>
<b>5. Discussion of each planned task for the next Milestone</b>	<b>8</b>
5.1 Have a valid, working login with a simple user interface	8
5.2 Create a database to store login information using MongoDB	8
5.3 Create a landing page for the software	8
<b>6. Date(s) of meeting(s) with Client during the current milestone</b>	<b>9</b>
<b>7. Client feedback on the current milestone</b>	<b>9</b>
<b>8. Date(s) of meeting(s) with Faculty Advisor during the current milestone</b>	<b>9</b>
<b>9. Faculty Advisor feedback on each task for the current Milestone</b>	<b>9</b>
9.1 Create Website Wireframe	9
9.2 Roadmap for Web Socket Creation	9
9.3 Create a Database Schema	9
9.4 Test Plan	10
9.5 Design Plan	10
9.6 Requirements Document	10
<b>10. Evaluation by Faculty Advisor</b>	<b>11</b>

# 1. Progress of current Milestone (progress matrix)

Task	Completion %	Garrett	Tyler	Taylor	Parker	To do
Create Website Wireframe	100%	0%	0%	50%	50%	None
Roadmap for web socket creation	100%	0%	100%	0%	0%	None
Create a database schema	100%	50%	50%	0%	0%	None
Test Plan	100%	25%	25%	25%	25%	None
Design Plan	100%	25%	25%	25%	25%	None
Requirements Document	100%	25%	25%	25%	25%	None

## 2. Discussion of each accomplished task (and obstacles) for the current Milestone (at least a few sentences, ie a paragraph)

### 2.1 Create Website Wireframe

The primary goal of the website wireframe, developed by Parker and Taylor, was to establish a clear and intuitive layout for the PocketSports coaching app. The design aims for simplicity and ease of use while wanting a fun and engaging user experience. Both the player and coach user interfaces were created, showing all the key functionalities are available to each user. There were some difficulties of being able to create the wanted visuals using the online visual software, Figma.

### 2.2 Roadmap for Web Socket Creation

1. Set up the Server
  - Listens for client connections and handles messages
2. Define events for drill creation
  - Establish event types like drill: started to handle drill actions
3. Connect client to web socket
  - Establish a web socket connection to the server
4. Emit and Handle Events from Client
  - Send WebSocket events from client when user interacts with drill editor
5. Testing and Stability

Reference Material: <https://www.youtube.com/watch?v=gnjZGpOkvfM>

```
○ (base) tylerton@TT-435 hello_world % node server.js  
  
HTTP and WebSocket server is running on http://localhost:8080  
Client connected  
█
```

---

## WebSocket Drill Creator

You said: create drill

Create Drill

```
HTTP and WebSocket server is running on http://localhost:8080  
Client connected  
Received: create drill  
█
```

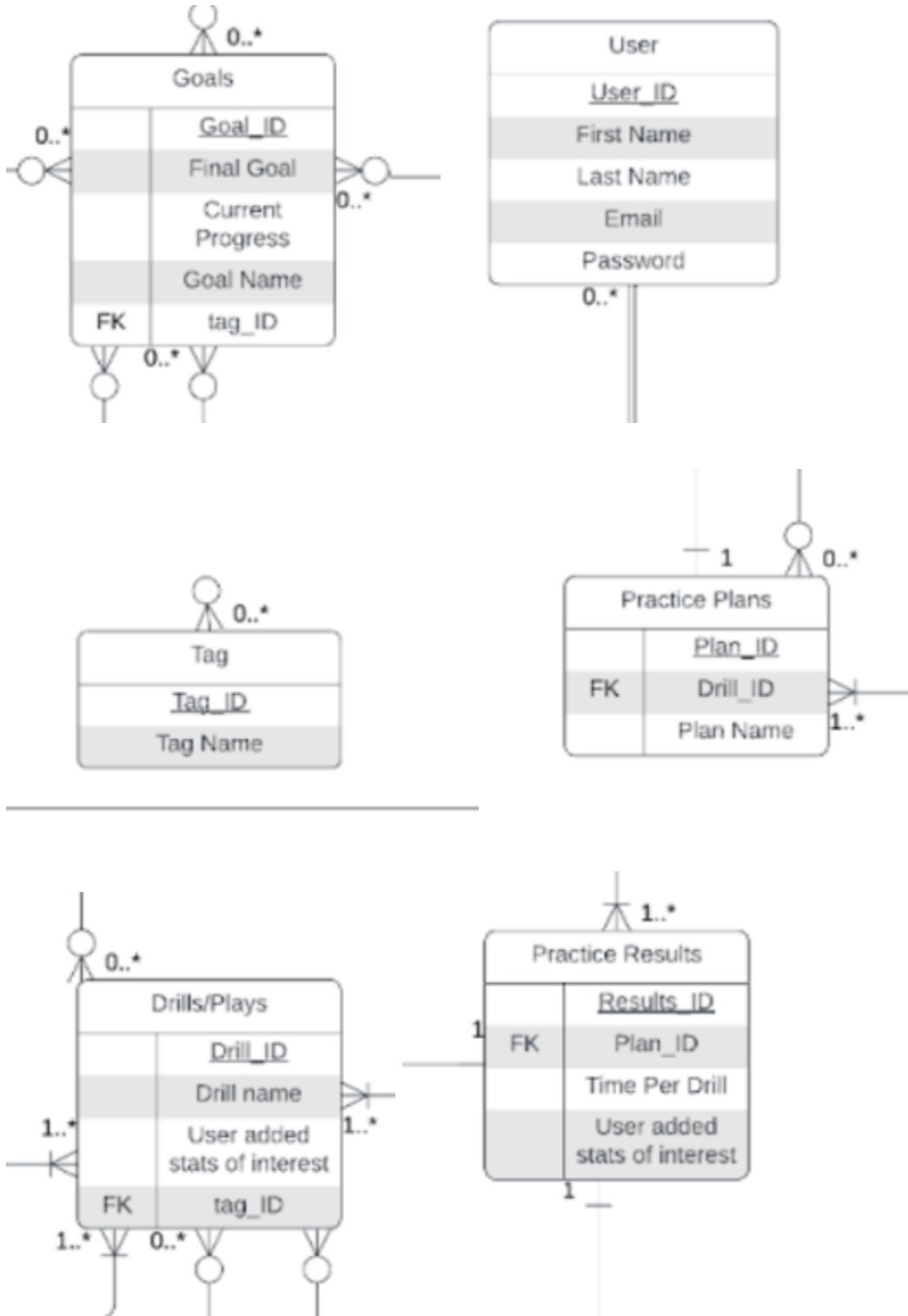
We first start the project running and serving the files on localhost where the client will then be connected. Then we interact with the UI clicking upon Create drill which will then send it to the server where it displays Received: create drill demonstrating live interactive web socket creation for a hello world demo.

### 2.3 Create a Database Schema

First we created an ER-Diagram to model our database. This was difficult at first since we had never created one before. The schema was created to model the diagram. Schemas were made for the Coach, Drills, Goals, Owner, Parents, Practice Plan, Practice

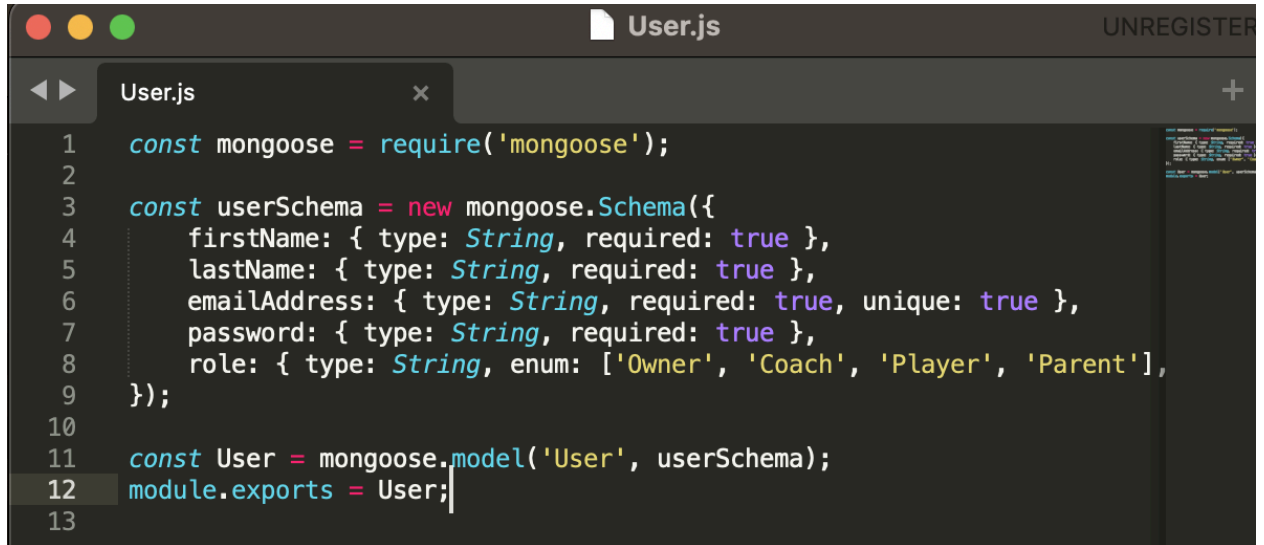
results, tags, team, user. The schema will outline how the information will be formatted and look in the mongoDB database.

User Schema, Practice Results, Practice Plan, Drills/play, Tag, Goal in **Diagram**:



For team schema we wanted it to hold certain information such as name, organization, and roster. The data in the database will be formatted in this particular way. The same principles apply for the others.

Example of user schema in **code**:

A screenshot of a code editor window titled 'User.js'. The code defines a Mongoose schema for a user. It includes fields for firstName, lastName, emailAddress, password, and role. The role field has an enum with values 'Owner', 'Coach', 'Player', and 'Parent'. The schema is then used to create a Mongoose model named 'User', which is exported from the module.

```
1  const mongoose = require('mongoose');
2
3  const userSchema = new mongoose.Schema({
4    firstName: { type: String, required: true },
5    lastName: { type: String, required: true },
6    emailAddress: { type: String, required: true, unique: true },
7    password: { type: String, required: true },
8    role: { type: String, enum: ['Owner', 'Coach', 'Player', 'Parent'],
9  });
10
11 const User = mongoose.model('User', userSchema);
12 module.exports = User;
13
```

## 2.4 Test Plan

In this document, we outline how we plan to test the software using unit tests and integration tests. We ran into some issues without formatting the document, but later figured it out. Additionally, we had to brainstorm different tests and ways to ensure everything is working correctly.

## 2.5 Design Plan

In this document, we outline how we plan to design the software and its architecture. We needed to have a few meetings as a group to ensure that everyone was on the same page with the system requirements and how we want everything to look. Additionally, the different users could have different views and we had to account for that.

## 2.6 Requirements Document

In this document, we outline what we want the system to do and how each individual user interacts with the system. We go into detail about user and software constraints and dependencies. Additionally, we outline the external interfaces, functional, non-functional, and performance requirements.

## 3. Discussion of contribution of each team member to the current Milestone

### 3.1 Garrett Gmeiner

I managed and planned the workflow between my team. Additionally, I created an ER-Diagram for our database, met with Dr. Nematzadeh, and revised it. Additionally, I made a table of contents (TOC) in each of our planning documents. I completed a rough draft of the system requirements to base our documents off of before changing it over to the IEEE format. Within the requirements document, I completed section 3.3 Performance Requirements and 3.4 Non-Functional requirements. Concerning the design plan, I filled out section 2 System Overview and 3 System Architecture. Finally, in the test plan I completed in section 2, sections 2.1-2.9.5, which were 9 out of 24 of our test cases we plan to use to test our system

### 3.2 Tyler Ton

I researched how to do the web sockets using socket.io to create practice plans. Also I created the schemas for the project. For the documentation I did a portion of each document. For the design plan I did the data design. For the test plan I did section 1. For the requirements I did section 1 and parts of section 2. Also met with Dr. Fitz for specific questions around the project.

### 3.3 Taylor Carlson

I worked on the website wireframe of the PocketSports coaching app using Figma, mainly working with the login and the player user interface. The outlines of the functionalities are shown on the app, as well as the general format of how the app will look. I also worked on the requirements document, test plan, and design plan, filling out my assigned sections. My sections for the requirements document were 3.1 and 3.2, and for the test plan were sections 2.10-2.16. In the design plan, I did sections 6.0 and 7.0.

### 3.4 Parker Cummings

I worked with Figma as well as HTML, CSS, and javascript to help out with the website of the PocketSports App for the coach, player, parent, and owner user interface. I helped move the project from bare HTML and CSS into a full react project using javascript to dynamically load pages. I researched how to set up authentication for the web app and got a partially working login screen (for the next milestone). I completed Section 1 of the design plan, sections 2.18-2.24 of the test plan, and 2.3-2.5 of the requirements

document. I also created the logo as well as completing multiple rounds of reviews for the file system.

## 4. Plan for the next Milestone (task matrix)

Task	Garrett Gmeiner	Tyler Ton	Taylor Carlson	Parker Cummings
Have a valid, working login with a simple user interface	10%	10%	40%	40%
Create a database to store login information using MongoDB	40%	40%	10%	10%
Create a landing page for the software.	30%	30%	20%	20%

## 5. Discussion of each planned task for the next Milestone

### 5.1 Have a valid, working login with a simple user interface

The first step to use the software is to login to the user account. Therefore, the first thing we should implement is a working login screen with all of the functionalities. This should involve creating an account, logging in to a previously created account, and the forget password functionality.

### 5.2 Create a database to store login information using MongoDB

Since we have all the planning completed for the database, we should start building it immediately. We need to first be able to store user profiles so that we can accomplish task 5.1. However, it is necessary to have the entire foundation of the database prepared so we can store information needed for further functionalities.

### 5.3 Create a landing page for the software

We will need a landing page so the user can navigate to the software online. This is crucial for the marketing of our product and initial accessibility. The site should be visually pleasing to the user, and it should facilitate user needs by making everything



easy to find. This site should also link to our milestone site that we use to track our progress.

## 6. Date(s) of meeting(s) with Client during the current milestone

Meeting 1: 9/6

## 7. Client feedback on the current milestone

The client has recommended a landing page for the site where the user can navigate to first and then log in. Additionally, the client has recommended that the team's organization can be used to make the user experience unique to that organization.

## 8. Date(s) of meeting(s) with Faculty Advisor during the current milestone

Meeting 1: 9/25/2024

Meeting 2: 9/30/2024

## 9. Faculty Advisor feedback on each task for the current Milestone

### 9.1 Create Website Wireframe

1. Add a gradient to see the nav bars links more clearly
2. Make the goal span a full circle

### 9.2 Roadmap for Web Socket Creation

Add a hello world demo

### 9.3 Create a Database Schema

Add a diagram (graphic) instead of using code

## 9.4 Test Plan

Looks good.

## 9.5 Design Plan

Edit the wireframe

## 9.6 Requirements Document

Looks good.

Faculty Advisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## 10. Evaluation by Faculty Advisor

- Faculty Advisor: detach and return this page to Dr. Chan (HC 209) or email the scores to [pkc@cs.fit.edu](mailto:pkc@cs.fit.edu)
- Score (0-10) for each member: circle a score (or circle two adjacent scores for .25 or write down a real number between 0 and 10)

Garrett Gmeiner	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Tyler Ton	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Taylor Carlson	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Parker Cummings	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

Faculty Advisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_