

Milestone 2

SimpleWrestling

Team 6

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April 4, 2019

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Revisions

Milestone	Version	Last Modified
M2	V1	04/04/2019

M2	V2	05/21/2019
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1. Data Definitions

Wrestlers - One of our main users of interest. Wrestlers are used to populate the data of a tournament.

Weight - Attribute of **Wrestlers**. Weight is used to categorize wrestlers.

Coaches - Entities that **Wrestlers** belong to. Coaches are used to organize teams of wrestlers to compete in a tournament.

Teams - Entities that **Wrestlers** and **Coaches** belong to. Teams are used to categorize groups in tournaments.

Tournaments - Entities that are created by a **Tournament Admin**, comprised of **Brackets** and **Teams**. **Tournaments** is a platform that allows all data to follow together connecting all our data sets.

Dates - Attribute of **Tournament**.

Brackets - Sub-entities of **Tournaments**, comprised of **Matches**. The Brackets are used to display the winner of the match to have relevant information to update the bracket.

Matches - Sub-entities of **Brackets**, Matches contain 1 or 2 **Wrestlers**, will contain a flag **Bye** and a **Score**. The matches are used to display a score of two wrestlers to update the bracket,

Mats - Entities that contain **Matches** in an ordered sequence. Mats are used to make sure the wrestlers have a place to compete and they need to compete in order to update the brackets.

Score - Attributes of **Wrestlers**, and **Matches**, created by **Scorecard**. The score is to determine which wrestler wins.

2. Functional Requirements

Priority 1 Requirements:

1. Tournament Admins

P1, 1.1: Tournament Admins shall create a new table of Tournaments

P1, 1.2: Tournament Admins shall delete a table of Tournaments

P1, 1.3: Tournament Admins shall modify Tournaments

P1, 1.4: Tournament Admins shall create Brackets within Tournaments

P1, 1.5: Tournament Admins shall assign Wrestlers to Brackets based on the Wrestler's Weight and the Bracket's Weight Pool

P1, 1.6: Tournament Admins shall review and edit Scores of Matches

P1, 1.7: Tournament Admins shall approve or decline Coaches request

P1, 1.8: Tournament Admins can assign Matches to Mats

2. Coaches

P1, 2.1: Coaches shall join Tournaments

P1, 2.2: Coaches shall add Wrestlers to Rosters

P1, 2.3: Coaches shall delete Wrestlers from Rosters

P1, 2.4: Coaches shall modify Rosters

P1, 2.5: Coaches can track which Mats their Wrestlers need to go to next

P1, 2.6: Coaches shall make a request to join a Tournament

3. Visitors

P1, 3.1: Visitors shall search tournaments by Date

P1, 3.2: Visitors shall search tournaments by Team

P1, 3.3: Visitors shall view Brackets

P1, 3.4: Visitors shall view Tournaments

Priority 2 Requirements:

1. Tournament Admins

P2, 1.9: Tournament Admins shall manage Tournaments from multiple regions

2. Coaches

P2, 2.7: Coaches shall manage multiple Rosters

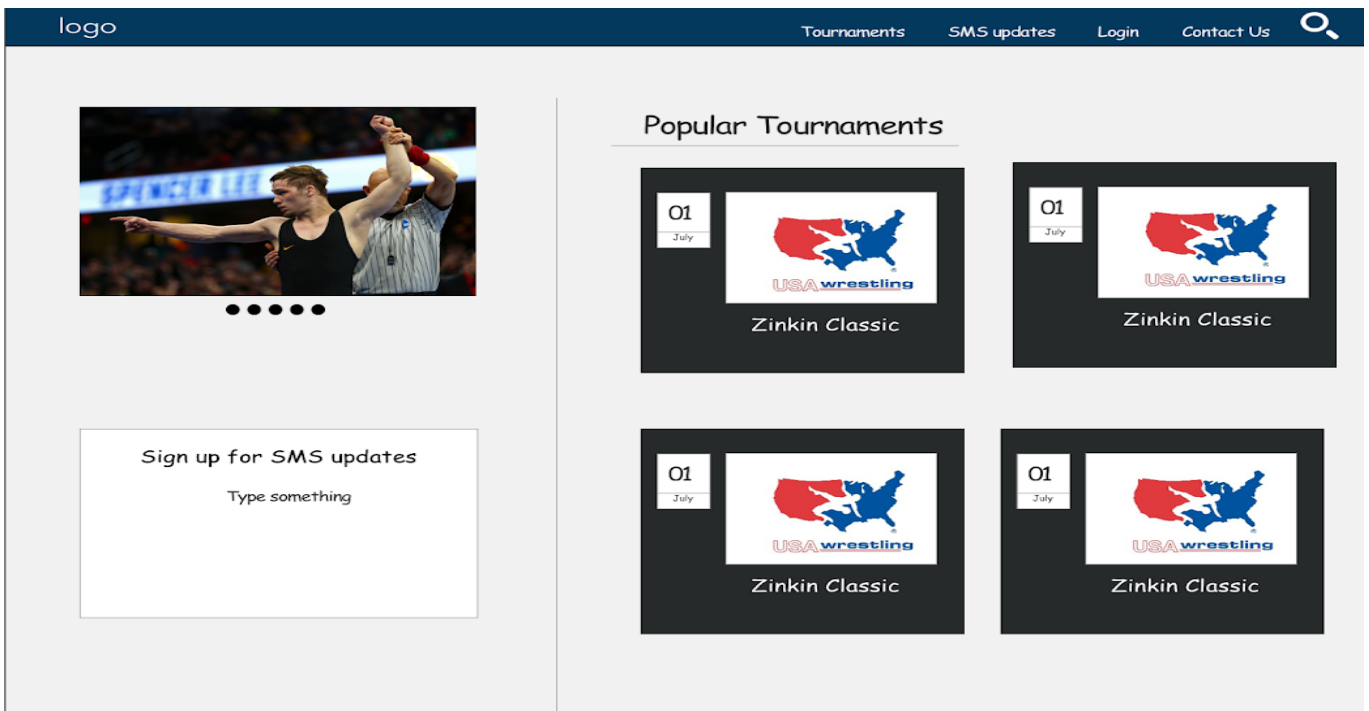
3. Visitors

P2, 3.5: Visitors shall search tournaments by Wrestler

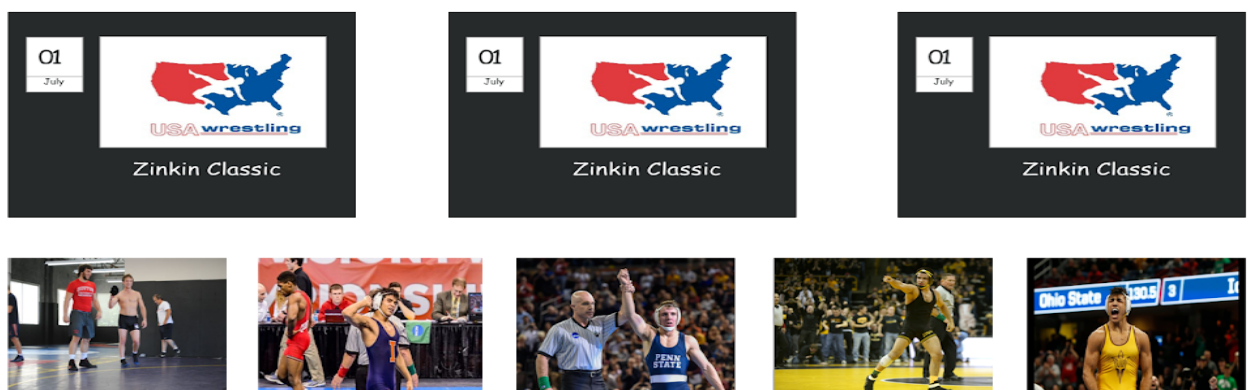
P2, 3.6: Visitors shall subscribe to a Wrestler or Team

3. UI Mockups + Storyboard

Landing Page:

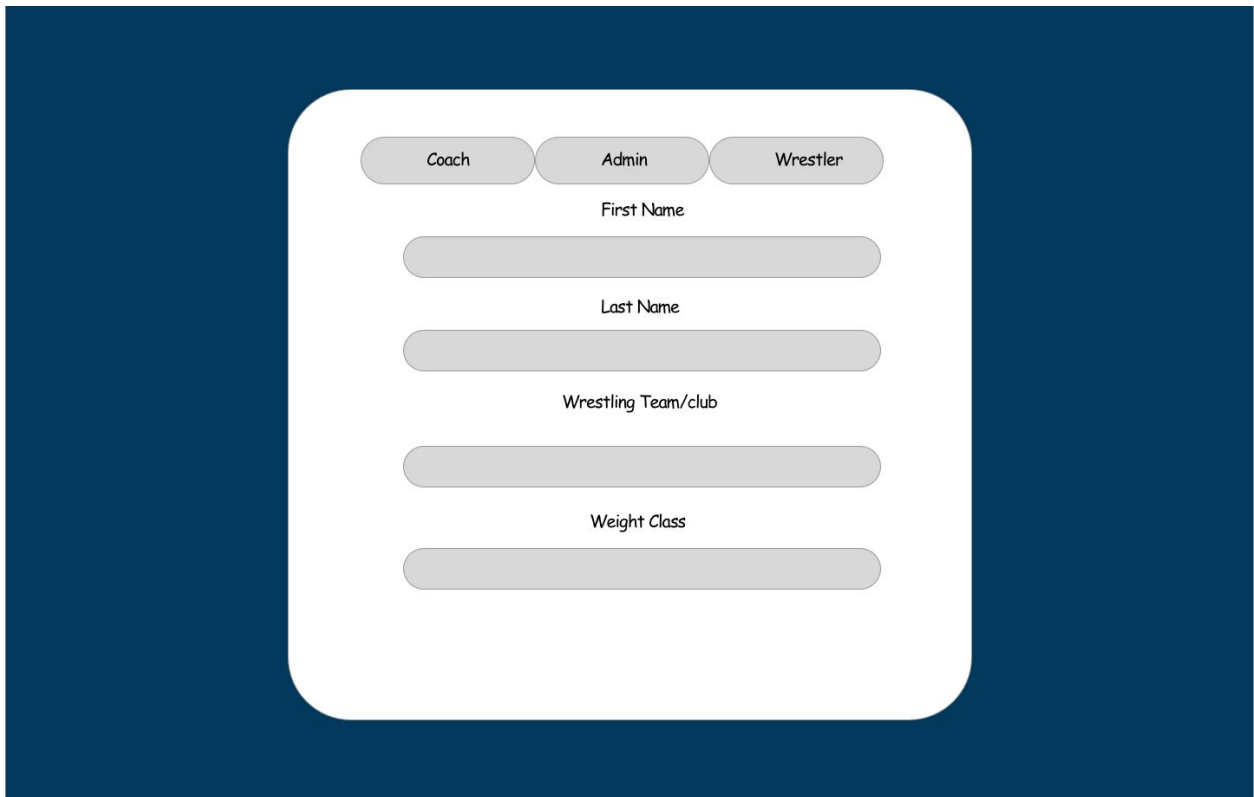


Recently searched Tournaments



Registration Page:

This will be the page for all unregistered users to sign up for the service.

A registration form UI mockup centered on a dark blue background. The form is a white rounded rectangle containing three role selection buttons at the top: 'Coach', 'Admin', and 'Wrestler'. Below these are five text input fields, each with a label above it: 'First Name', 'Last Name', 'Wrestling Team/club', and 'Weight Class'.

Coach Admin Wrestler

First Name

Last Name

Wrestling Team/club

Weight Class

Login:

We are giving three different options for registering. That is one for coaches, one for tournament administrators, and the last one is for the wrestlers themselves. Once users have their information registered with us, and they have logged in, they will be able to access their dashboards as well as all other features of the site.

Login

Don't Have an Account?
[Sign up here](#)

Email

Password

Login

[Forgot Password](#)

Admin Dashboard:

Host tournament

Tournaments							
Tournament name	location	wrestling style	Date start	Date end	tournament flier	number of wrestlers	notes

Coaches Dashboard:

List of Wrestlers

Name	Weight Class	Grade	Record	Recieve SMS?
Roberto Clemente	120	9	0-10	yes/ no

Recent Wrestler matches

Wrestler 1	Wrestler 2	Mat #	Score	Tournament
Huy Nguyen	Roberto Clemente	4	12-2	NCS

Tournaments nearby

sample tournament 1	Date	Location	Tournament Flier	Register your team
sample tournament 2	Date	Location	Tournament Flier	Register your team

Coaches Team Registration:

Tournament name

Enter a tournament

wrestler name

find profile

wrestler age

wrestler weight class

seeding information

Tournament Creation Page:

logo

TournamentsSMS updatesLogin

Hosting a tournament

Tournament Name

Date

Level

Style

Location

Number of Gyms

Number of Mats

Tournament Flier

drag and drop file

Tournament Logo

drag and drop file

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Tournaments Search Page:


logo

TournamentsSMS updatesLogin

Tournaments

Host a Tournament


01
July



USAwrestling

Wrestling Tournament


01
July



USAwrestling

Wrestling Tournament


01
July



USAwrestling

Wrestling Tournament


01
July



USAwrestling

Wrestling Tournament


01
July



USAwrestling

Wrestling Tournament


01
July



USAwrestling

Wrestling Tournament


01
July



USAwrestling

Wrestling Tournament


01
July



USAwrestling

Wrestling Tournament

01
July



USAwrestling

Wrestling Tournament

More Tournaments

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Bracket Management Page:

logo

Tournaments

SMS updates

Login

add / remove wrestler (admin)

Zinkin

Register (coach only)

Weight Classes

106

113

120

126

132

138

145

152

160

170

182

195

220

285

Wrestler names

Weight class #

Bracket space

Admin able to modify brackets change names weight class

See live tournament matches

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Contact

FAQ

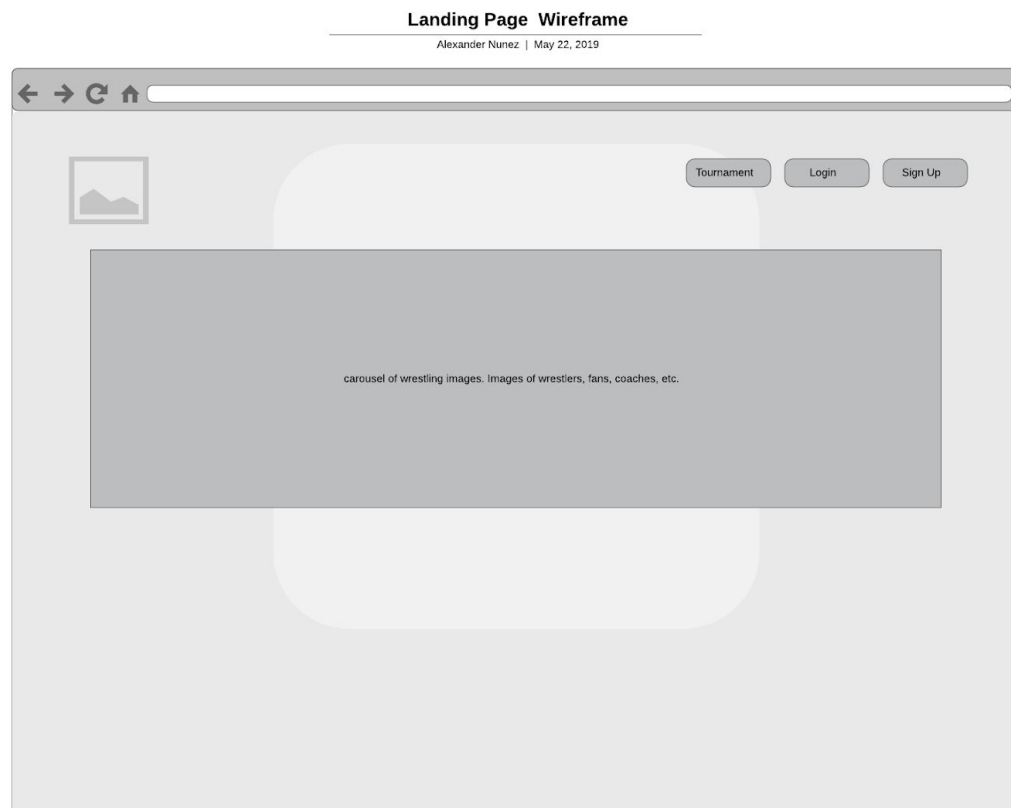
Privacy Policy

Terms of Use

Story Board:

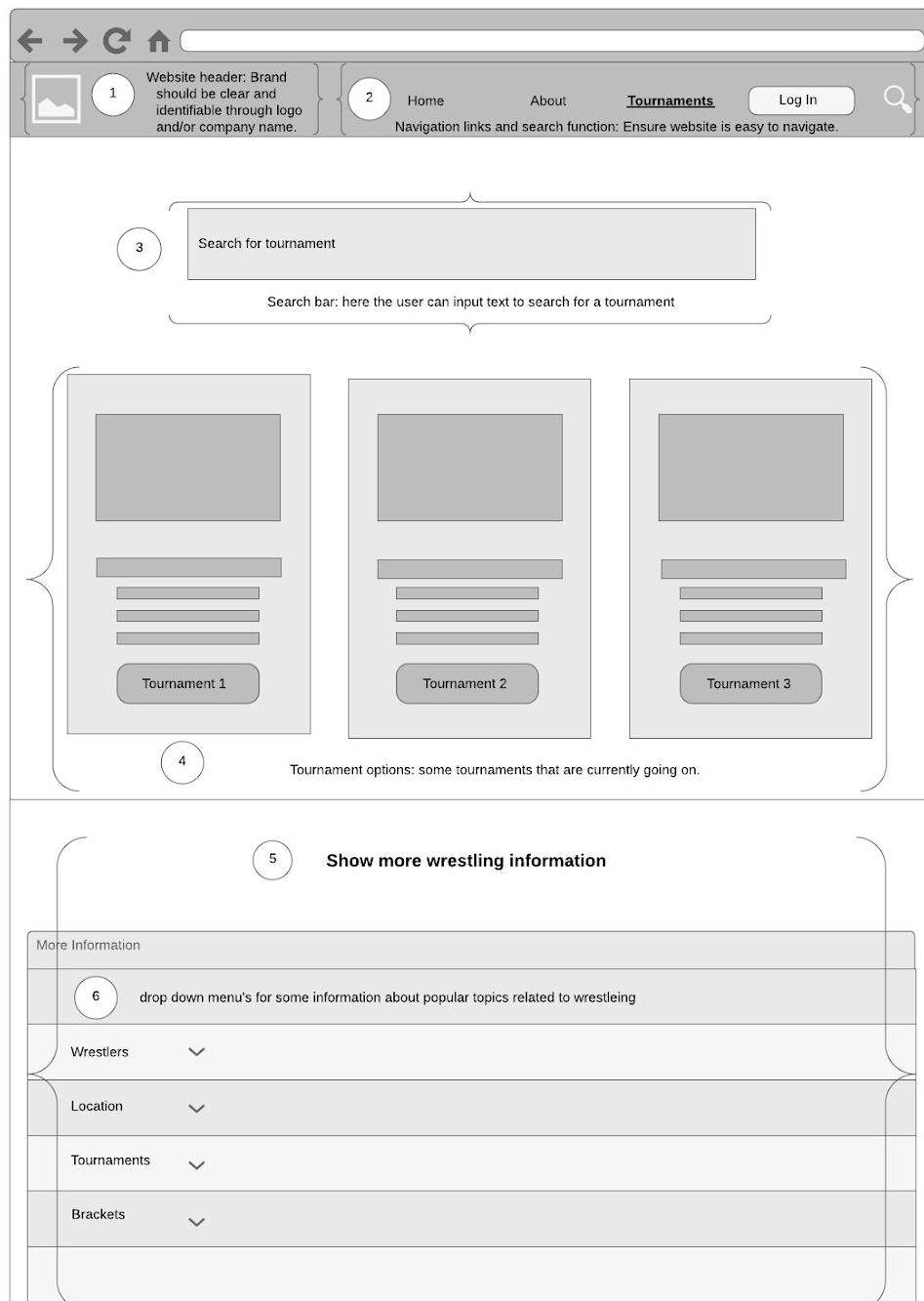
Use Case 1:

A family member of a wrestler wants to know when the wrestler is going to compete. They visit the website, reach the landing page, select tournaments, search for wrestlers name in the search bar.



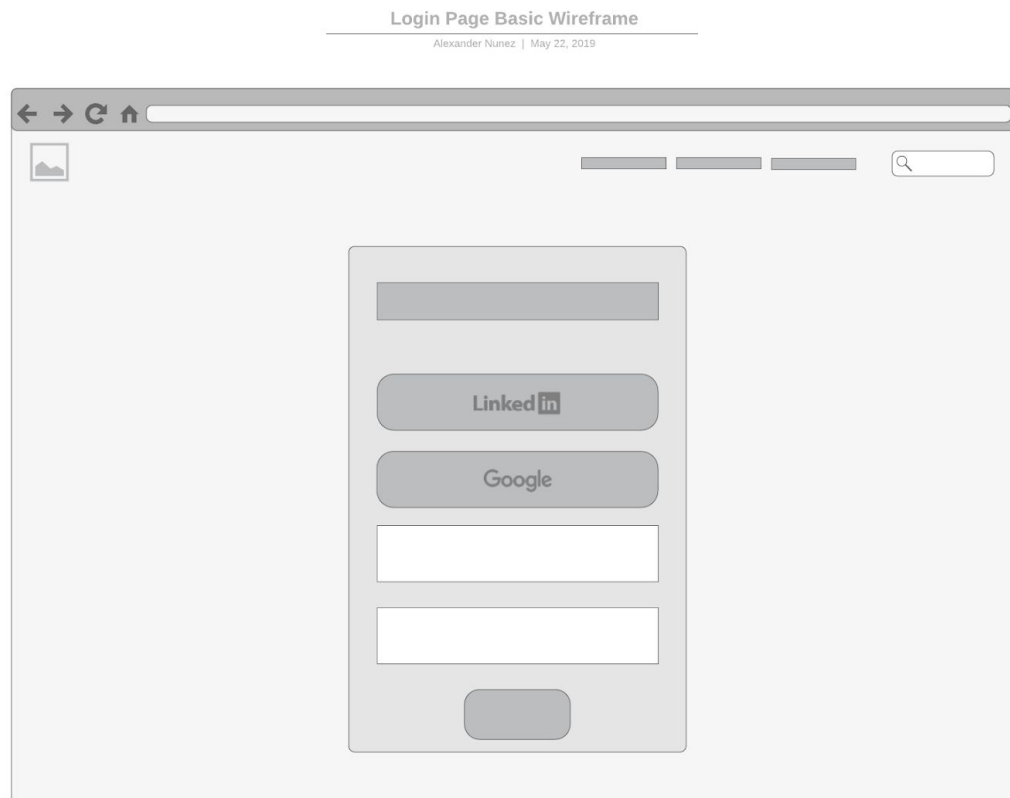
Tournament Page Wireframe

Alexander Nunez | May 22, 2019



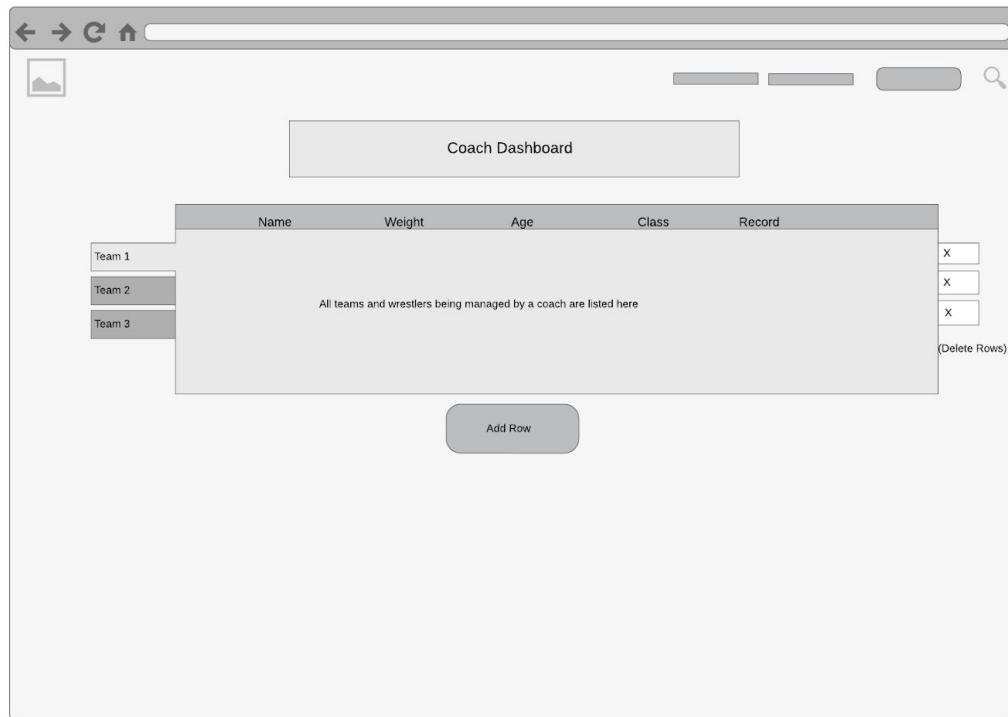
Use case 2:

A coach wants to add a new wrestler to his team. The coach visits the login page, enters his credentials, and is directed to the coach's dashboard page where he can add, delete, modify



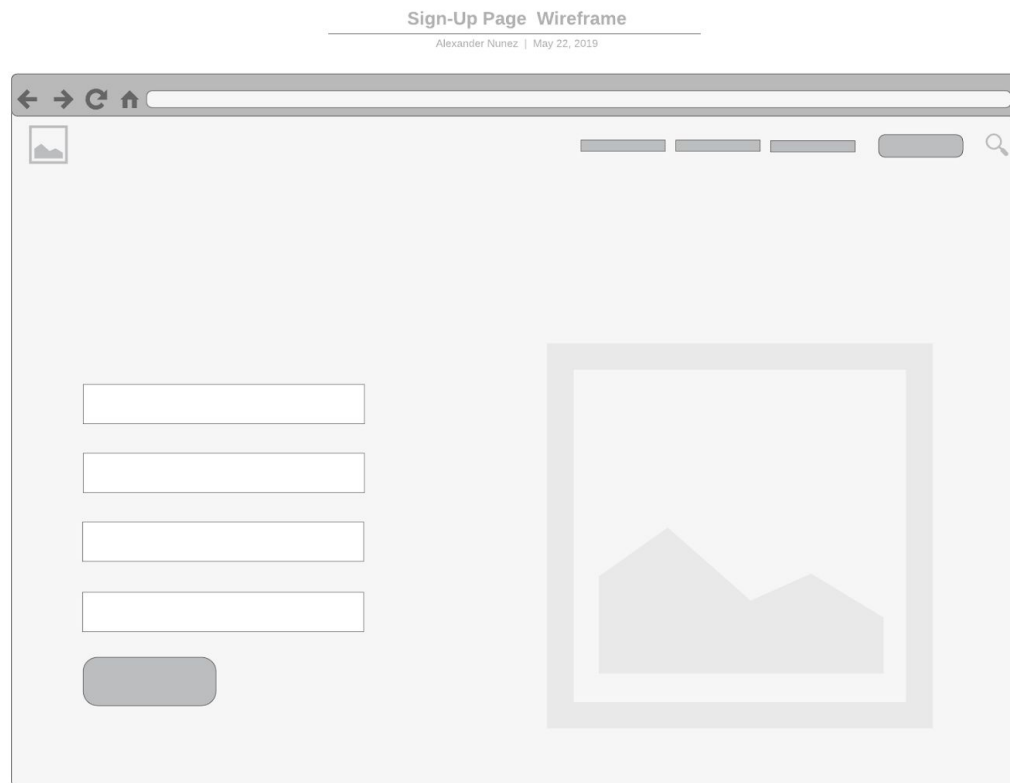
Coach Dashboard Wireframe

Alexander Nunez | May 22, 2019



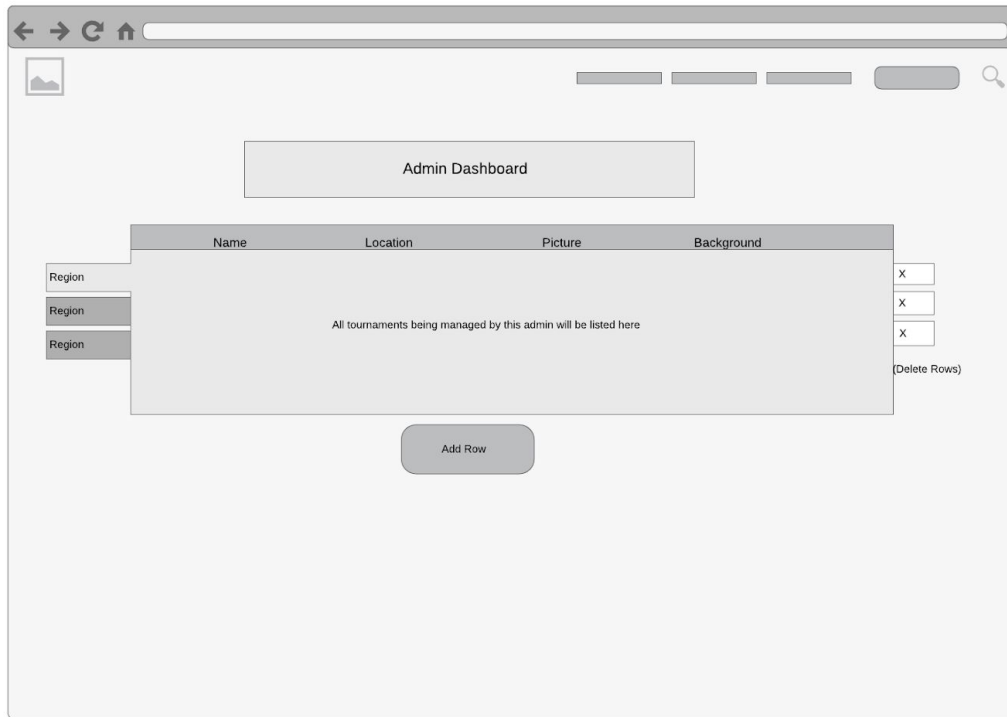
Use case 3:

An administrator wants to use the website to manage some tournaments. She visits the Sign Up page, enters credentials, and is then granted access to an administrators dashboard



Admin Dashboard Wireframe

Alexander Nunez | May 22, 2019

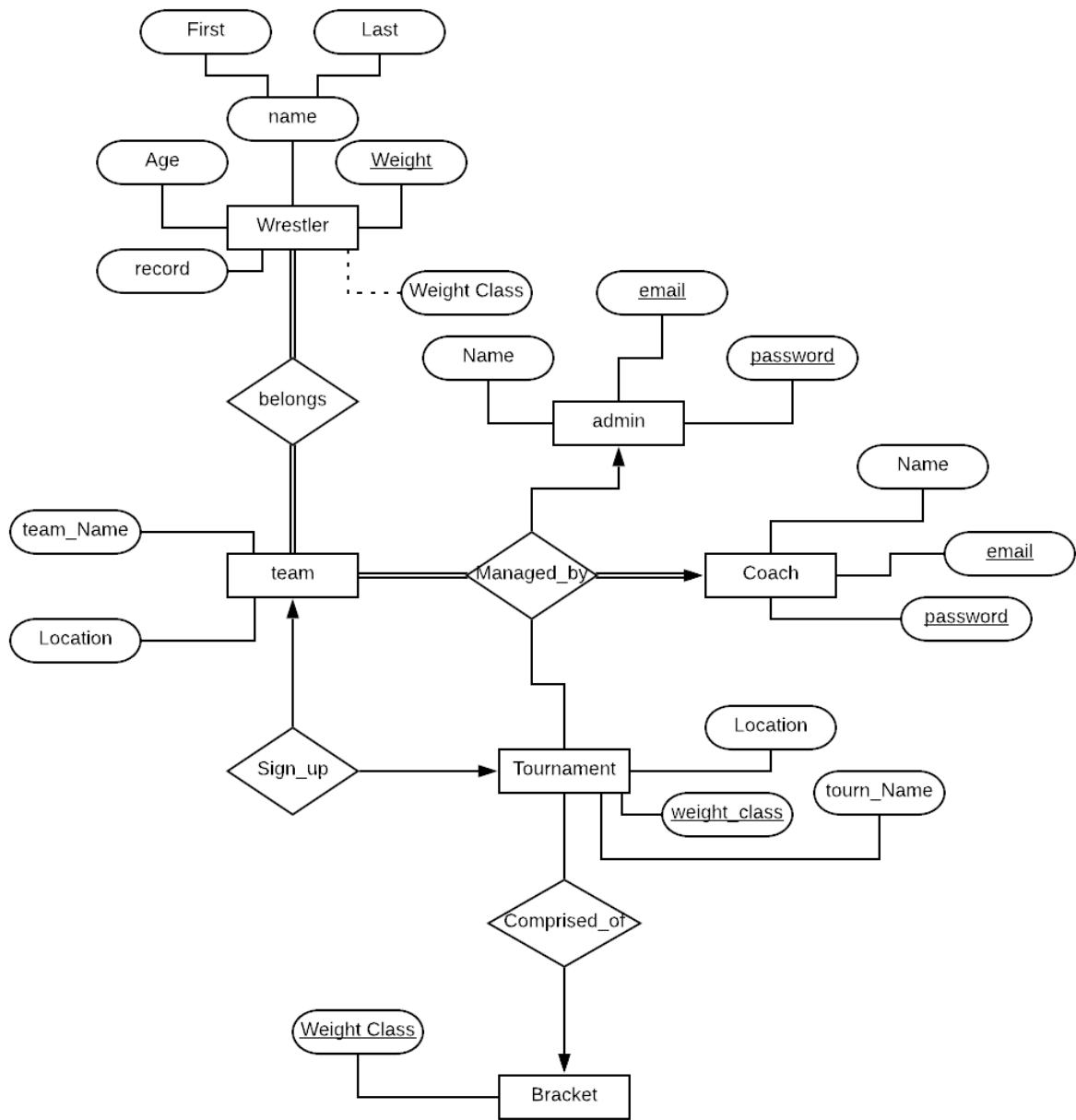


4. High-Level Architecture, DB Organization

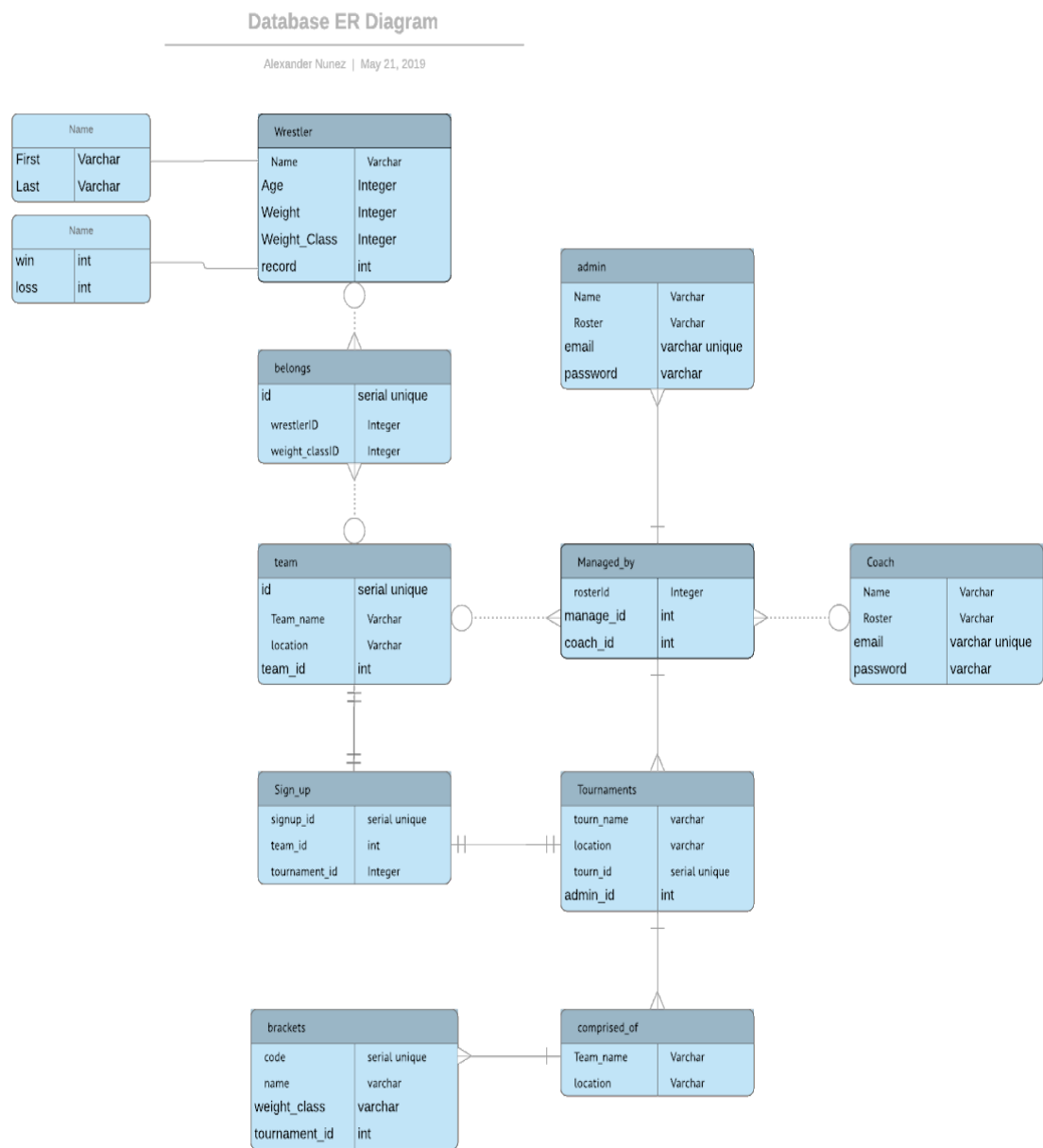
Business Rules (8):

1. **Tournament Admins** shall create a new table of Tournaments
2. **Tournament Admins** shall create Brackets within Tournaments
3. **Tournament Admins** shall assign Wrestlers to Brackets based on Weight Class
4. **Coaches** shall be able to join Tournaments
5. **Coaches** shall be able to add Wrestlers to Rosters
6. **Coaches** shall be able to log the Wrestlers weight, age, and name in

ERD Based on Business Rules:



Database ERD Based on ERD Above:



We will use PostgreSQL as our DBSM because it is a DBSM that some of our team members were more familiar with, which reduced the learning curve for other team members.

Media Storage: all media will be stored in a file system.

Search/filter architecture and implementation:

We will be using Full-Text Search for PostgreSQL. Searching provides the capability to identify natural-language *documents* that satisfy a *query*, and optionally to sort them by relevance to the query. The most common type of search is to find all documents containing given *query terms* and return them in order of their similarity to the query. Notions of query and similarity are very flexible and depend on the specific application.

The searched items will be organized in a way that the most relevant (relevant to the input from the user) will appear first at the top of the results.

The DB terms to be searched are “Coach name”, “tournament name”, tournament date”, “wrestler name”, “tournament location”

DB Organization:

```
SELECT ' (Wrestler name) & tournament'::tsquery @@ 'Miguel Hernandez  
collegiate finals tournament'::tsvector;
```

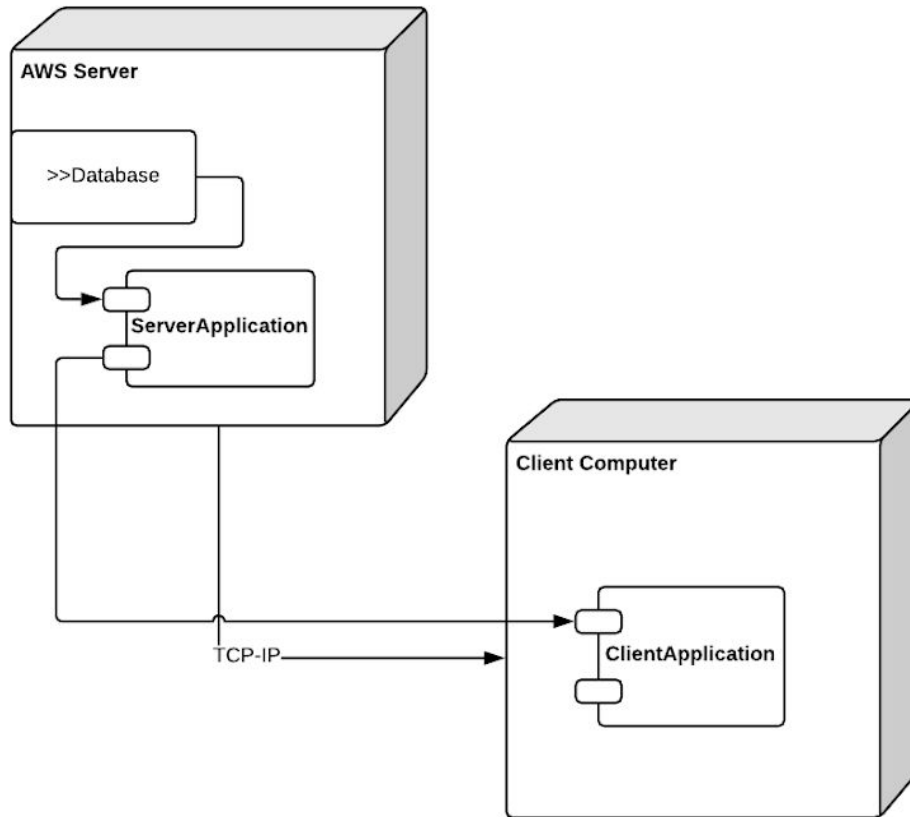
?column?

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5. High-Level UML Diagrams

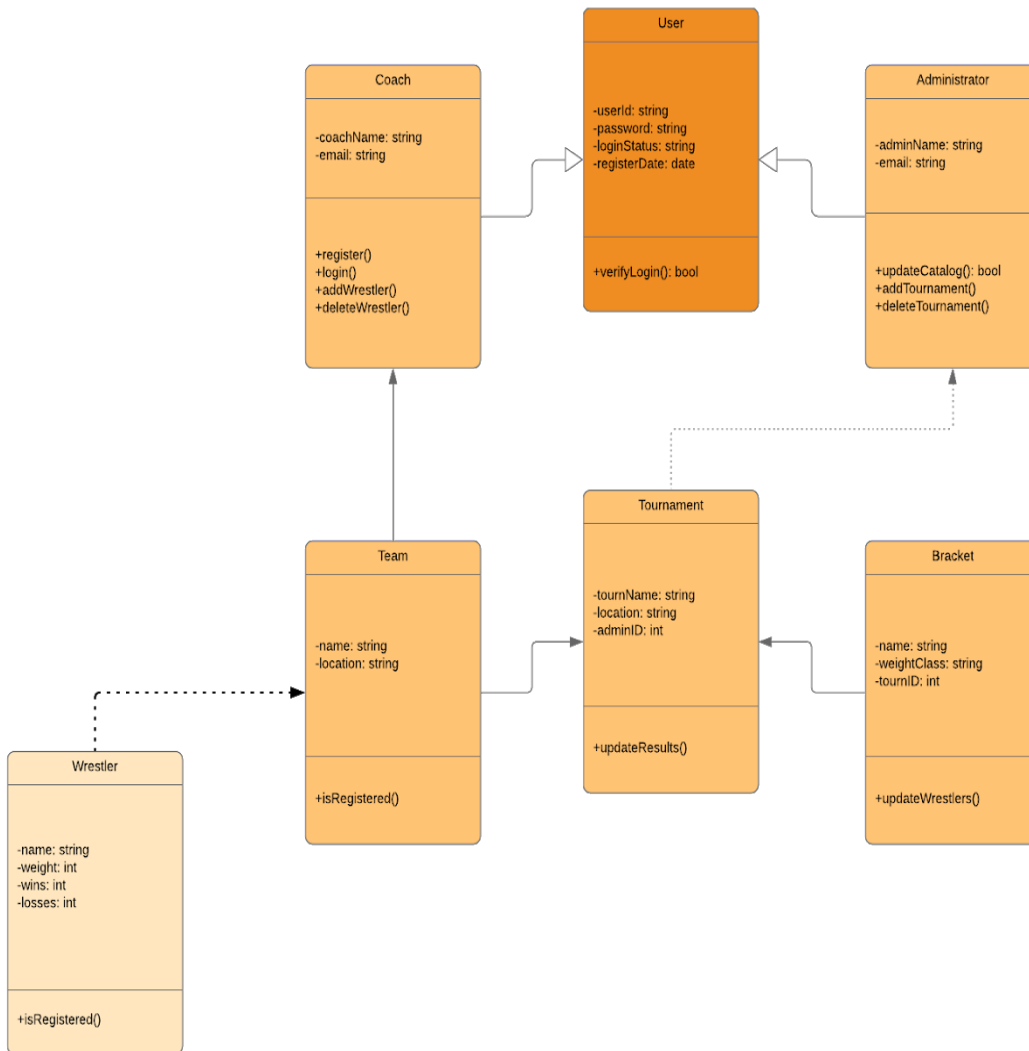
Deployment Model

Michael David | April 4, 2019



UML Class Diagram

Alexander Nunez | May 21, 2019



6. Key Risks

Skill Risk

The Skill Risk we will have are not having the technical skills learn the technologies in the time we are given. We are all new to the web development industry. I think it is extremely difficult for the team to learn a new language and framework to complete this project. The team is capable of learning these technologies however in the given time allowed it is extremely difficult. On top of that, our website is unique and not everyone on the team was aware of how wrestling tournaments operated.

Our solution is to educate others on what we know and explore the technologies together. The goal is to gain skills independently then share that information with the rest of the team so we constantly learning and improving. We are taking advantage of many online resources to learn the necessary skills.

Schedule risk

The Schedule risk is always going to be an issue because we mapped out our timelines of when to each our goals however as young developers we do not know when we are going to hit a roadblock or bug. These issues can take days or weeks to fix. So the time from of the project is was going to be an issue as time gets closer to the deadlines.

Our solution to this issue is trying to communicate well with the team to bring up our issues as they come up. We have to communicate well with our team when we can not meet our deadlines. So can help in areas where we need help. This issue is something we saw happening as the semester progressed. We understood that everyone has busy schedules and other obligations. So a solution was to only use Javascript-based languages because switching from React.js to Node.js is much easier than React.js to Python. This means it is much easier to help out the areas that need the most help because everything is done in Javascript.

Teamwork Risk

The risk of working in any team of strangers is developing trust. The issue is that we do not know each other and we are unaware of each other's development skills and soft communications skills. Sometimes these risks are unavoidable. Also, given that everyone is a student and has different schedules, it becomes difficult to communicate with everyone

Our Solution is solving this issue is clear communication. The constant struggle of making sure everyone stays on task would be to communicate often with the team. I think it would be extremely helpful to the team to just speak up when you're having trouble or just general questions or thoughts, but also have the team lead to check in to make sure everyone is on task in case the group is too shy to speak up.

Legal/content Risk

The Legal and Risk problems of this project would be the copyright of possibly using similar software to Trackwrestling who is the current king of the market. I can see some legal issues that

they might try to pursue once users begin to realize our product is much more user-friendly and a better experience.

The solution to this issue that our team came up with is to take a deeper look into Trackwrestling and other potential legal issues with this type of software because if we plan on launching this product to the market we have to be clear it is safe and legal. After our research, we can be approved with proper licensing as there are no restrictions.

7. Project Management

We were able to manage the task for M2 in an okay manner we assigned check-ins every few days to make sure everyone is on the same page development, however, this comes with some unavoidable issues being that many students are very busy outside this course. It was hard to keep track of everyone's task. We are in the process of attempting the process of doing a pyramid style of management. The style being having the Frontend and Backend Lead run their own teams and report to the Team Lead. However, I think in the future we will use Trello just to make sure everyone can clearly see what everyone is doing. I think it would also be more helpful to see where everyone is on the development cycle that way we can locate which areas need help and help out.