PROJECT DESCRIPTION

- Our project consists of two main components: the API and the web page.
- The purpose of the API is to handle requests made by the webpage. The API also helps abstract away calls to the server, allowing for less powerful hardware to work as well as more powerful hardware.
- Our API is containerized, and handles requests based off of the express middleware architecture.
- We use Docker Toolbox to run our software.
- The purpose of the web page is to act as an easy method for scorers to interact with the API. The webpage will essentially make requests to the API server and display that information in an easy and intuitive way for users.
- This project also uses a Microsoft SQL database to store data on teams and gymnasts.
- The software backend has 37 endpoints.
- The web application requires the user to be authenticated through login.

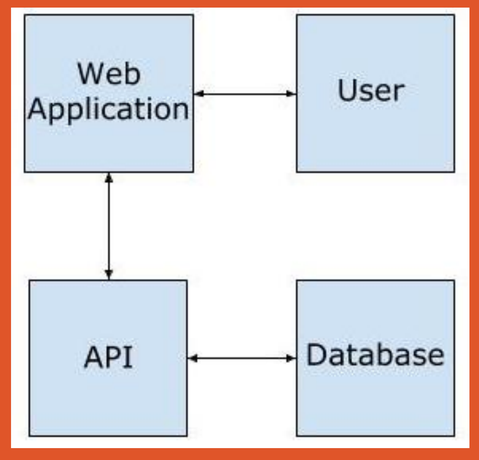

Figure 1: UML diagram of the components

Oregon State University

OSU GYMNASTICS SCORING

Competitive Scoring Software for OSU Gymnastics
CS Senior Capstone Project

Gymnastics photos by Ralph Greene

INTRODUCTION

The gymnastics meets held in Gill Coliseum are fast paced, usually televised, and attended by many fans. In order for competitions to run smoothly and provide a fun experience for fans, athletes, coaches, and staff, there must be a way for the scores judges give to each routine to be recorded, organized, and displayed using the hardware that is already in Gill.

The Oregon State Gymnastics Team would like new scoring software. The pre-existing software used to display and keep scores has become outdated and has issues displaying on the current hardware. Because of this, it is important for new, custom software to be built that can accurately and elegantly display scores on Gill Coliseum's hardware in a readable manner that is intuitive for fans to understand while providing all the necessary functionality.

BACKGROUND

- Oregon State Gymnastics is looking to improve the quality of experience for athletes, fans, and staff in scoring gymnastics meets.
- Gill Coliseum holds five to six gymnastics meets per year against other PAC-12 and NCAA opponents.
- The current scoring software is slow to set up, outdated, and has reliability issues.
- Post season competitions, such as regionals, add more complexity to scoring.

RESULTS

- The web application has user login authentication.
- The user starts using the application by setting up a meet.
- The user sets the number of teams, names of teams, number of players, names of players, number of judges, and names of judges.
- The user can then set lineups for each event.
- After the lineups are set, judges can score each event.
- After scoring is complete, scoring and lineup data can be exported to csv files.

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