Sports Annotated Technical Report

Phase I

# Group Name: Team DGAF

Mission Statement: Don’t get an F…

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Abstract:

Sports Annotated, created by Amber Tucker and Jerry Han (collectively known as Team DGAF), is a user-oriented data aggregation site providing information on various facets of professional American Football. Its full stack development was/will be implemented with Google Cloud Platform, Bootstrap, JavaScript, Python, HTML, Flask, SQLAlchemy, and PostgreSQL.

## 1: Introduction

## Intended for the dedicated or casual National Football League fan, Sports Annotated details the three main pillars of the sport (games, teams, and individual players) within one comprehensive website. It allows a user to quickly and easily review information on the 32 existing teams, active athletes, and game results. Its searchable database facilitates a user’s ability to research specific games, athletes, and teams. Its attractive and easily navigable front end also enables easy and aimless browsing, allowing a user to explore at their leisure and come to a greater understanding and appreciation of the sport.

## 2: Methodology/Design

Sports Annotated is a user-friendly, responsive site.

### 3: Front End

The front end, designed with users in mind, is clean and responsive. Bootstrap’s pre-defined grid layout allows easy scaling depending on browser size. Bootstrap classes were used to format the navigation bar, collapsing it to a single drop-down menu if the viewport is under 576px (roughly the size of a smart phone screen). Bootstrap classes were also used to format the main content, stacking subsections vertically if the viewport size is under 576px. Bootstrap classes embedded within HTML endow Sports Annotated with responsive design and visibility regardless of a user’s device size.

Currently, images are stored in a directory and accessed by specifying the image’s location in the directory. Images are used to provide context/clarification for textual information on the site as well as giving the site an ascetically pleasing quality.

During the next phase of the project, embedded videos (sourced from youTube or a NFL affiliate site) will be added to the games page displaying highlights to users.

JS – future plans

Flask

### 4: Back End

SQL will be used to manage the back end of *Sports Annotated*. Data will be organized by model (Games, Teams, and Players) with their corresponding attributes. The attributes of teams are team location, stadium, blah ADD ATTRIBUTES. The attributes of games are the two teams who participated, day of the game, time of the game, and the final score of the game (ADD/DEL ATTRIBUTES PRN). The attributes of players are name, team, number, position, and age(ADD/DEL ATTRIBUTES PRN).

SQL

APIs

### 4: Hosting

Sports Annotated is hosted on Google Cloud Platforms (GCP). A new project titled “cs329e-idb” was created on App Engine. Using Google Cloud Shell, the gitlab repository was cloned onto GCP with the command “git clone.” Prior to cloning the repository, app.yaml file was created and store into the repository in order to configure the App Engine app’s settings. Once the repository is cloned, “cd [directory of repository]” and type “gcloud app deploy”. To ensure that the app can be deployed, a ‘requirements.txt’ was created so that when GCP creates a virtual environment, Flask and Gunicorn will run inside the newly create environment. Once the app is deployed, the team typed in “gcloud app browse” so that the team could render a URL link from GCP. The current URL link hosted on GCP is <https://cs329e-idb-220319.appspot.com/>

GCP – stores all files. Platform to host website

### 4: Testing

Unit Testing

## 2.2. Data analysis

An outline of how the data obtained from sampling and laboratory analysis were analysed, including details of any statistical tests undertaken and their assumptions and limitations.

## 3: Results

A description of the results obtained without any explanation or interpretation of them. Visual aids such as graphs, tables and maps may be used to summarise the results. If raw data is to be included in the report, it should be placed in an appendix rather than in the results section.

## 4: Discussion

The results of the study are interpreted and implications of these results in terms of the project objectives are discussed. A discussion of how the results relate to other studies is also common. An evaluation of the methodology used may also be undertaken.

## 5: Conclusions

Summarises specific conclusions drawn from the results in terms of the project objectives and working hypotheses.

6: Recommendations