As a basketball fan, I want to be able to select a start stadium and number of stadiums and have the program automatically select which stadiums to go to, starting with my selected start stadium.

As a basketball fan, I want to make a custom trip of all the stadiums and have the program select the shortest route between them.

Description:

Select destinations from the trip then map the shortest distance from this data.

- **Assumptions:**
- [] Plan GUI available
- [] Implementing an algorithm to map the shortest distance based upon the data for assignment
- **Tasks:**
- [] Connect mapped data to widget for display to user.
- **Assignee:**
- **Estimation:** 8
- **Priority: High**
- **Definition of Done:**

The user will see their choices with the most efficient route. displayed to a widget and this information will be desk checked. This will be checked against a manual calculation of the most efficient route.

As a basketball fan, I want to make a custom trip of all the stadiums and have the program select the shortest route between them.

Description:

Select destinations from the trip then map the shortest distance from this data.

- **Assumptions:**
- [] Implementing an algorithm to map the shortest distance
- **Tasks:**
- [] Connect mapped data to widget for display to user.

```
**Assignee:**

**Estimation:** 5
```

Priority: High

Definition of Done:

The user will see their choices with the most efficient route.

Story 2:

As a basketball fan, I'd like to visit any team starting at Denver Nuggests going the shortest distance using Djikstras or A* algorithm - Display the total travelled

Description:

Plan a trip from start location to end location with shortest distance utilizing above stated methods.

Assumptions:

- [] Data accessible to create tree for traversing

Tasks:

- [] Create queries to make tree for traversing to represent this information.

Assignee:

Estimation: 5

Priority: High

Definition of Done:

The program will display the most efficient trip to the user by GUI utilizing requisite data structures. Verify the route is most efficient using a manual calculation.

Story 1:

As an administrator, I want to be able to show new data to the database through input file based upon enable/disable factorization.

Description:

Making use of a file I want to update the SQL database based on what data is expected to be viewed or rendered for program utilization.

- **Assumptions:**
- [x] A database exists to update by input file.
- **Tasks:**
- [] Research & implement a method to update existing SQL database
- **Assignee: Robert**
- **Estimation:** 5
- **Definition of Done:**

The SQL database successfully updates from input file after function call to disable/enable viewable or renderable data.

As an administrator I want to be able to add, edit, and delete different souvenir data from the database.

Description:

View the data loaded from the database and have appropriate GUI tools to modify the data

- **Assumptions:**
- [x] GUI available
- [x] Admin GUI available
- [x] Database available
- **Tasks:**
- [] Display information from database
- [] Determine correct control to edit database
- [] Commit back to database

```
**Assignee: Nicholas**
```

Data is verified to be in database from external program

Database info is loaded into program

Data is able to be modified using appropriate control

Database is updated (verify in external program

As an administrator I want to be able to be able to access an administrator interface using a secure login.

```
**Description:**
```

Login to have access to the administrator interface

```
**Assumptions:**
```

- Database ready

```
**Tasks**
```

- [] Check Username/Password

```
**Assignee:Logan**
```

Estimation: 0

Priority: Low

Definition of Done:

Administrator may login using a password

^{**}Estimation:** 5

^{**}Priority: High**

^{**}Definition of Done:**

As an administrator, I want the program to automatically generate souvenirs for stadiums that don't have any.

Description:

The program will automatically generate souvenirs for all the basketball stadiums, including new ones

- **Assumptions:**
- [x] The new souvenirs will be automatically added for all stadiums
- [x] The data will be automatically appended into its corresponding database
- **Tasks:**
- [x] Create the function to add new souvenirs
- [x] Add the data to the database

```
**Assignee: Nicholas, Logan**
```

// Logan seed data

- **Estimation:** 3
- **Priority: High**
- **Definition of Done:**

The program will automatically create souvenirs corresponding to the stadium and append them to the database.

As a traveler, I want to be able to see the total seating capacity of all NBA stadiums.

Description:

The program will allow the user to see the total seating capacity of all NBA stadiums.

- **Assumptions:**
- [x] A user interface will allow the user to see the total seating
- [x] That total will update if any changes are made to the seating data
- **Tasks:**
- [x] Create the function to add up all the seating
- [x] Create the UI to display the total seating
- [x] Making sure the total distance changes if any distance is edited

```
**Assignee: Robert**

**Estimation:** 5

**Priority: High**

**Definition of Done:**
```

The program will automatically total up and display the total seating capacity of all stadiums. If any capacity is changed, the total will also change.

As an administrator, I want to be able to modify arena data from the database.

Description:

The administrator will be able to edit all the data fields for the arenas.

- **Assumptions:**
- [x] A user interface will be created so the admin can interact with the data fields
- **Tasks:**
- [x] Read in the database
- [x] Write into the database
- [x] Make sure the database saves on program close
- **Assignee:Nicholas**
- **Estimation:** 3
- **Priority: High**
- **Definition of Done:**

The admin will be able to edit the data fields of the selected stadium and save those changes. The changes will be updated in the database, and we will verify in an external program that the changes were committed.

As a developer, I want there to be a database containing the information relevant to the project.

Description:

There's an SQL database containing all the information relevant to the project.

- **Assumptions:**
- [x] An SQL database will be created
- [x] The data will be both manually entered and automatically entered
- [x] A user can only read from the database, while the admin can both read and write.
- **Tasks:**
- [x] Research & implement a method to update existing SQL database
- **Assignee: Logan, Nicholas**
- // Logan seeding data per definition of done
- **Estimation:** 5
- **Definition of Done:**

SQL database is loaded from file. File is created from seed data if it doesn't exist. Verify data integrity of database using external program.