

Inputs, Outputs and Algorithm:

Inputs:

The user will be asked to input a whether they want information on an NBA player, team or position and will enter the value they desire.

They will then be asked to enter either the players name, team name or position abbreviation.

Outputs:

The program will output information about the requested player, team or position including:

The first name, last name, position, jersey number, height, weight, age, birth date and team played for.

Step-by-step explanation:

Create data frame using NBA API.

When variable player is entered, search the API for that name.

If Player in API, open API and begin looking for a key with players name.

Else, hide API and don't pull anything from it.

With API opened, find players information, teams, etc. and print.

If the player entered does not exist in the database we will use an exception that will print this player does not exist in the database.

When variable team is entered, search the API for that name.

If Team in API, open API and begin looking for a key with team name.

Else, hide API and don't pull anything from it.

With API opened, find Teams information and print.

If the team entered does not exist in the database we will use an exception that will print this team does not exist in the database.

When variable position is entered, search the API for that abbreviation.

If Position in API, open API and begin looking for a key with position abbreviation.

Else, hide API and don't pull anything from it.

With API opened, find Position information and print.

If the Position entered does not exist in the database we will use an exception that will print this is not a position abbreviation.

Print information about player, team or position.

Project Adjustment:

The base idea of our project stayed the same but we did have to make some changes in order to make our project more feasible and of higher quality. We decided to switch from displaying data on the NBA, NFL and MLB because we could not find a reliable API with all this information. We decided to only use information for the NBA because we felt more sports fans would be interested in knowing information on the players, rosters and positions in the NBA more than the other two sports. We also changed the output from statistics to player information because the API for statistics was too large for the program to run properly.

Work Breakdown:

For our project we equally divided up the coding process and were able to collaborate as a team to complete the project. Individually Derek worked on gathering the proper API to supply our program with

the data we needed and the GET request, Josh worked on the if and elif statements and Brandi was able to do the error exceptions. Together we collaborated on the poster design and Josh and Derek presented our program while Brandi put together the video explanation of our program.