

## NBA DATABASE User Manual

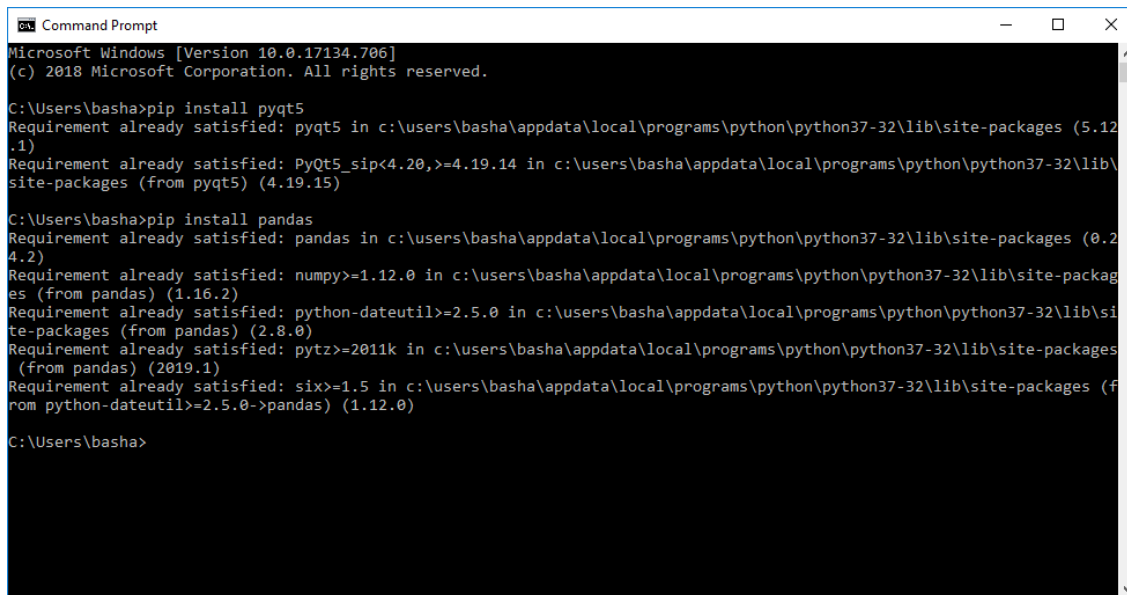
**Team Aspire - Adeel Asghar, Bashaar Shah, Michael Chen**

- Installation files with libraries
- Start Page
- Main Page (user input, what to enter how to use)
  - Adding Player
  - Deleting Player
  - Editing Player

### Installation

To begin, you must first install the necessary libraries which can be done with a pip install command inside command prompt. The libraries we will be using are PyQt5(for UI) and pandas (for reading excel files).

- pip install pandas
- pip install PyQt5



```
Microsoft Windows [Version 10.0.17134.706]
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C:\Users\basha>pip install pyqt5
Requirement already satisfied: pyqt5 in c:\users\basha\appdata\local\programs\python\python37-32\lib\site-packages (5.12.1)
Requirement already satisfied: PyQt5_sip<4.20,>=4.19.14 in c:\users\basha\appdata\local\programs\python\python37-32\lib\site-packages (from pyqt5) (4.19.15)

C:\Users\basha>pip install pandas
Requirement already satisfied: pandas in c:\users\basha\appdata\local\programs\python\python37-32\lib\site-packages (0.24.2)
Requirement already satisfied: numpy>=1.12.0 in c:\users\basha\appdata\local\programs\python\python37-32\lib\site-packages (from pandas) (1.16.2)
Requirement already satisfied: python-dateutil>=2.5.0 in c:\users\basha\appdata\local\programs\python\python37-32\lib\site-packages (from pandas) (2.8.0)
Requirement already satisfied: pytz>=2011k in c:\users\basha\appdata\local\programs\python\python37-32\lib\site-packages (from pandas) (2019.1)
Requirement already satisfied: six>=1.5 in c:\users\basha\appdata\local\programs\python\python37-32\lib\site-packages (from python-dateutil>=2.5.0->pandas) (1.12.0)

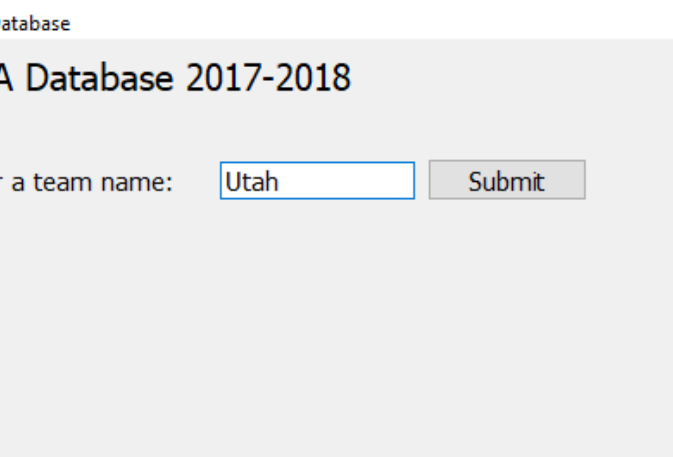
C:\Users\basha>
```

### Running the Project

Once you have installed the necessary libraries, simply open up the NBA\_Database.sln file and select Project>>Start without debugging from the toolbar options. The excel files that the project needs are already inside the folder and defined within the project.

### Start Page

Enter in one of 30 NBA teams and then click submit. This will then take you to the main UI with the selected team's full roster.



MainWindow

NBA Database

# NBA Database 2017-2018

Enter a team name:

**Main Page**

This is the main UI. From here, you can add a player to the team, remove a player from a team, or a edit a player's stats.

Utah

Player Name:

Rebounds:

Assist:

Steals:

Blocks:

Turnovers:

Points/Game:

Add Player

Player Number:

Remove Player

Player Name:

Stat:

New Stat:

Edit Player

Rank	Name	TRB	AST	STL	BLK	TOV	PTS/G
0 2	Joe Ingles	4.0	5.7	1.2	0.2	2.4	12.1
1 3	Ricky Rubio	3.6	6.1	1.3	0.1	2.6	12.7
2 4	Jae Crowder	4.8	1.7	0.8	0.4	1.1	11.9
3 5	Derrick Favors	7.4	1.2	0.7	1.4	1.1	11.8
4 6	Royce O'Neale	3.5	1.5	0.7	0.3	0.9	5.2
5 7	Kyle Korver	2.5	1.2	0.4	0.2	0.8	9.1
6 8	Dante Exum	1.6	2.6	0.3	0.1	1.2	6.9
7 9	Alec Burks	1.6	1.2	0.4	0.2	0.9	8.4
8 10	Lebron	1.0	1.0	1.0	1.0	1.0	12.0

## Add Player

Simply enter in a player's name, and then their stats. Clicking Add Player will insert this player along with his stats into the bottom of the list.

Utah

Player Name:

Rebounds:

Assist:

Steals:

Blocks:

Turnovers:

Points/Game:

Add Player

Player Number:

Remove Player

Player Name:

Stat:

New Stat:

Edit Player

	Rank	Name	TRB	AST	STL	BLK	TOV	PTS/G
0	2	Joe Ingles	4.0	5.7	1.2	0.2	2.4	12.1
1	3	Ricky Rubio	3.6	6.1	1.3	0.1	2.6	12.7
2	4	Jae Crowder	4.8	1.7	0.8	0.4	1.1	11.9
3	5	Derrick Favors	7.4	1.2	0.7	1.4	1.1	11.8
4	6	Royce O'Neale	3.5	1.5	0.7	0.3	0.9	5.2
5	7	Kyle Korver	2.5	1.2	0.4	0.2	0.8	9.1
6	8	Dante Exum	1.6	2.6	0.3	0.1	1.2	6.9
7	9	Alec Burks	1.6	1.2	0.4	0.2	0.9	8.4
8	10	Lebron	1.0	1.0	1.0	1.0	1.0	12.0
9	9	Kobe	3.0	45.0	33.0	3.0	4.0	23.0

## Remove Player

To remove a player, simply type in the number next to the rank (0-9) and click Remove Player. This will remove the selected player and shift the other cells accordingly. In this example, lets type in 9 to remove Kobe.

Utah

Player Name:

Rebounds:

Assist:

Steals:

Blocks:

Turnovers:

Points/Game:

Add Player

Player Number:

Remove Player

Player Name:

Stat:

New Stat:

Edit Player

Rank	Name	TRB	AST	STL	BLK	TOV	PTS/G
0 2	Joe Ingles	4.0	5.7	1.2	0.2	2.4	12.1
1 3	Ricky Rubio	3.6	6.1	1.3	0.1	2.6	12.7
2 4	Jae Crowder	4.8	1.7	0.8	0.4	1.1	11.9
3 5	Derrick Favors	7.4	1.2	0.7	1.4	1.1	11.8
4 6	Royce O'Neale	3.5	1.5	0.7	0.3	0.9	5.2
5 7	Kyle Korver	2.5	1.2	0.4	0.2	0.8	9.1
6 8	Dante Exum	1.6	2.6	0.3	0.1	1.2	6.9
7 9	Alec Burks	1.6	1.2	0.4	0.2	0.9	8.4
8 10	Lebron	1.0	1.0	1.0	1.0	1.0	12.0

## Edit Player

To edit a player's stats, enter in the exact player name from the team, and one of the following stats to edit: TRB (Total Rebounds), AST (Assists), STL (Steals), BLK (Blocks), TOV (Turnovers), PTS/G (Points Per Game) and then enter in a new value for that stat.

Form

Denver

Player Name:

Rebounds:

Assist:

Steals:

Blocks:

Turnovers:

Points/Game

Add Player

Player Number:

Remove Player

Player Name:

Stat:

New Stat:

Edit Player

	Rank	Name	TRB	AST	STL	BLK	TOV	PTS/G
0	0	Jamal Murray	4.2	4.8	0.9	0.4	2.1	18.2
1	1	Nikola Jokic	10.8	7.3	1.4	0.7	3.1	20.1
2	2	Gary Harris	2.8	2.2	1.0	0.3	1.2	12.9
3	3	Will Barton	4.6	2.9	0.4	0.5	1.5	11.5
4	4	Paul Millsap	7.2	2.0	1.2	0.8	1.4	12.6
5	5	Monte Morris	2.4	3.6	0.9	0.0	0.6	10.4
6	6	Malik Beasley	2.5	1.2	0.7	0.1	0.7	11.3
7	7	Mason Plumlee	6.4	3.0	0.8	0.9	1.5	20.6
8	8	Torrey Craig	3.5	1.0	0.5	0.6	0.6	5.7
9	9	Juan Hernangomez	3.8	0.8	0.4	0.3	0.5	5.8

### Pre-project team review

1. **Full name**  
Adeel Asghar
2. **Access ID (two letters four digits)**  
GA7177
3. **URL to GitLab or GitHub Account**  
<https://github.com/adeelasghar1001>
4. **What is one goal you want to accomplish with this project?**  
Learn how to implement Python in a group environment
5. **List the names of your team members that you have met and spoke personally**  
Bashaar Shah and Michael Chen
6. **What is one goal your team want to accomplish with this project?**  
Ensure our application doesn't have any errors and has a GUI.
7. **Do you and your teammates have decided a project?**  
A dynamic NBA Database.
8. **Have your teammates decided a project?**  
Yes
9. **URL of GitLab or Github project. The repository should contain the team contract agreement on a folder named "management"**  
<https://github.com/adeelasghar1001/NBA-Database>

## Updated Project Proposal

**Team Name:** Aspire

	<u>Names:</u>	<u>Access IDs:</u>
1)	Adeel Asghar	ga7177
2)	Michael Chen	ev3024
3)	Bashaar Shah	gb2543

Project Proposal Questionnaire:

**1. Describe your project in one paragraph.**

CRUD Python application that will be able to access NBA statistics from a database and manipulate and output them.

**2. Did you include a prototype presentation file into your 'Design' folder in your project repository?**

Yes

**3. What type of project are you doing (CRUD – Game – Data science – etc )?**

CRUD Application

**4. What is the URL of your repository?**

<https://github.com/adeelasghar1001/NBA-Database.git>

**5. Did you include your instructor and TA in your repository?**

Yes

**6. Did you include the following files in a folder named 'Management' in your project repository?**

- Team contract – YES
- Planning document - YES
- Gantt Chart (basic and advanced features clearly annotated) - YES

**7. Did you add your tasks to your project management tool? Which tool are you using?**

E.g. Project in Github

Using project in GitHub.

**8. How familiar are your team members with OOP and UML diagrams?**

Team is familiar with UML diagrams.

## Updated Project Outline – Team Aspire

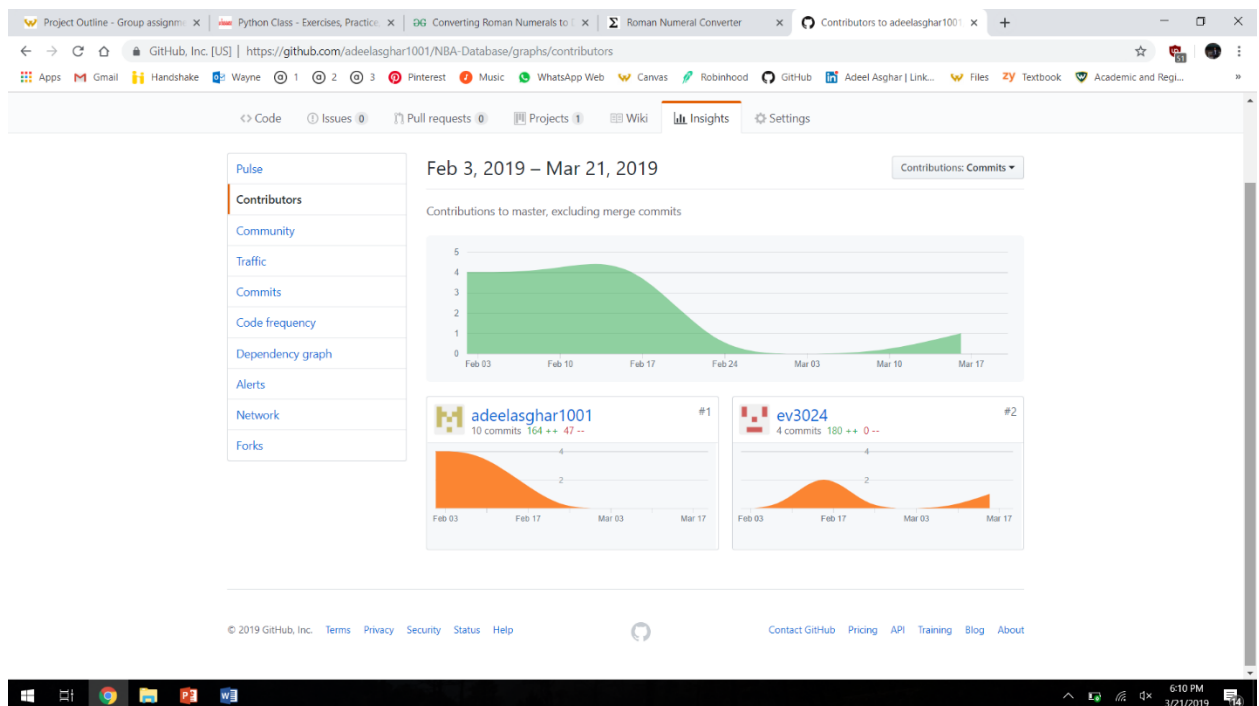
1. GA7177 – Adeel Asghar
2. EV3024 – Michael Chen
3. GB2543 – Bashaar Shah
4. We have written basic code that accesses excel files and displays them in the command prompt. This is good start as we have all the values stored into variables that we can then show in a GUI interface that we will design using QT. We have not personally tested other Python projects.

We have not tried any specific framework besides PyCharm and Visual Studio

We have not done much work on the project due to time restrictions however, we did encounter Git errors which were resolved via group collaboration.

We have implemented a method to read in data from an excel file and displays the information in the command prompt.

5.

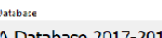


6. Overall, we realized that simply taking information from excel files and displaying it would be too little work for our project. We believe we can add team record predictions along with individual accolades as well. We have not been following the Gantt Chart but we will resume following it by simply pushing everyone's objectives one week backwards. We have not been using a Kanban board. Adeel is the team lead but

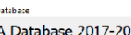


everyone is participating. The weekly reviews are useful for our team because it reminds us that we have a deadline and an objective.

Adeel

[illegible][illegible]

Michael



Mozilla/Windows

NBA Database

## NBA Database 2017-2018

Filter a team name:

[illegible]

## Bashaar

Microsoft

NBA Database

NBA Database 2017-2018

Enter a team name:

Utah

Player Name:

Rebounds:

Assist:

Steals:

Blocks:

Turnovers:

Points/Game:

Player Number:

Player Name:

Stat:

New Stat:

Rank	Name	PPG	AST	STL	BLK	TOV	PTS/G
0 2	Jon Hughes	6.5	5.7	1.2	0.2	2.8	13.1
1 1	Ricky Rubio	2.8	6.1	1.3	0.1	2.8	12.7
2 8	Joe Crawford	4.8	1.7	3.8	0.4	1.7	11.8
3 5	Derrick Favors	7.4	1.2	0.7	1.4	1.7	11.8
4 6	Rayce O'Neale	3.5	1.5	0.7	0.3	0.8	5.2
5 7	Nyles Kinnear	2.3	1.2	0.4	0.2	0.8	6.1
6 9	Dante Eason	1.8	2.8	0.3	0.1	1.2	6.9
7 9	Alan Banks	1.8	1.2	0.4	0.2	0.8	6.4
8 10	Luttrell	0.8	1.8	1.0	1.8	1.8	12.8

Windows edition

Windows 10 Pro  
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 Windows 10

System

Processor: Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz  
2.80 GHz

Installed memory (RAM): 16.0 GB (15.9 GB usable)

System type: 64-bit Operating System, x64-based processor

Pen and Touch: Touch Support with 10 Touch Points

  
[Support information](#)

Computer name, domain, and workgroup settings

Computer name: DESKTOP-UJRLM99

Full computer name: DESKTOP-UJRLM99

Computer description: Bashaar

Workgroup: WORKGROUP

 [Change settings](#)

Windows activation

Windows is activated [Read the Microsoft Software License Terms](#)

Product ID: 00330-50000-00000-AA0EM  [Change product key](#)