

Final submission:

What I said I was going to do:

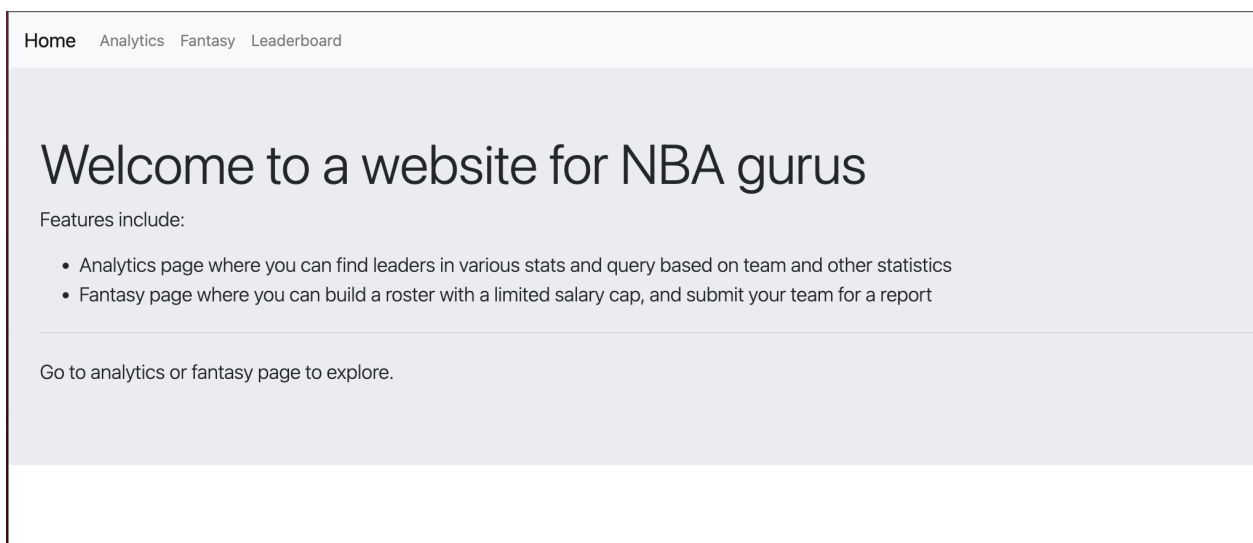
- Have the website fully working
- Have fantasy site working
- Include a leaderboard
- Implement some type of inheritance
- Deploy the website via heroku or some other framework
- Add unit testing

What I actually did:

- The website is working nearly perfectly. There are few errors I get when I do queries on the analytics page.
- The fantasy page is working how I wanted it to. However, I would like to continue working on the player ratings so the game is more competitive
- The leaderboard is also working and sorting based on the best overall team
- I didn't implement inheritance, rather I just made a new csv file with new columns based on player ratings for specific statistics. The coding for that took place in a jupyter notebook.
- The website is only able to run currently through a local host. I would like to continue editing the website and the fantasy page for me to deploy the website.
- I didn't do any unit testing. All my testing followed a waterfall approach where I made sure each component of the website worked as I did everything. Most of the testing was just doing print statements to the backend

Screenshots:

Home page (very basic) and just describes the components of the site:



Analytics Page:

←→↻🔍📄🌟🏠👤⋮

127.0.0.1:8000/analytics/index

HomeAnalyticsFantasyLeaderboard

Select form 1 or form 2

○Form 1

●Form 2

Submit

Select form and directs to next page.

HomeAnalyticsFantasyLeaderboard

FILL IN THE FORM TO FIND DATA ON NBA QUERIES

Pick a statistic to see leaders in:

○PPG○APG○RPG○BPG○SPG○3P%●2P%

TEAM (leave blank if you want to query the entire league)

TEAM NAME (ex: lakers)

knicks

Submit

Players

player	id	name	team	position	age	games played	min/game	min	usg	turnover	free throw att	fg %	2-point att	2-point %	3-point att	3-point %	fg %	ts %	ppg	rpg	trb %	apg	asst %	spg	bpg	TO/game
--------	----	------	------	----------	-----	--------------	----------	-----	-----	----------	----------------	------	-------------	-----------	-------------	-----------	------	------	-----	-----	-------	-----	--------	-----	-----	---------

Enter query for a rendered page with table>

Players

player id	name	team	position	age	games played	min/game	min %	usg rate	turnover %	free throw att	fg %	2- point att	2- point %	3- point att	3- point %	fg %	ts %	ppg %	rpg %	trb %	apg %	asst %
181	Joel Embiid	Phi	C-F	28.0	54	33.3	69.3	37.1	10.7	646	0.82	837	0.515	202	0.356	0.519	0.608	29.8	11.3	18.9	4.4	24.8
14	Giannis Antetokounmpo	Mil	F	27.27	57	32.8	68.4	34.8	12.1	659	0.719	833	0.612	216	0.306	0.581	0.632	29.7	11.5	18.4	5.9	32.9
318	LeBron James	Lal	F	37.2	49	36.8	76.7	32.0	12.5	292	0.771	656	0.619	391	0.358	0.588	0.62	29.7	8.1	11.8	6.3	31.2
174	Kevin Durant	Bro	F	33.45	41	36.6	76.3	31.5	12.0	290	0.897	620	0.573	218	0.372	0.569	0.628	29.6	7.3	10.8	5.9	28.1
150	DeMar DeRozan	Chi	G-F	32.6	63	36.1	75.1	31.9	9.0	501	0.87	1162	0.522	116	0.345	0.521	0.59	28.1	5.4	8.4	5.1	24.1
691	Trae Young	Atl	G	23.48	62	34.8	72.4	34.8	14.5	446	0.897	784	0.503	479	0.384	0.53	0.596	28.1	3.8	6.0	9.4	45.8
159	Luka Doncic	Dal	F-G	23.04	52	35.7	74.3	37.1	15.3	386	0.741	688	0.526	440	0.339	0.519	0.561	28.0	9.3	14.4	8.6	45.2
452	Ja Morant	Mem	G	22.59	55	33.3	69.3	33.7	12.4	399	0.762	887	0.537	252	0.341	0.531	0.576	27.5	5.8	9.0	6.7	34.5
421	C.J McCollum	Nor	G	30.48	12	35.7	74.3	29.1	9.0	46	0.696	150	0.607	93	0.398	0.603	0.617	27.1	5.6	8.6	6.7	35.5
606	Jayson Tatum	Bos	F-G	24.03	65	36.4	75.8	32.2	10.6	405	0.852	812	0.511	558	0.337	0.509	0.562	26.8	8.2	12.1	4.2	20.5

Enter form based on team:

Example: (top assist leader on the lakers)

Players

player id	name	team	position	age	games played	min/game	min %	usg rate	turnover %	free throw att	fg %	2- point att	2- point %	3- point att	3- point %	fg %	ts %	ppg %	rpg %	trb %	apg %	asst %	spg
663	Russell Westbrook	Lal	G	33.33	66	34.3	71.5	27.5	17.7	338	0.666	825	0.474	219	0.279	0.462	0.499	18.0	7.5	11.6	7.1	32.0	0.97
318	LeBron James	Lal	F	37.2	49	36.8	76.7	32.0	12.5	292	0.771	656	0.619	391	0.358	0.588	0.62	29.7	8.1	11.8	6.3	31.2	1.43
551	Rajon Rondo	Lal	G	36.06	18	16.1	33.5	15.7	32.1	2	0.5	41	0.366	30	0.267	0.38	0.383	3.1	2.7	9.0	3.7	30.1	0.67
143	Anthony Davis	Lal	F-C	29.01	37	35.1	73.1	26.9	9.4	227	0.709	569	0.578	66	0.182	0.546	0.582	23.1	9.7	14.8	2.9	14.1	1.22
290	Talen Horton-Tucker	Lal	G	21.3	49	26.0	54.2	18.4	13.3	96	0.781	282	0.486	147	0.265	0.456	0.494	9.5	3.3	6.7	2.7	14.4	0.92
445	Malik Monk	Lal	G	24.1	61	27.7	57.6	19.2	11.3	87	0.77	286	0.545	345	0.4	0.575	0.592	13.0	3.4	6.5	2.6	14.1	0.84
22	D.J. Augustin	Lal	G	34.34	6	18.4	38.3	11.1	10.5	1	1.0	5	0.6	20	0.4	0.6	0.609	5.2	1.7	4.8	2.3	16.9	0.67
335	Stanley Johnson	Lal	F-G	25.79	33	21.7	45.2	12.0	9.5	39	0.692	95	0.579	68	0.324	0.54	0.563	6.2	3.1	7.7	1.5	9.1	0.88

Second Form:

Top players in points per game who also average at least 8 rebounds per game:

PPG (points)

APG (assists)

RPG (rebounds)

BPG (blocks)

SPG (steals)

3P% (3point percent)

2P% (2point percent)

Submit

Players

player id	name	team	position	age	games played	min/game	min %	usg rate	turnover %	free throw att	fg %	2-point att	2-point %	3-point att	3-point %	fg %	ts %	ppg %	rpg %	trb %	apg %	as %
181	Joel Embiid	Phi	C-F	28.0	54	33.3	69.3	37.1	10.7	646	0.82	837	0.515	202	0.356	0.519	0.608	29.8	11.3	18.9	4.4	24.1
14	Giannis Antetokounmpo	Mil	F	27.27	57	32.8	68.4	34.8	12.1	659	0.719	833	0.612	216	0.306	0.581	0.632	29.7	11.5	18.4	5.9	32.1
318	LeBron James	Lal	F	37.2	49	36.8	76.7	32.0	12.5	292	0.771	656	0.619	391	0.358	0.588	0.62	29.7	8.1	11.8	6.3	31.1
159	Luka Doncic	Dal	F-G	23.04	52	35.7	74.3	37.1	15.3	386	0.741	688	0.526	440	0.339	0.519	0.561	28.0	9.3	14.4	8.6	45.1
606	Jayson Tatum	Bos	F-G	24.03	65	36.4	75.8	32.2	10.6	405	0.852	812	0.511	558	0.337	0.509	0.562	26.8	8.2	12.1	4.2	20.1
338	Nikola Jokic	Den	C	27.06	61	33.1	69.0	31.4	15.7	361	0.806	801	0.644	255	0.349	0.615	0.654	26.1	13.8	23.1	8.1	44.1
631	Karl-Anthony Towns	Min	C-F	26.33	62	33.6	70.0	27.5	13.8	388	0.814	706	0.582	305	0.4	0.588	0.636	24.3	9.8	15.4	3.8	18.1
143	Anthony Davis	Lal	F-C	29.01	37	35.1	73.1	26.9	9.4	227	0.709	569	0.578	66	0.182	0.546	0.582	23.1	9.7	14.8	2.9	14.1
575	Pascal Siakam	Tor	F	27.95	54	37.6	78.3	25.4	11.9	293	0.744	764	0.513	168	0.345	0.514	0.554	21.8	8.3	11.9	5.1	22.1

Fantasy page:

Type in names of players and click submit to add them to your team. (first name (capitalize first letter)) (last name (capitalize first letter))

Lebron James

Add player

#	name	age	scoring	passing	rebounding	off & def rating	efficiency	turnover_grade	ability	overall	salary
127	Lonzo Ball	24.38	6.0	7.0	7.0	9.0	10.0	10.0		8.516666666666667	3500
128	Tyler Herro	22.15	8.0	5.0	6.0	8.0	9.0	8.0		7.633333333333333	1000
129	Anthony Edwards	20.61	8.0	5.0	6.0	9.0	8.0	10.0		7.966666666666667	1000

Remaining salary: 14500

Number of players needed: 7



Lebron James

Add player

#	name	age	scoring	passing	rebounding	off & def rating	efficiency	turnover_grade ability	overall	salary
127	Lonzo Ball	24.38	6.0	7.0	7.0	9.0	10.0	10.0	8.516666666666667	3500
128	Tyler Herro	22.15	8.0	5.0	6.0	8.0	9.0	8.0	7.633333333333333	1000
129	Anthony Edwards	20.61	8.0	5.0	6.0	9.0	8.0	10.0	7.966666666666667	1000
130	Tyrese Maxey	21.35	7.0	6.0	5.0	10.0	10.0	8.0	7.916666666666667	1000
131	Shai Gilgeous-Alexander	23.67	9.0	7.0	6.0	8.0	7.0	10.0	8.133333333333333	3500
132	Scottie Barnes	20.62	7.0	5.0	8.0	9.0	8.0	10.0	8.133333333333333	1000
133	Precious Achiuwa	22.48	5.0	5.0	8.0	7.0	9.0	6.0	6.916666666666667	1000
134	Stephen Curry	34.0	10.0	7.0	7.0	9.0	9.0	10.0	9.016666666666667	5000
135	Jalen Green	20.09	7.0	5.0	5.0	10.0	8.0	8.0	7.416666666666667	1000
136	Evan Mobley	20.74	6.0	5.0	9.0	8.0	8.0	10.0	7.941666666666667	1000

Remaining salary: 1000

Dragons

Submit team

Submitting team for report:

Remaining salary: 1000

Team Chart Report

team name	average age	average scoring	average passing	average rebounding	average off & def rating	average efficiency	average turnover_grade ability	average overall	total salary
Green beam	23.009000000000004	7.3	5.7	6.7	8.7	8.6	9.0	7.9591666666666665	19000

Team Summary

Pros:

High scoring team
High offensive and defensive rating
Team creates a lot of turnovers

Cons:

Younger team meaning will have little experience, however, bright future
Selfish team that passes poorly
Will get outrebounded by most teams

Team Overall:

Leaderboard:

Home

Analytics

Fantasy

Leaderboard

2

Leaderboard

team name	average age	average scoring	average passing	average rebounding	average off & def rating	average efficiency	average turnover_grade ability	average overall	total salary
DavisGang	22.982999999999997	7.4	6.7	6.4	9.0	8.9	9.4	8.284166666666668	19000.0
Dragons	22.922	7.3	6.6	6.8	8.8	8.7	9.6	8.286666666666665	19000.0
Green beam	23.009000000000004	7.3	5.7	6.7	8.7	8.6	9.0	7.9591666666666665	19000.0

12

8

li

6

0

Coding in jupyter notebook for creating the new csv:

```
passing=0
efficiency=0
rtg=0
rbg=0
steals_blocks=0
scoringDone=False
passingDone=False
efficiencyDone=False
rtgDone=False
rbgDone=False
s_bDone=False
score=0
salary=0
#scoring
if scoringDone==False:
    if playerRow['PPG']>=25:
        scoring=10
        scoringDone=True
    if (playerRow['PPG']>=22) & (scoringDone==False):
        scoring=9
        scoringDone=True
    if (playerRow['PPG']>=18) & (scoringDone==False):
        scoring=8
        scoringDone=True
    if (playerRow['PPG']>=15) & (scoringDone==False):
        scoring=7
        scoringDone=True
    if (playerRow['PPG']>=10) & (scoringDone==False):
        scoring=6
        scoringDone=True
    if scoringDone==False:
        scoring=5
        scoringDone=True
    scoring_.append(scoring)
#passing
if passingDone==False:
    if (playerRow['APG']>=10):
        passing=10
        passingDone=True
    if (playerRow['APG']>=8) & (passingDone==False):
```

How to use/test:

Go to the within nba_web_5 directory .

Then run “source bin/activate” to activate venv.

Then go to src directory within nba_web_5 directory .

Run “python3 manage.py runserver 8000”.

To start server.

Copy the link and try out website.

To see database and its tables you need to install db.sqlite3 and it will show you tables if press the play button.

That covers up everything.