

README.txt

schema.sql: create statements for changed tables

unit\_test.py: test queries for this homework

#### Orders of Primary Keys

Appearances: playerID, teamID, yearID

Batting: playerID, teamID, yearID, stint

Fielding: playerID, teamID, yearID, stint, POS

Managers: playerID, teamID, yearID, inseason

People: playerID, nameLast

Teams: teamID, yearID

#### Foreign Keys

Appearances, Batting, Fielding, Managers to People

Appearances, Batting, Fielding, Managers to Teams

#### Modifying for Data Integrity

Update data types for fielding table by consulting the online documentation

<http://www.seanlahman.com/files/database/readme2016.txt>

lgID (league ID): each league ID is two characters

PO, A, DP are INT

the rest of the values should be int but sometimes they are NULL so I leave them as text

#### SIMPLEFLASK

##### General Notes

- Return error message if method is not implement
- Return error message if GET method returns nothing
- Model output on Professor Ferguson's examples

##### parse\_and\_print\_args()

- Taken from Professor Ferguson
- Modified to parse offset and limit

##### get\_resource(resource)

- Handles roster and generic GET and POST methods
- Get methods call get\_roster or find\_by\_template methods
- Post method calls insert, similar to RDBtable
- Implements pagination

##### get\_resource\_by\_primary\_key(resource, primary)

- Handle get, put, and delete methods with primary keys
- Implement put by finding and deleting old entry, inserting new entry

##### get\_related\_resource(resource, primary\_key, related\_resource)

- Handles GET and POST requests

- Implements pagination for the get method
- Use try-except to handle parent-to-child and child-to-parent GETs

get\_teammates(playerid)

- Handles GET requests

get\_career\_stats(playerid)

- Handles GET requests

paginate(link, limit, offset)

- Handles pagination
- Provides previous link, message if there are none left
- Provides next link
- Does not check to see if there are actually valid next links -- could be improved

SIMPLEB0

cnx

- Changed localhost to 127.0.0.1; user and password are dbuser
- run\_q and template\_to\_where\_clause provided by Professor Ferguson

find\_primary\_key(table)

- Helper method to get the primary key of a table

find\_foreign\_key(table)

- Helper method to get the foreign key of another table
- Information found on Stack Overflow

insert(table, r)

- Insert method with SQL query

insert\_primary\_key(table, primary\_key, r)

- Insert method with primary key calls regular insert

find\_by\_template(table, template, fields, limit, offset)

- For get method, find row with SQL query
- Supports pagination

find\_by\_primary\_key(table, primary\_key, fields)

- Get primary key columns of table, add to template, get the row

delete(table, primary\_key)

- Delete with primary key using SQL query

find\_related\_resource(resource, primary\_key, related\_resource, template fields, limit, offset)

- Supports pagination

- Get row of another resource through primary key

`find_related_resource2(resource, primary_key, related_resource, template, fields, limit, offset)`

- Supports pagination
- Get foreign key of related\_resource
- Get primary\_key of resource
- Find row by matching elements of foreign and primary keys

`insert_related_resource(playerid)`

- Use primary key to call insert on related resource

`get_teammates(playerid)`

- Select player, team, year from appearances
- For each player seen, find their appearances
- Find last and first years for players
- Return sorted result

`get_career_stats(playerid)`

- Cast sums to SIGNED to avoid DECIMALs that cannot be converted to json

`get_roster(args, limit, offset)`

- Casting
- Implements pagination