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CS340 - Database
11/26/2018

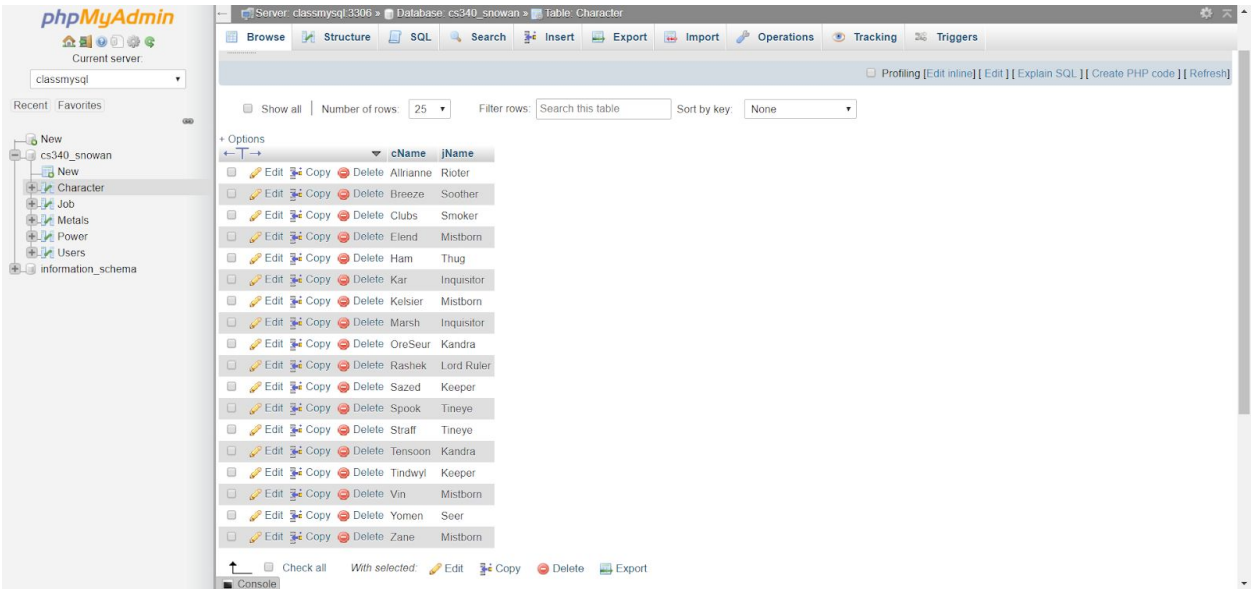
MISTBORN
DATABASE

Project Outline:

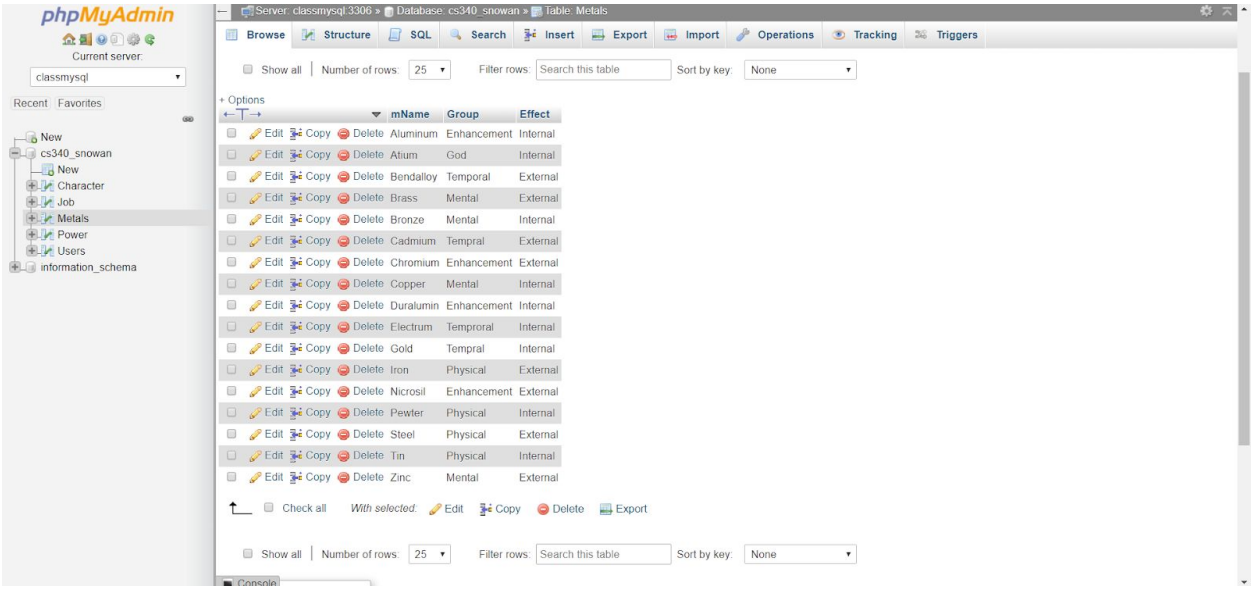
This is a database based upon the book series Mistborn, by Brandon Sanderson. This will focus on the characters, jobs associated with these characters, as well as metals used for different powers these characters use in the series. This will be used for anyone reading the series for the first time and wanting to keep track of who can use what metals and what each metel enable the user to accomplish. This can also be used by those coming back for another read wanting to remember before hand.

Database Overview:

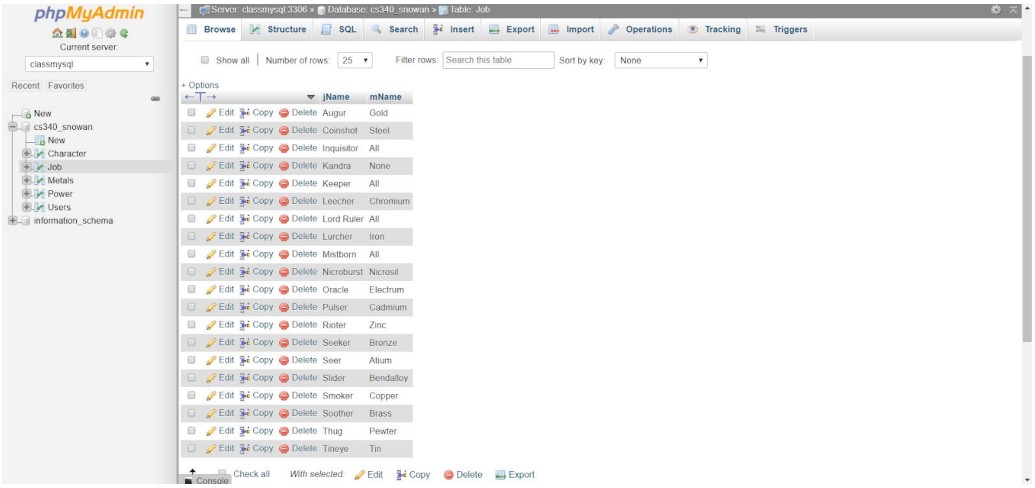
- **Character -** The different Characters within the Mistborn universe. Characters hold a relationship with the Jobs they hold in the series.
  - **cName -** Name of the character.
  - **Job -** Duties or job that the character fulfils.



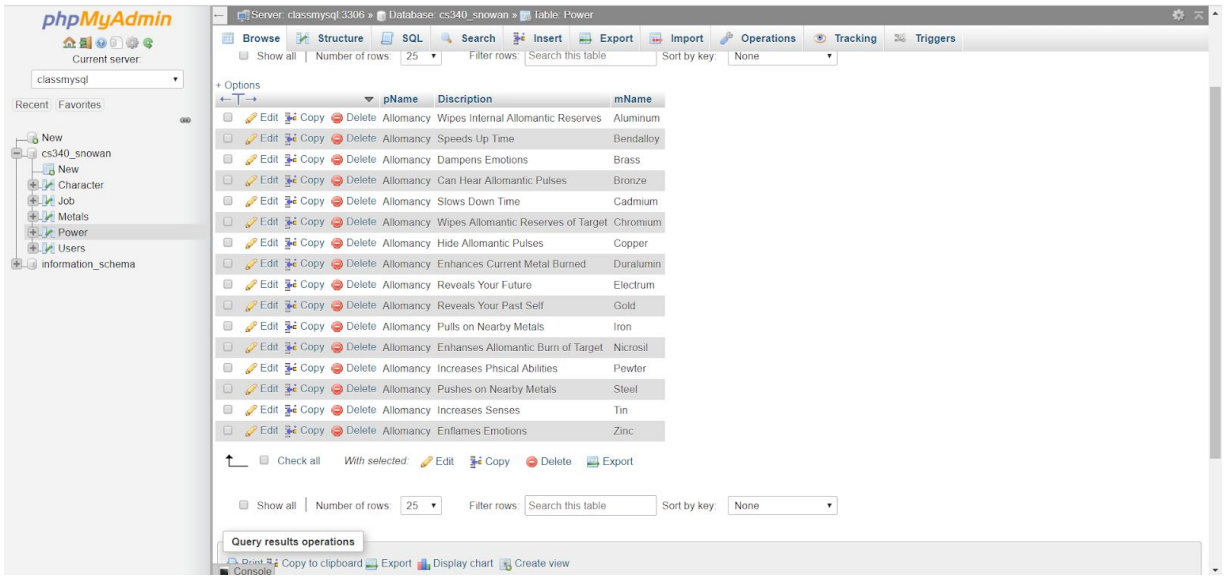
- **Metals -** The different Metals within the Mistborn universe. Metals are sorted by what powers they enable the user that burns the metal, as well as its effect on the target.
  - **mName -** Name of the metal.
  - **Group -** Categories based on what the metal enables the user to do.
  - **Effect -** Whether the allowed power has an internal or external effect on the target.



- **Job -** The different Jobs that curtain Characters may have.
  - **jname -** Name of the jobs.
  - **mName -** Name of the metal associated with the job.

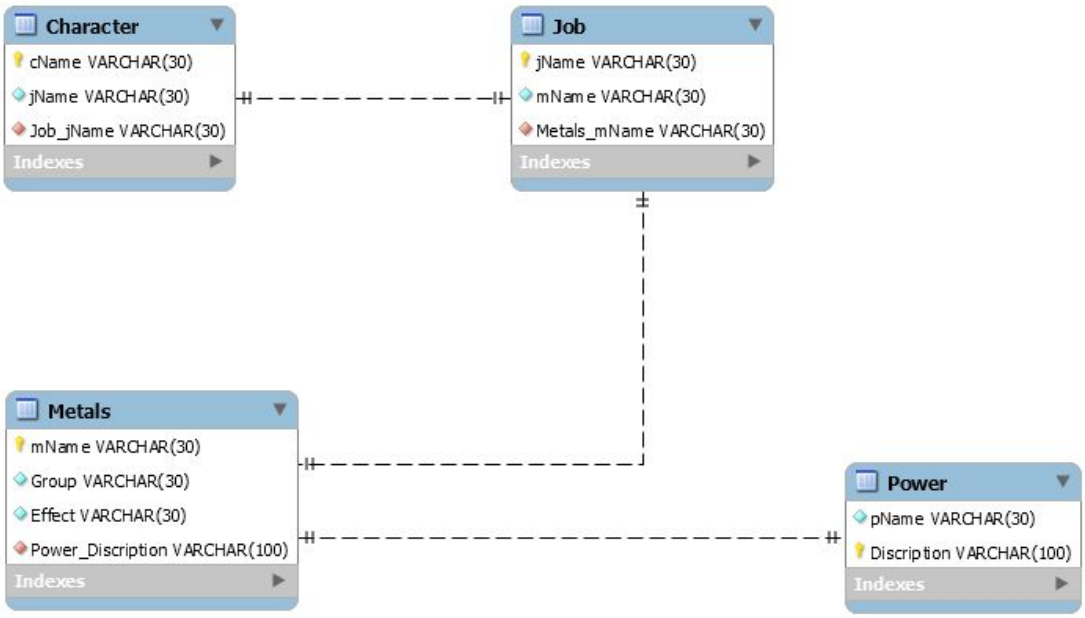


- **Power -** The different powers gained within the Mistborn universe based on the metal used.
  - **pName -** Name of the power.
  - **Description -** What the combination of power and metal enable the user to do.
  - **mName -** Name of the metal being burned.

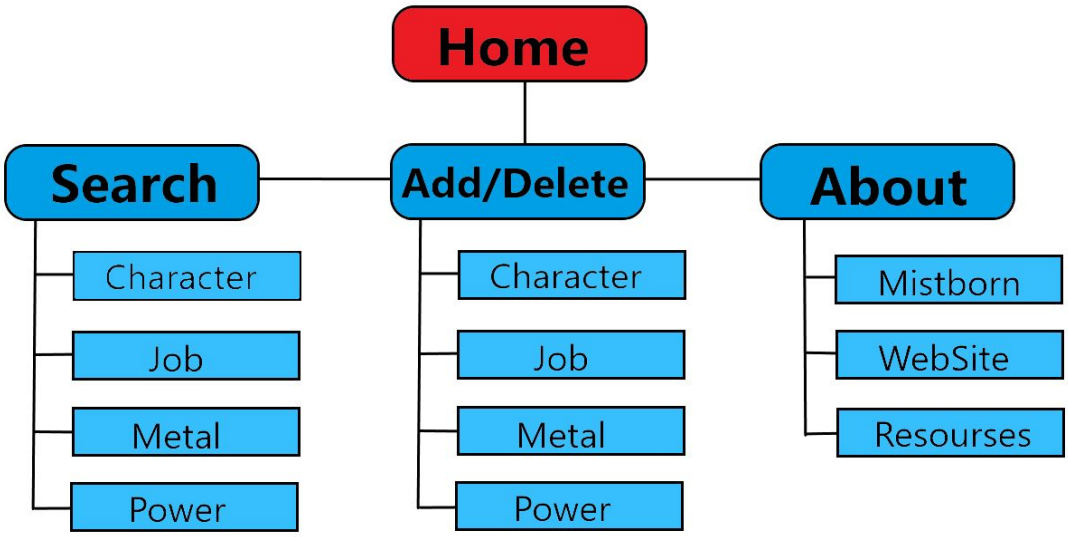


Database Design:

There is a one way relationship between Character and Job, Metals and job, and finally Metals and Power. This keeps the DB up to date as data is changed.



Website Design:



From the Home page the user will be able to go to three different pages, Search, Add/Delete, and About. In the Search page the user will be able to look up specific characters and associating information about them. There are four categories that the user may search for: character, job, metal, and power. Each, when clicked on, will populate sub categories for the user to put info into such as name of metal, or job title. From there the web application will apply a search of the database for the information you provided from the category they selected. An example of the sql code is as follows:
$sql = "SELECT * FROM `Category chosen` WHERE `subcategory` = '$input from user'";
After Searching it prints all the found info in a textbox on the lower part of the page.

From the Add/Delete page the user will be able to upload new info to the database or delete info from the database. The page provides 4 separate areas each dealing with an individual table: character, job, metal, and power. The user may fill in the textboxes then click the add button or delete button. From there the web application will check that all textboxes are filled out, if not it will send an error, then will proceed to insert or delete from the database. The sql code is as follows:
Insert:
$sql = "INSERT INTO `Table Chosen`(`Table Values`) VALUES ('$Information from the textboxes')";
Delete:
$sql = "DELETE FROM `Table Chosen` WHERE `Table Values` = '$Information from textboxes';

Finally the user can access the About page that will give a summary of the mistborn universe, where to learn more about the universe, how the website works, and resources that helped me along the way.