# Cryptocurrency Website

(https://cryptoalexhall.herokuapp.com/)

Alex Hall

1.SQL file to create database is CryptoDB.sql

2.SQL commands file is InsertData.sql

My website is broken up into six different php files:

- database.php
  - This file is used to connect to the heroku postgres server using the environment variable "DATABASE_URL"
- index.php
  - This is the landing page for the website that contains a list of the top coins sorted by Market Cap(Price * Current Supply)
    - This table is retrieved through a query with the SQL query:
      SELECT c.Symbol,c.Name,c.Url,c.Max_supply,c.Current_supply,p.Price FROM coin c, current_price p WHERE c.Symbol = p.Symbol AND Purchase_Time = (SELECT MAX(Purchase_Time) FROM current_price p2 WHERE p.Symbol = p2.Symbol ORDER BY (c.Current_supply * p.Price)=0, (c.Current_supply * p.Price) DESC
    - Clicking on an item in this list will take you the coin.php page with the information of the coin you are using.
  - In addition, you can change the sort of the table by click on one of the headers(Symbol, Name, Market Cap,...), which changes the "ORDER BY" portion of the SQL query.
  - There is also a search function in the navbar on all pages which allows you to search for a coin and takes you to the coin.php page specific to the symbol you input(ex: BTC)
- coin.php
  - This page gives you information on the coin, team members and recent trades.
    - Clicking on the coin name will take you the coins web page.
    - The SQL query for this information is changed based on the parameters passed in the URL:
      SELECT t.Fname, t.Mname, t.Lname, t.Position, t.Yrs_experience FROM team_member t, coin c WHERE t.Symbol = c.Symbol AND c.Symbol = '" . $_GET['symbol'] . "' ORDER BY t.Yrs_experience DESC
  - If there is no coin based on what you searched you will be given a message saying "There is currently no coin with the symbol, XYZ" and given a list of all the coins available sorted by Symbol.
    - SQL statement for table is:

> SELECT c.Symbol,c.Name,c.Url,c.Max_supply,c.Current_supply,p.Price FROM coin c, current_price p WHERE c.Symbol = p.Symbol AND Purchase_Time = (SELECT MAX(Purchase_Time) FROM current_price p2 WHERE p.Symbol = p2.Symbol) ORDER BY c.Symbol

- query.php
  - Hosts the ability of retrieve all trades based on 4 parameters, Coin symbol(s), exchange(s) their listed on, minimum value of coin(at trade), and maximum value of coin(at trade)
    - This is a complex search that intakes values and creates a new url based on parameters and sends you to results.php
  - In addition the input fields are querys that retrieve all the list of coins and list of exchanges
- result.php
  - This page will give you the list of transactions you identified in query.php
    - The query is built through the parameter lists which is:
      - Coin[], exchange[], Qmin, Qmax
    - The SQL statement is much more complex and complete through forloops and if statements you can see this code from line 47-79.
- admin.php
  - This page will allow you to log in with the password "**comp163**", the password is not hardcoded into the website and is reachable through the database.
  - Then you are prompted with two options a form of queries that can insert, delete or select specific tables and a raw query tool that can be used in any sql form.