

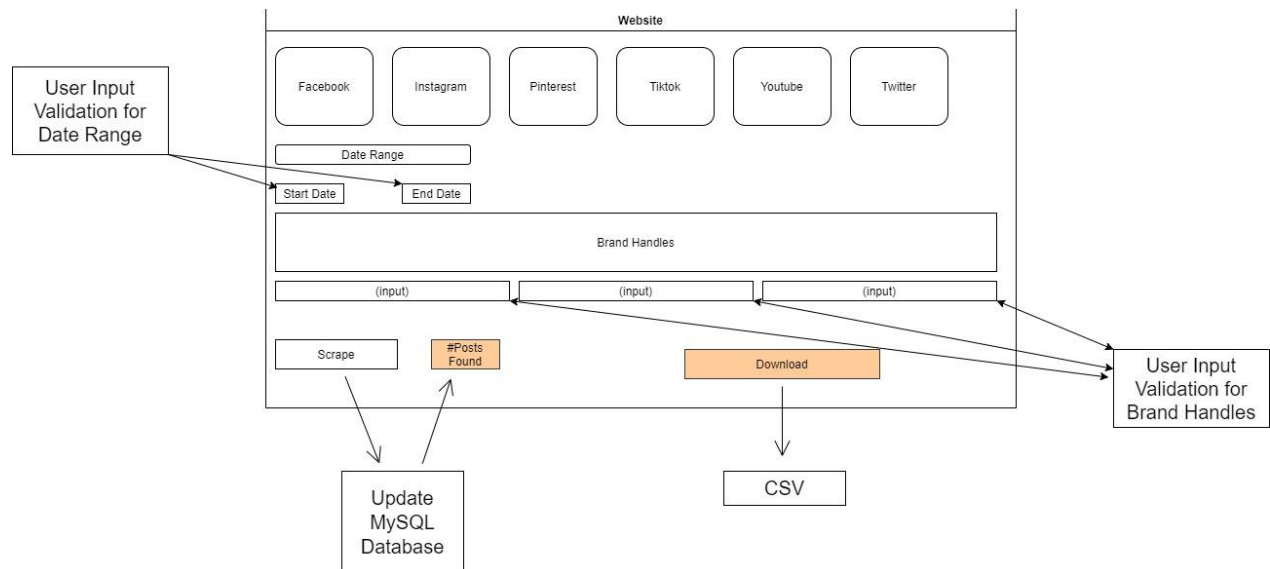
Design Document

Functional Description

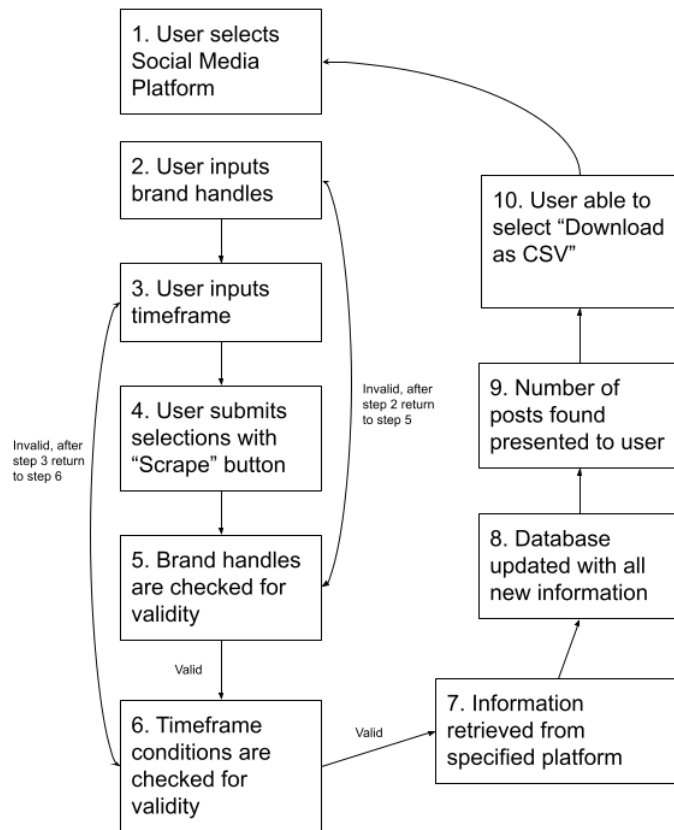
The Social Media Comparison tool utilizes the Python frameworks BeautifulSoup and Selenium to web-scrape 6 different social media outlets. Twitter, Facebook, Pinterest, TikTok, Instagram, and YouTube all publish open-source information related to various statistics regarding each of their respective websites. This open-source information includes likes, dates, comments, shares, view counts and many other statistics. These statistics are gathered using BeautifulSoup's HTML parser and Selenium's WebDriver and used to correlate up to two brands marketing statistics to one another.

The tool is hosted using Amazon Web Services and exists as a website. Users provide brand "handles" for the social media website they would like to analyze, and the web-scraper returns the corresponding data based on the social media outlet. In addition to brand handles, users provide a date range such that the web-scraper will only gather data that exists within the specified range. Lastly, the returned data is stored into a CSV file and a record is created in a MySQL database, keeping track of the web-scraped data.

User Interfaces



Data Flow



Proposed Solution

Brandy, a recently graduated marketing major with little to no computer skills will use the Social Media Comparison tool. The user interface will be very simple for Brandy to use. Once the input (brands, social media platform, and timeframe) she has entered are validated, the information will be scraped, the database will be updated, and the webpage will be updated to show Brandy that information was successfully retrieved Brandy will be able to see all the retrieved information by downloading a CSV file or querying the database