**CS 122 Project Proposal**
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**Summary of project**
In this project, our group will build a database of current and upcoming art exhibitions at various museums in Chicago. We want to search exhibits with filters such as keyword, artist name, location, date, etc. In order to search for artist names and keywords, we intend to implement natural language processing.

The data we will use will be scraped from the following museum websites. Each group member will scrape two of the websites:

http://www.artic.edu/ (Casper Neo)
http://oi.uchicago.edu/ (Casper Neo)
http://mcachicago.org/Home (Renee Cai)
http://www.renaissancesociety.org/ (Renee Cai)
www.nationalmuseumofmexicanart.org/ (Cynthia Mao)
https://smartmuseum.uchicago.edu/ (Cynthia Mao)

This information will be stored in SQL tables.

Our web interface, built in Django, will take in a keyword search, inputted by a user. This sends a JSON file to our program, which will generate a query that returns a list of museums with relevant exhibits. These museums will also be shown by location on a Google Map.

Interesting new things we will implement to our project are:
- Natural language processing to identify keywords and artist names
- Django applications package for web interface
- Google Maps API to show locations, maybe distance analysis

**Timeline of events:**
- Feb 24 - Feb 4: Complete web scraping to return text for each exhibition
- Feb 4 - Feb 14: Complete code to organize the data
    - Find keywords
    - Build tables for locations, artists, exhibit name, exhibit dates, etc.
- Feb 8 - Feb 26: Build web interface
- Feb 26 - Mar 3: Integrate Google Maps API
- Mar 3 - Mar 7: Make final modifications and be able to present in class
- Mar 7 - Mar 15: Submit program