SI507 Final Project Proposal

## **Final Project Name:** Hearthstone deck analyze

**Logline:** A program that lets a user to choose a hero of hearthstone, and then the user will see top 10 favorite decks and can choose to see a histogram of the score of each deck, after the user choice one of these deck, it will show the crystal barchart, attack line chart and health line chart and pie chart of race composition of all the cards in the deck using plotly chart.

**Data Source:**

1.Firstly, I will crawl all the decks of each hero from [http://www.hearthstonetopdecks.com/deck-category/deck-class/](http://www.hearthstonetopdecks.com/deck-category/deck-class/(+hero)) and add hero to this baseurl. for example, like <http://www.hearthstonetopdecks.com/deck-category/deck-class/druid/> For this page, there are all the decks that could be used by this hero, and there is a score number beside each deck name to show where this deck is popular.

2.Then I will rank them to find top 10 favorite decks of each hero. And crawl each specific deck composition and get each card’s name and kind of the card(classic or neutral),, for example, like <http://www.hearthstonetopdecks.com/decks/zarathustras-cthun-spiteful-druid/>

3. After that I will crawl each card of the deck to get more information. For example, I will crawl <http://www.hearthstonetopdecks.com/cards/enchanted-raven/> this druid’s card to get the mana cost of it, attack value and health value and etc.

**Data source challenge score:**

I will crawling [and scraping] multiple pages in a site you haven’t used before(As I describe above). So the total challenge score is 8.

**Data Presentation:**

1. Description:Present the histogram of the score of the 10 favorite decks of each hero

Tool: Plotly - Histogram

1. Description:Present a bar chart of crystal usage of classic and neutral card of each deck

Tool: Plotly - Bar chart

1. Description: Present a line chart of attack and health of each card of each deck

Tool: Plotly - Line Chart

1. Description: Present a pie chart of the race composition of all the cards in the deck

Tool: Plotly - Pie Chart