

Assignment #1: Social visualization with behavior logging.**Task:**

- (a) Create a website permits account creation and log in;
- (b) After the account logged in, display the **user profile**, which should include the account information (account name & log in history); Additionally, user can freely link to the page “stackoverflow tag=java”
<https://stackoverflow.com/questions/tagged/java?sort=frequent&pageSize=15>
- (c) Log the interactions upon the usage on the pages. (i.e. click, post, answer, comment, bookmark, thumb up/down, scroll to read, mouse movement trajectory, etc...)
- (d) Explore **the logged behavioral data offline**. Design **an interactive social visualization** on the same page, to explore and discover facts and patterns. You are free to transform the data, but you can't import other external data. You are free to use any scripting language any tools. You are not required to visualize all the variables in the dataset, but at least three behaviors have to be visualized. (Hint: You may not need to visualize all actions)
- (e) After implementation, you should interact with your visualization to explore the data and attempt to find patterns. List your analysis results and findings in the same web page of your visualization/app.

Requirement:

- Create at least 3 accounts (login: aaa, bbb, ccc; pwd: 123), you may assume these 3 accounts will not forget their passwords.
- Each account will perform a series of different behaviors after linking to stackoverflow java page.
- whatever you do, you need to log the user behaviors including at least 5 types of distinct actions with timestamps and logged in a persistent data layer (files or database)
- Answer the question “*Why do you decide to log these actions?*”, display it anywhere in the **user profile** page.

Evaluation:

- Account creation/log in/log out page (20%)
- Three accounts setup, including different behavior logs (10%)
- User profile page and link to Stackoverflow java tag page (20%)
- Persistent data logs (10%)
- Behavioral interaction logs (10%)
- Interactive Social Visualization (10%)
- Why do you decide to log these actions? (10%)
- Analysis & Findings (10%): You must list at least 3 bullet points of pattern findings from your interactive visualization (3pt), then explain the patterns in texts on the same page (5pt), describe your steps to find the results and why does it matter (2pt).

- **Bonus: (5%)** Be creative with the user behaviors on the webpages, think outside the box (i.e. facial expressions during browsing) CMU OpenFace API
<https://cmusatyalab.github.io/openface/>

Submission:

1. This is an individual assignment.
2. Your submission should be executable online and offline. You may indicate a link when submitting via Canvas, and enclose a zip file for all the source code. Entry page must set as **index.html or clearly noted in the submission.**
3. Zip file must be named as Assign1-YourFirstnameLastname (i.e. Assign1-SharonHsiao)
4. Submit it through Canvas.
5. Deadline: **Thursday Sep.20/2018, 15:00pm.**

Your assignment will be discussed in class or on blog.