

Assignment #5

Assignment Due Date: 5/3/19 by 11:59pm

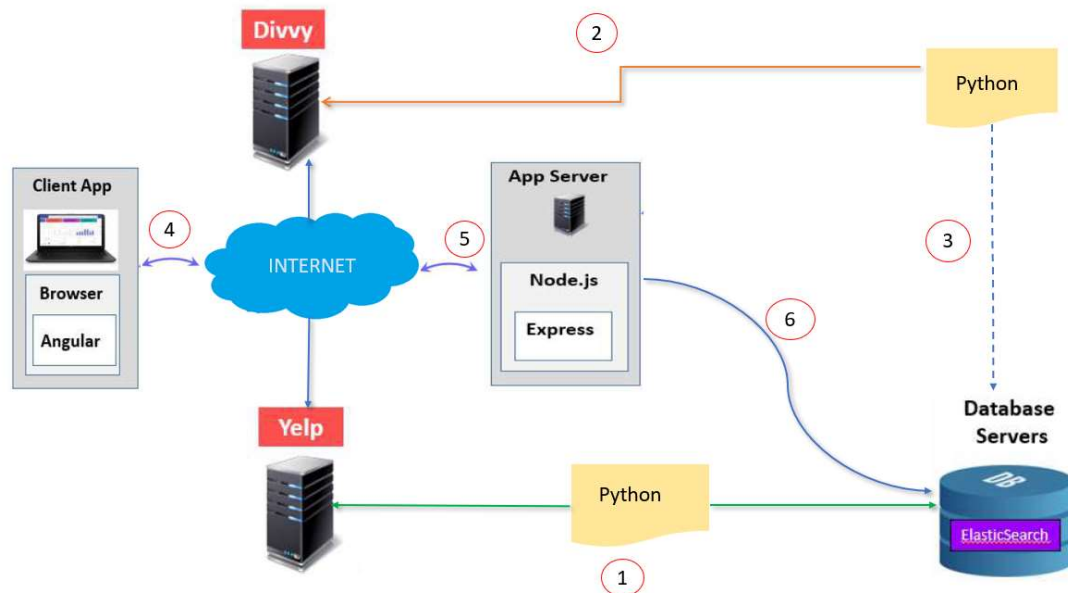
Assignment Deliverables:

You are required to submit a SINGLE WinZip file that has the following deliverables :

1. Documentation for the Angular Components that you created to draw the Line chart
2. Source Code
3. Output report that has ALL captured screen-shots of your assignment run saved in OUTPUT.pdf
4. Video recording of 10 minutes as a demo for the run of your assignment using <https://screencast-o-matic.com/>

Post your assignment as a SINGLE WIN-ZIP on Blackboard.

Architecture/High-level Design:



Requirements:

Refine your Assignment #4 implementation of ChicagoSocialHub to achieve the following :

- 1) Use Python (you need to REMOVE logstash in this assignment) to log the periodic Divvy stations status on ElasticSearch server. Your log MUST accumulate data of at least 7 days; your ipynb script will write data to ELasticSearch directly.
- 2) The periodic Divvy heart beat will be stored on PostgreSQL server
- 3) Your application MUST REFINE your implementation Assignment #4
- 4) You must provide the button to view real-time/log **data for Divvy** stations (hourly, daily, weekly) by **line chart**
- 5) You must provide the button to view real-time/log data for Divvy stations (hourly, daily, weekly) by line charts with Simple Moving Averages (hourly and daily SMA) on the SAME chart
- 6) You must provide the button to view **reviews** for **Yelp** by **bar chart**
- 7) You must provide **Divvy HeatMap** button to display the **ANIMATED HeatMap** for the real-time available Divvy dock

stations for the entire City of Chicago Divvy dock stations for the past 1 Hour (default value for **Time-Range**). The default view (**Time-Range**) is 1 hour , and the user shall be provided with **Time-Range** drop down list for selection of time for 1 Hour, 24 Hours, or 7 days.