**ELK integration with our chat application**

Installation of elk(elasticsearch, logstash,kibana) setup on our system.

Step1: Only Prerequisite is to download Java JDK 11 or above.

Step2: We download the elasticsearch, logstash and kibana zip files for windows from this website <https://www.elastic.co/downloads/>

Step3: Extract the all three folders.

Step4: Open the elasticsearch/bin folder and run elasticsearch.bat command to start the proxy.

It will be started on localhost:9200.

Step5: Open the kibana/bin folder and run kibana.bat to start the kibana proxy.

It will be started on localhost:5601

Step6: Configure the logstash.conf file with proper settings(Mainly specifying the path to the logs file and naming an index). We have defined it in the logstash.conf file in the repository.

Step7: Open the logstash/bin folder and run logstash -f logstash.conf command

This is to connect the logstash with the kibana.

Step8: Open the kibana at localhost:5601.

Step9: Click on the Management Tab on the left hand side bar.

Step10: Click on create an index, type the index name that you have already specified in the logstash.conf file. This will create an index.

Step11: Then go to ‘Discover’ Tab and select the index created earlier. The page will show you all the logs that were present in the console.log file.

Step12: Go the Visualize Tab to visualize some the logs methods like pie chart, histogram etc.

We have demonstrated with the pie chart.

Step13: Click on filters, then select the filter term and then select the filed as ‘message.keyword’ and ‘Orderby’ as metric:count and set the no of logs you want to show pie chart from the size field.And click on run, a pie chart will be created holding different sections of different messages.

**Note: We have attached the pictures of the process in the github repository under elk\_images folder.**