INF 551 Project Midterm Report
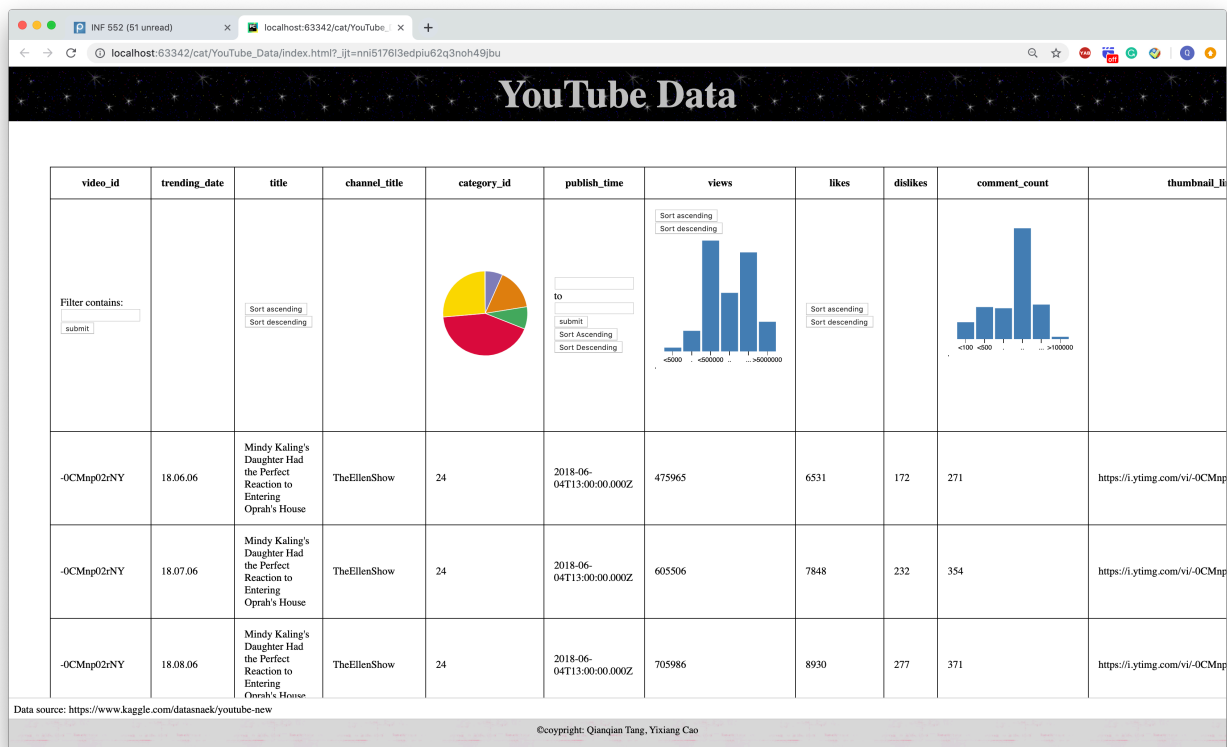## Cao Yixiang   SID: 4246043356
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I. Checklist:

Items in Timeline	Status
Show all the data on dashboard	Completed
Web frames	Completed (will be improved)
Sorting numerical attributes	Completed
Sorting non-numerical attributes	Completed
Filter of numerical attributes	Ongoing
Filter of non-numerical attributes	Ongoing
Visualization(histogram)	Complete
Visualization(pie chart)	Complete
Visualization(world cloud)	ongoing

II. Screenshot

III. Milestone Checking

According to the Gantt Chart in our project proposal (figure 1), we planed to realize all the basic functions excepting the world cloud visualization of video's tag. Checklist above shows that we have basically completed our expected plan.

However, some functions such as filtering are still in progress. Since we have set aside enough time for debugging when we planed, we are confident that we can finish it on time and with high quality.

tasks	week 5	week 6	week 7	week 8	week 9	week 10	week 11
frame and dataset	web frame attributes						
sorting function		sort numerical attribute	sort nonnumerical attribute				
filter function				filter numerical attribute	filter nonnumerical attribute		
visualization				stastical histogram	pie chart	word cloud	
other features							other features

figure1. Gantt Chart in Project Proposal

IV. Challenges

The process of building dashboard and implementing functions is certainly not straightforward. We have also encountered many challenges, some of which have been solved, and some of which are still need to be solved.

In the process of uploading data on firebase, because the "description" attribute in our dataset usually goes to a very long string which containing various types of char. This property makes online database refused to accept our dataset. What's more, the numerical data were represented as string type in our dataset, which always caused error in filter. To Solving these problems, we used python to reprocess dataset before we uploading it on firebase.

What we are trying to solve now is the fuzzy search of strings. We have implemented a search function using 'equal', but it is certainly not enough for filters. So we will try our best to solve this problem in the remaining time of this semester. What's more we still have not found a descending sorting function on firebase library, so we will ask for TA's help.

V. Discussion

During this project, we are more familiar with the JavaScript, HTML and CSS languages,. And we are more skilled at calling firebase, using it as a strong data processing tool.