EE / CprE / SE 492 – Sddec18-16

Use machine learning to predict relevant support content based on historical user interactions.

Week 6 Report
October 22, 2018 – November 5, 2018

Team members
Erin Elsbernd: Machine Learning Lead
Ram Luitel: Project Manager and Software Architect
Faizul Jasmi: Communication coordinator
Taizhong Huang: QA Lead
Christian Chiang: Cloud Tech Lead
Khoa Bui: Webmaster and DB lead

Summary of Progress for the Past Two Weeks.

In the last two weeks the dynamo table for the finalized cleaned data was finally created from the data giving to us from Workiva. Unfortunately the data is not complete and might have just been a duplicating from the old data. The cleaning lambda has been created from the table that was made from the clean data.

Pending Issues

The new data provided by the client was discovered to be duplicate data and not new. Therefore, any new progress made with new data with the models should be thrown out because of these data issues. We will work with the client to hopefully resolve this issue. One big issue we are still having is the lack of data from our client, Workiva. We have contacted our client with this issue and he has promised to bring more data.

Plans for Upcoming Reporting Period

For the upcoming period we will be integrating all the parts together, that includes, the architecture with the data cleaning lambda and the models finally ported to a full python script. This will complete the project as the desired output

Individual Contributions

Team Member	Contribution	Biweekly hours	Total hours
Erin Elsbernd	Worked on converting notebooks to .py files. Discovered the new data provided by client was duplicated data we received last spring.	4	19
Ram Luitel	Worked on K-Nearest Neighbors model to improve the model prediction but it looks like event transition is a non-deterministic finite state machine, so it really difficult to create title ID based entirely on the event transition	3	19
Faizul Jasmi	Found another error in Lambda .csv reader. Worked with Khoa to fix the error. Got all column correctly written	3	19
Taizhong Huang	Tried to convert other .ipynb models to .py, but failed.	2	18

Christian Chiang	Collaborate with Khoa and Faizul to write Lambda to read data from csv file and store dynamo table for the finalized cleaned data.	3	21
Khoa Bui	Worked on Lambda to write csv data to Dynamodb. Now we have Lambda ready for model to read data from	5	18