Danny Fritz and Conor Lorsung

Project 3 – ARM

Data Driven Intelligence

April 12th, 2018

**Overview:** For project 3, we decided to program this project in Java. We were able to conceptualize the algorithm of the Apriori algorithm by hand together as well as tackle the implementation and the programming as a team. We were able to effectively do this by keeping a repository for the project on Github for us both to receive changes and edit the code on our own individual time. We were able to meet up quite frequently over the past couple of weeks as well to brainstorm and pair program together. For parts of the project, we tried to split up the responsibilities of the coding to try and ‘divide and conquer’ to manage the time-box of our deadline on days that we were unable to meet. In the beginning of the project, Danny implemented the main method to efficiently scan in all of the files and create an ArrayList to be passed to the apriori() method. Conor came up with the idea to create an inner class called *Transaction* so that we could easily store the items within the transaction as well as the support for each transaction in a singular object. This made it a lot easier to work with the data and made conceptualizing the programming much easier. Although this was somewhat successful, a lot of the implementation proved to be a bit too difficult to tackle single handedly. For the most part, both of our strengths and weaknesses balanced out nicely for us to finish the project with ease.

**Work Percentage:** Danny – 50%, Conor – 50%

**Data Visualization:**