Individual Contribution Report

PARTH BHATT-TEAM 61

1. Reflection:

My overall role in the team development process was to bring the whole team together by setting up the Slack Channel for our team and organizing initial team building Zoom meeting to understand and know the strengths of each team member.For the team, I worked partially on Hotzone Analysis and developed the discussion on article “Running Database in Cloud Era” and System Documentation report entirely.

2. Lessons Learned:

I would like to share a tip that I learned in my initial year of programming, which was used during the development of this project, is use of functions. The functions help to clean up your code as you are not rewriting that code again and again to run the same algorithm. If an error occurs, it can be easily fixed as you just have to correct the algorithm at the function. I used that learning at many places during this project. For future design projects, I would like to keep the importance of commenting on your code in mind as it helps others and sometimes yourself in debugging any portion of a code at a later time. From commenting on the code, I mean adding a paragraph for each function explaining the input and output side of the function and the algorithm used to define that function and commenting on each line as necessary to explain what is accomplished using that particular line of code.

Another Lesson Learned throughout this course, was to use the resources provided on the internet to understand any theory topic explained during this course and attend the live events as they were really helpful in explaining any questions that I was having during that entire week.

3. Assessment/Grading:

As this is my first time working with Apache Spark, I watched the Youtube videos to learn more about the libraries and its compatibility with SQL and Python. While I was working on the hot zone analysis, I was stuck at creating the tempView. I used the Apache Spark SQL Programming Guide to understand how to use the tempView. Also in writing the System Documentation Report, I used Apache Spark Resources to understand each and every step used in our source code. So, I can provide accurate statements for that particular function in the System Documentation Report.From this experience, I learned that one should read any Platform's resource guide as it can easily solve the problem that you are stuck with at that particular time.

4. Future Application:

First of all, the project for this course was really helpful in understanding how big data can be used to get some analytics that can help to resolve some important questions. The skills that I have learnt in this course are all about database structure and implementation. I also learnt about the Amazon Web Services Products such as EC2 and DynamoDB. Looking at the advantages of Amazon Web Services, I would definitely use those in my future project over other products if needed. The in-depth knowledge of Apache Spark with SQL Language was really helpful in implementing Big Data Analytics as in this era, data analytics is one of the key parameters for any organization to succeed. In school, I learned JAVA and throughout this course we were using Python, it was definitely a learning curve for me in the beginning of this course. But, after working on a couple of assignments it was relatively easy to understand the language. The database Principles taught during this entire course will be used in future in the workplace to teach an engineer, who doesn't have any proficiency in database development. The live events throughout the course were engaging and informative in terms of participation from my fellow students and the professor and her staff. I would recommend this course to my fellow ASU students because the teaching faculty and knowledge gained from this course is immense.