

Individual Contribution Report

PARTH BHATT-TEAM 8

1. Reflection:

My overall role in the team development process was to analyze the data provided and develop the visualization to answer the customers ask .For the team, I worked on creating visualization for ethnicity/race and native country and also worked on the System Documentation report particularly on the Purpose and the writeup for the ethnicity/race and native country visualization. Participation in the project group meetings was equally important as the discussion to complete the project accurately and in a timely manner is also a crucial part.

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 comments. I would like to keep the importance of commenting your code in mind as it helps others and sometimes yourself in debugging any portion of a code at a later time. By commenting on the code, I mean adding the descriptions of each library and commenting each line stating about the results that are produced by executing that particular 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 JupyterLab, I watched the Youtube videos to learn more about the basic functionality. While I was working on the visualization for native country, I was stuck at creating the

GeoVisualization to understand the data. I used plotly express library documentation to understand how to use the scatterGeo to develop geovisualization map to understand the data in terms of native country of individuals . Also in writing the System Documentation Report, I used Plotly express Library documentation 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 libraries 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 data visualization and developing some useful insights from the data provided . I also learnt about how to use the JupyterLab and using libraries such as pandas and plotly express. Looking at the advantages of using data visualization techniques to understand and analyze data, I would definitely use those in my future project and will create a GUI where a user can generate different graphs for underlying data without any programming knowledge. This GUI can help analysts to generate knowledgeable insights from the data at ease as data analytics is a key part of today's world . 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 data visualization 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 analyzing the data using graphs and plots. 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.