**Final Project- Creating a Package**

Greetings everyone,

In this final project, I created a package named "myfinalproject" with different functions, documents and sub-documents by using simple and easy functions. These days, I am into music so, I created a "dataset" based on my music interest and used some functions to that dataset which I learned in my R Programming class. I used very simple functions in my package.

->As first step, I created a new package "myfinalproject" and did all my functions in sub-files created by using "use\_r()" function. I created my sub-files called 'my\_project.R', 'dataset\_songs.R', 'simple\_math.R'.

Description of my package:

Package: myfinalproject

Type: Package

Title: This package creates the functions of the numeric and charateric summary to the vector and created a dataset

Version: 0.1.0.9000

Author: Jahnavi

Maintainer: The package maintainer <jmandhadapu@usf.edu>

Description: Using different functions to create a vector and a dataset.

    Use four spaces when indenting paragraphs within the Description.

License: CC0

Encoding: UTF-8

LazyData: true

RoxygenNote: 7.2.3

Suggests:

    knitr,

    rmarkdown,

    testthat (>= 3.0.0)

Config/testthat/edition: 3

VignetteBuilder: knitr

->As second step, I installed required packages in rstudio to run the code. I used different functions like plot(), head(), summary(), add\_three(), roxygen2, Vignette builder, test() to test the function of my package. After getting our desired output, I used the function called load\_all() to load all the functions if any case I missed them. I attached the bar plot pictures in my GitHub repository.

->As my next step, I created my own dataset named "Dataset" based on my own interest in music and I imported that dataset by using "Import Dataset" to the package. In this I used mean,median,mode functions, summary of the data, rows and columns of the data, dimensions of the data, RMarkdown and Visualization process to this dataset. I posted every code in my GitHub Repository and I am attaching my GitHub Repository.

-> Overall, I learned many interesting and exciting functions to write and run the code of my Project. This gives eager to learn more and more about the R Programming Language. Building own package without any references and getting the desired output is the exciting part in my Final Project. Thank you Professor for all your chapters, modules.

Thank you.