

Team Dynamics Document:

- Weekly meeting time outside of class:
 - Everyone is available on weekends, but Sunday is preferable
 - If in-person:
 - UT library
 - Else Discord call
 - Check in with one another twice a week on non-class/meeting days
- How will we communicate?
 - P: Discord
 - A: Text Messages
 - C: Email
 - E: In-person @ UT Library
- Technologies used:
 - Discord, [Julius.ai](#) (program that is similar to what the customer wants, for inspiration), React, Tailwind, JSON/Markdown, OpenAI, Docker, plumber
- What other expectations do you have of one another?
 - To be responsive to the ideas of the group and to learn new ways of approaching a problem
- How will you keep track of what people are working on what parts of the project?
 - Either atlassian or excel spreadsheets
- Team Structure
 - Roles
 - Frontend UI Developer: Dhwani
 - Frontend and Pedagogy Developer: Anthony
 - Backend API Developer: Khalil
 - Backend AI and Integration/Testing: Amanda
 - Knowledge Base Curator/DevOps: Darwin
 - Team Lead and R/Statistics Specialist: Jordano

Project Requirements:

Current Understand of the requirements of the project:

- Create software that makes it easy for a political science student to generate code that runs a statistical regression on some given data
- Requirements:
 - Ease of Use
 - Students may not know R so the interface must be simple and should guide the students
 - Education
 - Want the students to understand the “why” of the outputs, not the outputs themselves. NEED tooltips and explanations
 - Code Visibility
 - Must display the exact R code used so students can learn and reuse code
 - Statistical Clarity
 - Want the students to understand the context of their data via p-values, coefficients, correlations, etc.
 - Data Types
 - Should automatically detect the type of data: nominal/ordinal/ratio/interval, along with explanations (should also have the ability to manually override selection)
 - Outputs
 - Tables, plots (types of plots), and the downloadable R script, marginal effects plots
 - Make sure to have libraries imported features
 - Scope
 - Want to focus on common regression models (OLS, logistic, multinomial logistic, multinomial, ordered, ordered logistic, Poisson, negative binomial for starters)
 - How to interpret these models
 - Type of variable (nominal, ordinal, continuous, etc.), may not get the regression required for the variable
- Requirements simplified:
 - Upload csv/xlsx
 - Detect variable types
 - Suggest regression model (OLS, Logistic, etc.)
 - Run curated R templates with plumber

- Show tidy results with glossary explanations
 - Run locally via Docker
- Constraints/Considerations:
 - Students will have limited technical background
 - Data sets will come from excel or csv
 - Tool needs to be able to run in browser, so no complex installations