

STOR 320/520 Final Project I

10/04/2022

Introduction to Project

Process	Deliverable	Points
Data to Questions	Project Proposal	10
Questions to Investigation	Exploratory Data Analysis	20
Investigation to Modeling	Final Written Paper	40
Modeling to Communication	Final Presentation	30

Introduction to Project

- Final Project Score

- 30% of Course Grade
- Mostly Objective:
 - Follow All Rules
 - Meet All Deadlines
 - Well-Defined Rubrics
- Partially Subjective
 - Interest Level
 - Verbal Communication
 - Written Communication
 - Grammar and Spelling
- Members of the Group Will Receive Approximately the Same Grade
- 5 Points of the Final Written Paper Based on Peer Scoring

Introduction to Project

- Four Roles
 - Randomly Assigned to Research Groups of 4 or 5
 - Group Assignment: [google sheet](#)
 - Each Part of the Project Will State the Expectations of All Members of the Group According to Their Role

Four Roles

- Role 1: Creator

- Schedule a 5 Minute Meeting with the instructor on Oct. 25 (3:30 pm – 5:00 PM).
- Verbally Explain the Dataset(s) Your Group has Chosen
- Verbally Communicate the Initial Questions Your Group Plans to Pursue
- State the Roles the Other Members Have Chosen
- **Lead Designer** in Slides for Final Presentation

Four Roles

- Role 2: Interpreter

- Schedule 8 Minute Meeting with your Lab instructor in **Lab 10**
- Briefly Discuss Any Interesting Results from the Initial Questions
- Discuss Your Group's Findings on The Follow-up Questions
- Explain Which Areas Your Group Will Focus on For the Final Presentation and Paper
- Responsible for Watching Practice Presentation Before Presentation Day
- Groups of 5/6 Should Have 2 Interpreter

Four Roles

- Role 3: Orator(s)

- Deliver a 5-7 Minute Presentation on the Day of Final Exam
- Use a Slide Show
- Explain the Data You Used
- Show Visuals/ Tables to Illustrate Discoveries
- Discuss Details of Methods Used For Questions Your Group Pursued Deeper After the EDA
- Summarization of Written Paper
- Groups of 5/6 Should Have 2 Orators

Four Roles

- Role 4: Deliverer

- Proposal, EDA, and Final Paper Will Follow **RMarkdown Templates**
- Ensure that These Parts are Organized According To Templates
- Ensure that These Parts are Free of Grammar and Spelling Errors
- Ensure that These Parts are Clearly Explained and Hit All Requirements
- Submit Slides One Day Before Final Presentation Date
- Submit Final Report Before deadline (Dec. 03) in HTML/PDF

Four Roles

- Abbreviated Roles
 - Creator (C)
 - Interpreter (I)
 - Orator (O)
 - Deliverer (D)
- For Each Part, There Are Clearly Defined Expectations for Each of These 4 Roles

Part 1: Project Proposal

- Select Data From Online (CIOD)
 - Must Contain At Least 5 Variables (Non-Identifier)
 - May Be Divided Into Multiple Data Sets (Requires Joins)
 - At Least 2 Variables Must Be Categorical or You Must Have a Clear Idea on How You Will Treat Numerical Variables as Categorical
- 2 Initial Questions From Each Member (CIOD)
 - Innovative Thought
 - Non-Trivial (Not Obvious)
 - Groups of 4 = 8 Questions
 - Groups of 5 = 10 Questions
 - Groups of 6 = 12 Questions
- Delegate Your Roles (CIOD)

Part 1: Project Proposal

- Template Submitted in HTML to Dropbox Folder by Due Date (Oct. 28th 11:59pm, 2022)
- Communication of Proposal (C)
 - Schedule a 5 Minute Zoom Meeting on Oct. 27th (anytime between 3:30pm and 5:00pm) – [google doc](#) to check available slots.
 - **Zoom meeting link:** <https://unc.zoom.us/j/91309625228>
 - **Have Computer With Data Ready;**
 - **Test your zoom and screen share** before joining the meeting since you only have 5 mins to present your project proposal.
 - **Information on:** Data Source; Variables Contained; Types of Variables; Questions Your Group Will Investigate and Variables of Interest; and What Roles Your Other Members Are Taking

Part 2: Exploratory Data Analysis

- Investigate Initial Questions (CIOD)
 - Divide All Initial Questions Evenly Among the Group
 - Each Member Must Create 2 Tables or Figures that Investigate Answers to the Questions Posed
 - At least 1 Table or Figure for Each Proposed Question
- Follow up Questions (CIOD)
 - Propose **4 Additional Questions** You Want to Explore Based on What You Found in Pursuit of Answering Initial Questions

Part 2: Exploratory Data Analysis

- Investigate Follow-Up Questions (CIOD)
 - Display 2 Tables or Figures Illustrating Your Attempt to Answer 2 of the Four Follow-Up Questions
- Summarize Investigation (CIOD)
 - Follow Rmarkdown Template
 - Results From Initial Questions Should Be Divided According to Each Member
 - Follow-Up Questions Should Be Proposed
 - Results from Investigating Follow-Up Questions

Part 2: Exploratory Data Analysis

- Written Summary (CIOD)
 - Paragraph 1: Describes what you learned from your investigation of the initial questions.
 - Paragraph 2: Describes what you learned from your investigation of the follow-up questions
- Template Submitted in HTML to Dropbox Folder by Due Date (Nov. 11 , 11:59pm 2022)
- Schedule an 8-minute meeting with the lab instructor during the lab session 10 (Week of Nov. 08th).

Part 3: Final presentation

- Use slides show to control your presentation within 7 mins.
- Will happen on **Nov. 22 and 29.**
- According to order [here](#), reserve your slot by email
- Slides Submitted in HTML one day before the presentation date to Dropbox Folder. Submission link:
<https://www.dropbox.com/request/zrQmyAi04GJU6d8d65v3>

Part 4: Final paper

- Due on Dec. 3 at 11:59pm
- Follow the template and instructions in dropbox folder “Final_Paper_Template”

Helpful Advice

- Project Proposal
 - Choose Roles Based Off Strengths and Availability
 - Select a Dataset That is Interesting With Many Variables (>10)
 - Pick Very General Initial Questions
 - Work as a Team to Come Up With All Initial Questions Then Split Them Up as a Group

Helpful Advice

- Exploratory Data Analysis
 - Meet to Discuss Results
 - Discuss Follow-Up Questions
 - Investigate the Follow-Up Questions as a Team
 - Discuss the Information That Will Be Written About in the Summary

Helpful Advice

- General Advice
 - Do Your Job and Hold Each Other Accountable
 - Be Prepared to Evaluate Each Other at the End
 - Read the Rubrics To Ensure You Get All Points