Final Project Submission Requirements and Rubric

These are the requirements and grading rubric for the final project submission.

The report file, which is a pdf file, must include these sections:

1. **Project title, date, names of investigators.** The project must have a descriptive/meaningful title that appears on a single line at the beginning of the report. Do not include a line with something like "Project 2", just include the project title. These fields are already defined in the template Rmd file, so all you have to do is fill them in.

2. **Project Overview:** Describe the main purpose of the report and guiding questions you will investigate. Include any specific information about the domain and what you plan to study about that domain that the audience should know to understand the rest of your report.

3. **Data and Resources Used:** Describe where you obtained data from, what variables you used, their data types and distributions. Clearly describe what the variables measure. Include plots and tables to show the ranges and distributions of the important variables- you don't necessarily have to do this for all variables, just the important ones. Do not display a raw summary of the entire dataset (data dump). Mention any modifications to the data (cleaning). Links to data sources go in the References section at the end of the doc.

4. **Analysis:** This is where you explain the methods you used to carry out the analysis to investigate the guiding question(s). State what techniques you used and what variables were included. Remember that all plots and tables must be captioned and uniquely numbered. Include a description for the reader of what your plots and tables show. For modeling, identify the independent and dependent variables if applicable. Did you preprocess the data? For example, some models may require scaled, numeric data. Make sure you describe all of the steps you have taken in each part of your analysis. State the results of your methods. For each "experiment" (fitting/testing a model), state the results via tables and/or plots. Explain what the results mean for the reader.

5. **Summary and Conclusions:** Summarize what the results of your experiments above show about what you have found about your guiding questions. State any threats to validity; any factors that could undermine your conclusions.

6. **References:** Links to data sources and any resources you used in the report. This includes any sources of information including code examples you used. You do not need to include any course material here.

Note that these main sections correspond to those in the Rmd template file. You may add subsections if you wish.

Files to submit:

A template Rmd file has been made available for your use. Submit this Rmd file and a pdf file that is the knitted version of the Rmd file. Do not submit any data files.

Your files must have this naming convention:

INFO248-project-final-partner1lastname-partner2lastname.pdf
INFO248-project-final-partner1lastname-partner2lastname.Rmd

Grading Rubric:

Submitted Files	No files submitted *0 points*	One of 2 required files submitted, or incorrect file type. *1 points*	Two required files submitted *2 points*
Submitted File Names	Incorrectly named files. *0 points*	Partially correct file names, or 1 of 2 files correctly named. *1 points*	All submitted files correctly named. *2 points*
Title, date, names of investigators.	No descriptive title, no date, no names. *0 points*	Included some, but not all of the three required fields, or title not descriptive. *1 points*	Included all three fields, with descriptive title. *2 points*
Project Overview: main purpose, guiding question(s), domain description.	Main purpose, guiding questions and domain not present. *0 points*	Missing main purpose or guiding questions or explanation of domain, or one or more of these requirements not clearly explained. *1 points*	Main purpose and guiding questions clearly stated. Domain-specific background sufficiently explained. *2 points*

Data and Resources Used: Data description.	Missing the description of data source, and variables in the data set(s) not described. *0 points*	Missing the description of data source, or incomplete description of variables in data set(s). *1 points*	Data source described– where obtained from, variables in data set(s) described with name, type, and brief description of what they measure. *2 points*
Data and Resources Used: Data distributions.	No plots of variables included. *0 points*	Only one important variable distribution plotted and explained, or two variable distributions partially plotted and explained. *1 points*	At least two important variable distributions plotted and explained. *2 points*
Analysis: steps in each analysis performed.	No explanations for techniques provided, raw model output dislayed with no explanation. *0 points*	Steps for each technique used partially or poorly explained and presented, or some techniques not fully explained. *1 points*	Steps for each technique used clearly explained and presented. *2 points*
Analysis: statistical modeling.	No modeling or statistical techniques applied. *0 points*	Only one modeling technique applied, or a techniques not applied appropriately. *1 points*	At least two modeling techniques applied appropriately. *2 points*

Summary and Conclusions.	No summary or conclusions provided. **0 points**	Missing a summary statement or conclusion, or not clearly stated. **1 points**	Clearly stated summary of results and conclusion about what analysis showed about guiding questions. **2 points**
References.	No references for material that was used or data source links provided. **0 points**	Missing references to material that was used, or links to data sources. **1 points**	Appropriate references and data source links provided. **2 points**
Entire document: plots and tables numbered and captioned.	Plots and tables are not numbered or captioned. **0 points**	Some plots and tables numbered and captioned. **1 points**	All plots and tables numbered and captioned. **2 points**
Entire document: Professional quality.	Document is not in a readable format. **0 points**	Document is somewhat poorly formatted so that readability is affected, or contains numerous typos. **1 points**	Document is well-formatted, free of typos, and completely readable. **2 points**