


Final Team Project

[Start Assignment](#)

- Due Monday by 11:59pm
- Points 180
- Submitting a text entry box, a website url, a media recording, or a file upload
- Attempts 0
- Allowed Attempts 3

Introduction


The final project for this course will assess the development of an end-to-end statistical analysis. In Module 2, you were assigned to a group by your instructor. You and your teammate(s) have worked closely to find a dataset, cleaned and prepared it for analysis, performed EDA, and produced a model. You will then produce a final technical report discussing the results of your analysis and the validity of your model. It is required that you and your team use GitHub as a code hosting platform to manage version control and collaboration during this project. It is also necessary to create and add a [README \(https://sandiego.instructure.com/courses/14112/files/1936180?wrap=1\)](https://sandiego.instructure.com/courses/14112/files/1936180?wrap=1) file to your GitHub repository. It is *recommended* that you follow the [PEP 8](https://pep8.org/)  (<https://pep8.org/>) – Style Guide for your Python code in the final project.

Project Timeline

- Module 2 (by the end of Week 2): The course instructor will group students into teams of two to three members.
- Module 4 (by the end of Week 4): Each team will select and introduce a dataset. The team representative will submit the "Team Project Status Update Form."
- Module 7 (by the end of Week 7): Each team will submit the following deliverables for the course project in the final week:
 1. **Technical Report:** One **PDF** document with your final technical report. This should describe your preparation and analysis of the data, discuss the final model selection, and describe the statistics behind your final model selection.
 2. **Team Presentation:** One 8-10 minute video presentation by **all** team members. **Do not exceed 10 minutes.** Submit one **mp4** file. This should be presented as a business presentation of your analysis to a non-technical audience. You will present your analysis and findings in a way that is understandable to any non-technical executive or business leader. This presentation should include **one slide** to showcase your collaborative efforts; you will create a presentation slide **highlighting each team member's individual names** and **their contributions** to the final project work and deliverables.

****It is critical to note that no extensions will be given for any of the final projects' due dates for any reason, and final projects submitted after the final due date will not be graded.**

Project Datasets

- You are responsible for finding a dataset for the final team project in this course. Several free data resources are provided by the [UCI Machine Learning Repository](https://archive.ics.uci.edu/datasets)  (<https://archive.ics.uci.edu/datasets>).

Requirements

- Divide the work equally between the team members for the following steps, and everyone needs to code and review the code.

For your technical report document:

- You should include the following sections in your report:
 - Introduction
 - Data Cleaning/Preparation
 - Exploratory Data Analysis
 - Model Selection
 - Model Analysis
 - Conclusion and Recommendations.
- Include an appendix with the output of your code from a technical notebook (i.e., Jupyter Notebook).

For your video presentation:

- Give an 8-10 minute presentation of your analysis aimed at a non-technical audience of business leaders.
- Each team member should participate in the presentation equally.

Project Deliverables and Submission Format

- Prepare and submit your Final Technical Report in **PDF** format on Blackboard. You will use the naming convention **Final-Project-Report-Team-Number.pdf** (e.g., Final-Project-Report-Team-1.pdf)
- Prepare a recorded video presentation of your project using a screencasting tool, such as Zoom, to record your screen and provide a voice narration.
 - Ensure that the sound quality of your video is good and each member presents an equal portion of the presentation.
 - Export the video file to an **mp4** format.
 - You may use any recording software you wish. View the [Recording Video Presentation and Submission Guidelines](https://sandiego.instructure.com/courses/14112/files/1936151?wrap=1) (<https://sandiego.instructure.com/courses/14112/files/1936151?wrap=1>) for AAI Students.
 - You will use the naming convention **Final-Project-Presentation-Team-Number.mp4** (e.g., Final-Project-Presentation-Team-1.mp4).
- Only **ONE** member of your team will need to submit these deliverables. Please note that you must submit each deliverable separately.

- **NOTE:** Team members may not get the same grade on the Final Team Project, depending on each team member's level of contribution.
- You will submit the peer evaluation form individually below in Assignment 7.1.

This assignment has [Turnitin](#) ➞

<https://help.turnitin.com/integrity/student/canvas/assignments/submitting-an-assignment.htm>) enabled for submissions which means that your instructor will obtain an Similarity Report that identifies specific parts of your writing that may indicate a high level of matching to external content. You are strongly encouraged to review your work without penalty by activating the [Draft Coach extension in your Google Docs](#) ➞ <https://help.turnitin.com/integrity/student/draft-coach/using-draft-coach.htm>) prior to submitting your work for final grading.

To understand how your work will be assessed, view the scoring rubric below.

Click the **Start Assignment** button above to submit your assignment.

Final Team Project Scoring Rubric (AAI-500)

Criteria	Ratings					Pts
Technical Report 50%	90 pts Meets or Exceeds Expectations The final technical report is properly	81 pts Approaches Expectations The report has some grammatical or formatting	73.8 pts Below Expectations There are many grammatical and formatting errors and there	63 pts Inadequate Attempt The report is full of grammatical and	0 pts Non-Performance The technical report was not completed.	90 pts
Python Code 30%	54 pts Meets or Exceeds Expectations The code is properly formatted, easy to follow, and includes a clear interpretation of all analysis. All sections are without errors, has comments included.	48.6 pts Approaches Expectations The code is correct, but the analysis and interpretations are correct. Code runs with no errors, but there are few comments and	44.28 pts Below Expectations There are errors in the analysis and interpretations. Code runs with some errors, there are few or no comments,	37.8 pts Inadequate Attempt The code is not properly formatted and the analysis is incorrect or incomplete. Code is filled with errors that impact its ability to run	0 pts Non-Performance The code does not run or is incomplete.	54 pts
Team Presentation 20%	36 pts Meets or Exceeds Expectations The presentation is appropriate, and is easy to follow. The presentation is between 8-10 minutes and is professional. The discussion is easy to follow for a non-technical audience and provides a strong summary of the analysis.	32.4 pts Approaches Expectations The presentation is difficult to follow at times. The presentation is between 8-10 minutes but lacks some professionalism. The discussion is overly technical at times.	29.52 pts Below Expectations The presentation is either under 8 minutes or over 10 minutes and lacks professionalism. The discussion is either overly technical or does not provide enough information.	25.2 pts Inadequate Attempt The presentation is not properly formatted and it is difficult to follow. The presentation is under 8 or over 10 minutes, does not summarize the material well, and is filled with errors.	0 pts Non-Performance The presentation is incomplete or not submitted.	36 pts
Total Points: 180						