

# Final Project Description

Fundamentals, principles, and values

**Due Date:** Apr. 9, 2025, 11:59 PM

**Submission:** Assignment box on myCourses

## Objective

One of the main reasons you are taking this course – I hope! – is to be able to put some of the lessons from the class into action. The final project is meant to give you an opportunity to do so by conducting an ethics assessment of an ML system, so that you get hands-on experience on what it is like to conduct an AI ethics audit of a system in the future.

In this project, you will be working in pairs toward conducting as thorough of an AI ethics audit as possible. Find your partner and sign up as a group on myCourses.

**Use case for auditing:** As a team, you will have a choice of three pre-built different use cases for you to select from – select one of three from myCourses to audit.

If you don't feel inspired by the three, feel free to find your own use case from the wild (it can be a real deployed tech, or a research prototype that one can reasonably imagine being used in the real world) and propose to the instructor – as long as you have reasonable access to an AI system and a context behind the use case, we can formulate the use case.

## Context

**Use cases:** All three pre-built use cases involve a machine learning system being designed for a target user group, a training dataset, and a set of transcripts resulting from an interview conducted with various stakeholders of the technology you'll be analyzing. The system being analyzed is still being developed (i.e., it is a pre-deployment stage technology). If you choose to find your own use case and missing real stakeholder interviews, don't worry – we will generate interview data etc. as needed (ask your instructor).

**Audit context:** Your team is acting as an AI ethics consultancy. You have been hired by the CEO of the company (your Client) developing the technology behind the use case. Your Client has communicated that they would like to receive your audit results before they deploy the tech such that they can make any changes or do course corrections before deployment if possible. They are continuing to develop their tech toward their deployment timeline as your team conduct your audit. In the process of hiring your team, the CEO learned that the quality of the audits can vary significantly from one AI ethics consulting firm to another. Therefore, she has



hired two consulting firms (your team, and another team in class) to audit the same product/service, just to be on the safe side.

Your instructor will serve as your Client should there be any need for further clarification on the project, access to specific stakeholders or other information you may seek along the way.

**About your team:** You are a new AI ethics consulting company with no record of having conducted an AI ethics audit before. Knowing that AI ethics auditing is a new market that is just starting to open up, you are keen to build your portfolio of clients and stand out amongst many other consulting firms that are trying to do the same. As a new consultancy, the frameworks/toolkits you use in the audit process, the final presentation of the report, and many other detailed decisions about the audit are up to you. You are keen to impress your very first Client with a rigorous and professional report, such that she can refer your services to other companies like hers.

**Your audience:** This is an audit commissioned by the CEO of the Client company. She expects to be able to distribute the audit report to the senior management of her company, and have them act on the recommendations mentioned in the report. As a CEO, she is busy and most concerned about high-level take-away items to help guide her strategies related to the project. This means, she will want a few key takeaways from the report that she can relay to the board of governors, the public, or employees.

Since she is the one who commissioned the report despite some internal resistance from others in the company, she expects the report to be of high quality. She hopes that the report will change the minds of those who called this project a waste of money and time. In order for the senior management to act on the recommendations, the report must contain enough information about the issues found during the audit and how the mitigation actions recommended are sensible solutions to address the issues.

**Duration:** You have about five weeks to deliver your audit report to your Client (see due date above). After the five week period, you are scheduled to present your findings to your Client.

## Content expectations

Regardless of which use case you've been assigned to audit, your audit report should include at least the following items at minimum:

- An executive summary (1 page max) containing a short description of the use case analyzed and a summary of your findings presented in a way that senior managers across departments can quickly understand.
- An introduction section that contextualizes the technology, use case, and the assessment in more detail.
- Description of the methods/strategies used for each component of the audit (e.g., which toolkit, framework, process did you follow for which aspects of the analysis? What led you to choose the tools/frameworks etc.?)

- Scope and limitations of the analysis conducted (e.g., if you did not do a legal analysis, you should make clear what this means to your reader)
- Results of the assessment highlighting the issues (e.g., sociotechnical harms, ethics risks) discovered.
- Recommendations to address the issues
- A conclusion that clearly articulates a prioritized list of issues and recommendations to address them.

There is no official page limit or format. Whichever way your team decides is the most effective way to present your report will do. Given the nature of the audit though, a good rule of thumb is to aim for somewhere between 10 pages to 40 pages including figures, appendices, references etc. Note that length/wordiness does not equate to quality. Remember the multiple audiences you are trying to speak to.

## Deliverables

You should prepare a report (as a .PDF file) containing your response to the above mentioned parts. If you've produced any code as part of your audit process, you should be prepared to submit it as either a github repo (a link must be provided) or a compressed file (e.g., .zip file) with clear instructions on how to run the assessment/code via an accompanying readme file. You should submit all relevant files (report, code and readme file etc.) in the same assignment box in myCourses.

You are more than welcome to make your final report publicly available. If you wish to have your submission featured on the publicly facing course website, send your instructor an email providing explicit permission to provide the material online. You can also make the content public and send her a link for the broader community to better find your content. Remember that as a team submission, both members of the team have to agree on the decision to make the submission made public.

## Presentation

Your team will be scheduled to present to a group of professionals in the AI community in Montreal during the last two classes of the course. Each of the community members will have the opportunity to ask questions as well as your classmates. They will be asked to provide their feedback on your presentation, which will be used toward your final presentation grade.

## Grading Rubric

Rubric for the final project report and the final presentation will be published on myCourses. Your presentation and the report will be graded as a team.