

The next step toward the project will be a short “roadmap” document. This is meant just to be a brief description of what you’re intending for the project – about a page in length, with a discussion of relevant background work and tentative plans for how you’ll proceed. If your project is based on your reaction paper, then you don’t need to repeat things you’ve said in the reaction paper – it’s enough to describe how you’re planning to turn the ideas from the reaction paper into a larger project. Overall, this is intended as a brief write-up so that we have a picture for what you’re planning to do.

The roadmap document should be uploaded to Canvas by the start of class on Tuesday November 16.

Looking ahead, there are two remaining steps in the project after the roadmap document. (The following text is for future planning purposes; it does not describe anything you need to hand in as part of the the current document.)

- (i) We will hold presentations on the projects during the final two lectures of the class, on December 2 and December 7. In past semesters, the presentations have been a good way to see what everyone has been working on, and they also tend to be a potential source of feedback.

Given the number of projects, and the goal of fitting them into two lectures, each presentation will only be 4 minutes in length. And since they will be taking place before the final project write-up is due, they should be viewed more as very brief “previews” of the project than as complete summaries of the finished project.

These presentations should briefly describe (a) the issue that you’re studying via the project, situating it in the context of prior work, and (b) a preview of one thing you’ve found so far. With this type of outline, there are a number of ways to design an effective presentation based on your progress into the project up to that point. Given the 4-minute length constraint, we are limiting each presentation to at most two slides; and it’s crucial in practice to plan the content to make sure that what you’re presenting fits within the length limit.

Using the project groups and topics determined by the roadmap documents, we’ll announce a schedule of presentations so that everyone knows what sequence they’re presenting in.

Given the challenge in switching presenters and microphones in the physical classroom, we are currently exploring the feasibility of a plan to hold these presentations on Zoom, with the full class participating, and with groups taking turns screen-sharing to do their presentations. We’ll be in touch with more details on the format soon.

- (ii) Finally, the full project write-up is due by Canvas upload at a date and time specified by the university (we aren’t allowed to modify it, since the university is centrally scheduling the due dates of all final projects). The due date is: **9am, December 11.**

The project write-up should be approximately 10-15 pages (in any reasonable format, so this gives a fair amount of flexibility on the length). The course home page at

<https://www.cs.cornell.edu/courses/cs6850/2021fa/coursework.html>

gives more detail about the expectations for the project; as noted there, the basic genres of project are the following:

- An experimental evaluation of an algorithm, model, or measure on an interesting dataset. The papers on the course home page suggest some possible domains in which to think about such experiments; but you can also assemble your own data.
- A theoretical project that considers an algorithm, model, or measure in the area of some course topic, and derives rigorous results about it.
- An extended, critical survey of one the course topics, going into significant depth and offering a novel perspective on the area.

As with the reaction paper, the project should contain at least some amount of mathematical analysis, and some computations on real or synthetic data.