GROUP PROJECT

Goals & approach:

The aim of the group project is to practice the end-to-end application of data science skills learned throughout the program, in a way that can achieve substantial organizational impact. To this end, we will also focus on practicing effective problem-solving, communication, influencing, and design.

The final Web-based deliverable will allow you to capture and share your work and help build your project portfolio. Your group will have wide latitude on which problem(s) to work on and which tool(s) to use, as long as the problem is a meaningful problem to solve with impactful outcome and data are open data. You are highly advised to use only open (publicly available) datasets, for various legal and logistical reasons.

Open Data Resources
https://docs.google.com/document/d/15Saujk4IHE-0cYwkAKLl7TtxvIgMEhwJmzo2pAIE4co/edit

Project flow & timeline:

Groups will present in weeks 6, 10, and 14 of the course.

Week 6 (presentation #1) Focus: Problem selection, initial scope of the data driven product MVP, initial results / findings from market / audience research & validation and EDA, project planning

Week 10 (presentation #2) Focus: Getting as close to an initial working prototype of core functionality as possible.

Week 14 (presentation #3) Focus: Delivering the final, polished version of the demo prototype (with a live demo). Web-based deliverable (website of the project) will also be due in week 14.

Important note: Web-based deliverable has two components -- live demo of your MVP and the actual website that describes your project. For some teams, the demo is part of the website deliverable. For other teams, it is not.

IDEATION, GROUP, PROJECT SELECTION

Project ideation and selection process

Each student is recommended to think about three ideas. Some students found writing down ideas by answering questions in the guideline in a Google Doc as a helpful exercise to facilitate structured and clear thinking.

Each student will the pick one idea of your own to share with the class. The week (week 3) following the "ideas pitch," each student will vote on the presented project ideas, based on your preference of which idea is impactful and worth working on with a team. The project ideas receiving most votes / highest ranking will be the projects for the class. Typically, each group will have 3 to 4 students.

The following is the project evaluation guide and a few links for reference.

Please let us know if you have questions.

Project Idea Evaluation - Criteria and Questions

Problem clarity (rate on scale 1-5)

What problem are you solving?
For whom are you solving this problem?
Why is this a hard problem? Why hasn't it been solved already?

Potential impact (rate on scale 1-5)
In what ways could solving this problem drive major impact for your organization?
How much impact could solving this problem drive? (rough guesstimate is fine)
Who else is trying to solve this problem, and how could your solution realistically be better?

Feasibility (rate on scale 1-5)
In what way(s) could you realistically solve this problem with your project?
What kind of data would you need? Is it publicly / openly available?
What kind of knowledge / expertise do you already have on this problem? What additional knowledge will you ultimately need?
What additional resources, skills, etc. could be required to succeed?
Are there potential privacy, ethical, or legal issues?

Previous projects
https://www.ischool.berkeley.edu/programs/mids/capstone

Pre-week 1 homework // Additional Consideration for identifying project ideas:

While it's optional prior to the first week class, we ask you to start thinking about ideas to address a problem/question that interests you and could have a meaningful impact relevant to an organization, industry, and the world we live in.

A few angles to help stimulate you to think about ideas:

- As an expert in your industry (or industry you have interest in), what areas / work flows could be significantly improved with insights from data science? What insights could help inform CEOs / key stakeholders of a industry about a potentially transformative market opportunity / product innovation etc?

- As a consumer and user of various services (public and private), what new services do people want or what areas of improvement do you/people want to see from existing service providers that could significantly improve customer experience and service?
Let's challenge ourselves to think about big 10x-impact ideas!