Big Data Project

Project Requirements and Constraints

Practical Things
Presentation and report requirements

Code:
- GitHub Repository
  1. Add your Github user in this Google Sheet:
  2. Create a repository in our organization with your project name.
  → Links on **Moodle page**.

Doc:
- **Slides:** submitted as pptx or pdf, no common template
- **Report:** submitted as pdf, ACM SIG Proceedings Template Official
  - we will use a two-column template from ACM that is being used in SIGMOD, which is one of the premier data management conferences
  - The actual template files can be found here (also for Word): https://www.acm.org/publications/proceedings-template
  - I suggest you use the Latex version available on Overleaf: https://www.overleaf.com/latex/templates/association-for-computing-machinery-acm-sig-proceedings-template/bmvfhcdnxfty

The Heilmeier Catechism
Proposal structure and presentation

- **What are you trying to do? [GOAL]**
  Articulate your objectives using absolutely no jargon.
- How is it done today, and what are the limits of current practice?
- What is new in your approach and why do you think it will be successful?
- **Who cares?**
- **If you succeed, what difference will it make? [IMPACT]**
- What are the risks?
- How much will it cost?
- How long will it take?
- **What are the mid-term and final "exams" to check for success? [REVIEW]**

Input for Proposal Outline
Proposal structure and presentation

- **The Problem:** What is the problem you are trying to solve
  - Define very clearly. Explain why it is important.
- **Novelty:** Why has previous research not solved this problem? What are its shortcomings?
  - Describe/cite all relevant works you know of and describe why these works are inadequate to solve the problem. This will be your literature survey.
- **Idea:** What is your initial idea/insight? What new solution are you proposing to the problem? Why does it make sense? How does/could it solve the problem better?
- **Hypothesis:** What is the main hypothesis you will test?
- **Methodology:** How will you test the hypothesis/ideas? Describe what simulator, model or you will use and what initial experiments you will do.
- **Plan:** Describe the steps you will take. What will you accomplish by Milestone 1, 2, 3, and Final Report? Give 75%, 100%, 125% and moonshot goals.

Adapted from Onur Mutlu's slides.

Next Steps and Proposal Presentations
Next Week

Code Repository:
- Find a group (if not already), think of a project name and create a repository.
- Make sure to list all team members in the repository's README.md

Proposal Presentations:
- Upload proposal slides to Moodle (3-4 slides)

- Next week you will present your proposals in front of the class:
  - **max 3 min** presentation time **(sharp)**
  - **ca 5 min** feedback and question time