

## PROJECT MILESTONE-1

- **Due in class: 19<sup>th</sup> March (bring to class)**
- **Turn-in deadline: 20<sup>th</sup> March (with any changes from in-class work!)**

### What is the project about?

In groups of 3-4, you will systematically evaluate and improve an existing digital product for its users.

### What exactly does that entail?

1. Form a team (3-4 people), ensure there is at least someone in your team that enjoys visual art (sketching, drawing, painting, engineering drawing!), someone that enjoys writing, someone that identifies as a people person (enjoys meeting people, having conversations, been told a good listener, etc.), and someone that enjoys data analysis / number crunching. [If you loved doing interviews, you're probably a people person, and if you loved qualitative coding, you are probably a data analysis / number crunching person!].
2. Collectively, pick an existing digital product; it could be an app, a website, a cloud-based service, a software you use (including IDEs, RStudio, Email or productivity tools), or even a smart device. You get to pick as a team! The only condition is that there is a user-interaction/interface element to it (so, not ML models that simply make
3. Gather data about the product from its existing users. Specifically, the data should tell you about what is missing / not good, so you can improve upon it. This doesn't have to be new data you need to gather; you should try to gather existing data (e.g., scrape stackoverflow/reddit/hackernews, scrape reviews from Appstore or Amazon, etc.).
4. **Fix** the top 2-5 user interaction problems for the users, and evaluate it.
  - Low battery life is not really a user-interaction problem. Don't worry, the next milestone will help you debug this!
  - 1-2 if you must design non-trivial features, 4-5 if you fix usability issues / redesign existing features.
  - You won't engineer the new features, simply design it!
  - Focus is on solid, which is not the same as "cool"!

### Milestone-1

For Milestone-1, you will do #1 and #2 above, and plan for #3. You will actually do #3, as part of your Milestone-2.

Milestone-1 is a 1-page report with:

1. Team members
2. What product / service / software / device you are going to improve
3. Formative data gathering (empathizing) plan:
  - a. What data do you have about the users of the above product.
    - i. Bring a link to the data / the data itself, if you have it.
    - ii. If it is scientific literature (e.g., papers), links to those.

- b. If you do not have data and want to do a study for data gathering, bring the data gathering plan:
  - i. Method (survey, interviews, observations), along with specific details (e.g., survey questions, what task you will observe them doing, what interview questions) in the Appendix.
  - ii. Who will the participants be?

**MISCELLANEOUS:**

- a. The quality of your formative analysis plan will be graded, so make sure the data source you cite is good quality, your research and survey questions are carefully framed, etc.
- b. It's also good to do a thorough job now, because you can just go ahead and do it your second milestone (due 3<sup>rd</sup> April in class!).
- c. **Print a copy of the one-pager + any appendix to class.**
- d. During the class, you will receive feedback on your plans, and get a chance to revise / correct mistakes. You will then turn in the original one-pager, revised one-pager along with the feedback you receive the following day. Turn in is via Hello IITK.