PROBLEM IDEA GENERATION (HOMEWORK. 01.)

It is thought that Albert Einstein said, "If I were given one hour to save the planet, I would spend 55 minutes defining the problem and 5 minutes resolving it". As captured in this oft-quoted adage (and others like it) the importance of choosing the right problem to solve cannot be overstated. In this exercise, you'll take a moment to think about problems to bring to your Team for a group dialog in Class 3. Each student will "pitch" their ideas to the group, and one will become the Team work to define and solve over the semester. To be able to fully participate in Class 3, please complete and submit the following.

STEPS

- 1. Download a copy to the "Problem Idea Generation (INDV)" excel sheet from LMS.
- 2. Individually start the Problem Identification process by generating or sensing problem opportunities and include these in the spreadsheet. Some techniques finding interesting problems include:
 - a. Follow a personal passion.
 - b. Research to improve the "state-of-the-art" of a problem of interest.
 - c. Make an existing product more inclusive (ability, location, socioeconomics, etc.).
 - d. Compile bug lists (what annoys you?).
 - e. Study user behavior.
 - f. Consider implications of trends (technology, demography, or social norms).
 - g. Imitate, but better.
- 3. Limiting the problem ideas to three, conduct background research to support your ideas. Try to find the five important features of problem definition (unsatisfactory state & symptoms, impact, users/stakeholders, definition of success, opportunities for innovation) for each idea.
- 4. Complete the Problem Idea Generation (INDV) spreadsheet responses.
- 5. For each of the three problem areas, use your Sketchbook to an interesting aspect of the problem.
- 6. Note, in Class 3 you will combine your ideas with your teammates in a shared spreadsheet and use these notes to share with them about the idea. Please keep your notes succinct and to the point.
- 7. Submit your spreadsheet on Gradescope.