

Collective Problem-Solving, Parts 2 & 3: Information Gathering, Cross-Validation and Final Proposals

CS-234: Technologies of societal self-organization, Fall 2020

NOTE: If you have **any questions regarding this assignment**, please **do not hesitate to contact us** by starting a [discussion on Moodle](#) so that (1) we can help you and (2) your classmates who might potentially have the same questions benefit from our answers. You can also always contact the CS-234 staff at: cs234@groupes.epfl.ch

NOTE: Note that you must always comply with the current pandemic regulations at EPFL, Canton Vaud and Switzerland. Always prefer remote interaction solutions and follow the rules!

Introduction

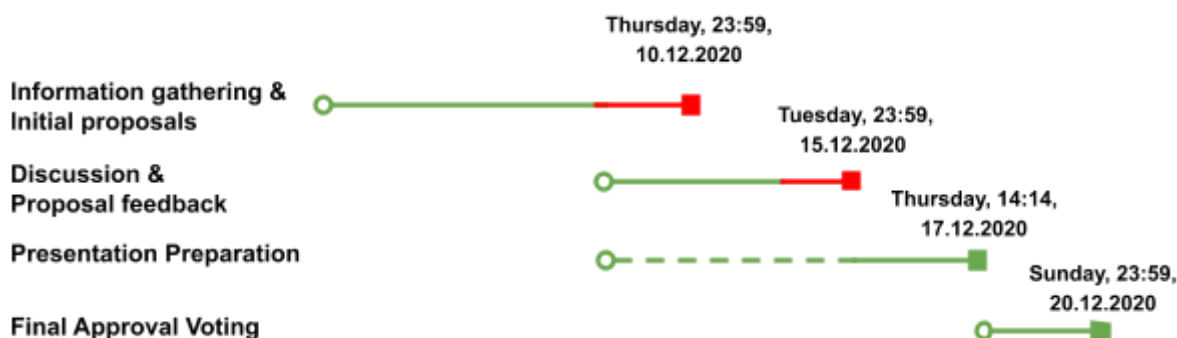
You have collectively decided to work on one among these three proposals

- [Bad credits distribution](#)
- [Communication is key in ALL relationships](#)
- [Creating new relations on an online campus : how can we connect with other students from home](#)

Now is the time to pick a proposal and try to find a solution! In the following four weeks, you will work in small groups to: (1) gather information about the problem, (2) propose an initial potential solution to the problem, (3) engage in discussions over both your and other teams' proposals (and optionally merge your proposal with other's), (4) incorporate feedback you receive from other groups to refine your proposal, (5) present your final proposals and (6) participate in an approval voting over all the proposed solutions.

Your first task is to form teams of **five** students. Please provide the names of the team members [here](#). You are going to work together with your teammates on gathering information, discussion of your project and presentation preparation. As a result, there will be 14-15 teams who will independently crack down on one of the collectively selected issues. Meanwhile, you will still provide feedback to other teams and participate in the voting on an individual basis.

Timeline of Parts 2 & 3



Information Gathering and Initial Proposals

You need to start the information-gathering stage with deciding with your teammates which of the three selected proposals you want to work on and what angle of the chosen issue you are going to investigate and address. For example, for the problem with bad credentials distribution you can focus on bachelor classes, master classes, or both.

After you have decided which problem and on what aspect of the problem you want to focus on, you can move on to the meat (or tofu) of this stage where you gather expert information that will help you come up with a proposal for a potential solution to this problem. Information gathering is a standard process in problem solving, e.g., data collection in science. For this assignment, you can choose from a variety of sources of information, such as interviews with experts, questionnaires with EPFL students & staff, literature studies (e.g., magazine articles, academic papers, etc.), surveys, etc. **Although you are free to choose from any of the aforementioned sources of information, in your proposal, each team member has to contribute information from at least one source.** So, in a team of three, each student can either gather data individually from different sources, or all team members work together on all three sources to collect the information. It is a good idea to choose your sources such that the collected data can justify different parts of your proposal, e.g., you could find out the severity of the problem in one part, search for its root cause in another part, and finally support your solution with the data from a third source. Note that conceptual separation is not a requirement, you could as well use all three sources to refine your solution. Also note that the list of suggestions we make above IS NEITHER comprehensive NOR restrictive. You can choose whatever aspects of the problem you are interested in and collect information in a way that helps you justify your proposed solution the best.

Note that, as said before, this part, as the entire homework, must comply with the current pandemic regulations at EPFL, Canton Vaud and Switzerland. Always prefer remote interaction solutions and follow the rules!

When you have gathered all this precious information and come up with a proposal for a solution, it is time to compile it into a write-up so other teams can also learn your findings, potentially incorporate them in their proposals and provide feedback. **The write-up must**

include half a page of introduction where you state what part of the whole problem your team is looking into and describe your motivation. It must also include: (1) the information you collected, (2) an analysis/description of the information you collected, and (3) your proposed solution. The length of this part must be between 1-1.5 page(s) PER team member.

By the deadline of **Thursday, December 10 @ 23:59**, your team must create a thread on Loomio and attach a write-up with your initial solution proposal and any supporting material. You should name the thread as *[Team Name]: [Title of your proposed solution]*.

Discussion and Feedback on Proposals

When each team has created a thread on Loomio with the write-up and all the supporting material, the discussion about the proposals can start.

The goal of this stage is to discuss and argue about the proposals presented by the different teams. The requirement is that each team must give feedback to **all the other teams' proposals**. You do so by commenting under teams' threads with their write-ups from the previous stage on Loomio. You can choose whether to split proposals between the members of your team or go over all of them together. The feedback should be **constructive** and **argued**. You are supposed to ask questions, to suggest improvements and to link the proposal with your own proposal or with other proposals.

This stage is not limited to discussion of other teams' proposals. You should also interact with other students discussing your own proposal. As a team, you are supposed to moderate the discussion about your own proposal, to answer questions and to provide any needed detail about your solution. This allows you to improve your proposal, by taking into account feedback from other people.

To summarize, the crucial point of this stage is to use the insights you have learned during the information gathering in helping other teams with their proposals and to use the information gathered by other teams in improving your proposal.

During this stage you can also propose to **merge** your proposal with another team's proposal. If the two directions are close and you realize that the approach and the solutions are compatible, you can propose to work together and merge the proposals.

The deadline for giving all the feedback is **Tuesday, December 15 @ 23:59**.

Presentation

After the presentation and discussion phases are over, you finally present your lunch-breaking proposal to your fellow students and to the CS-234 team. Each team prepares a **10-minute presentation** (there will be 3 additional minutes for questions and discussion) with a summary of your information gathering approach and results, your proposed solution and the results of the discussion phase. In the overview of the discussion

phase you can, for example, answers the following question: Was the feedback phase useful for my group? Did we incorporate feedback from others into our proposal? Did the discussion of other proposals help us to improve our own proposal?

The presentations are on **Thursday, December 17 @ 16:00-17:00** and on **Friday, December 18 @ 08:15-10:00** during the dedicated exercise sessions. **Make sure to mark these time slots in your calendar as you must attend both slots.** We will release the presentation schedule in due time.

The deadline to upload your slides to Loomio (under the same thread as your write-up and supporting material) is **Thursday, December 17 @ 14:14.**

Final Voting

After the redefinition from the discussion, the feedback stage and after the presentation, we conclude this assignment with one last voting about all the proposals. This time, we hold an approval voting where everyone expresses whether they approve the presented proposals. As before, the voting will take place on Loomio.

The deadline to vote on proposals is **Sunday, December 20 @ 23:59.**