

# Group Assignment Instructions

## Assignment #5

Solution process, step by step:

- When assignment #5 is released on **Tuesday, July 10th**, you will be asked to *work individually on a solution* to the problem. This will provide each of you a chance to think about the problem and possible solutions. Instead of using your individual directory for assignment #5, you will use *the group directory*, which has already been created for you.
- Some time between **Friday, July 13th and Monday, July 16th** (or as soon as everyone has had a chance to think about the problem), you should *upload any (partial) solutions* to GitHub, *create pull requests* for them, and *share them with the entire group over in the group Slack channel*.

At this point, you should *discuss the different approaches* that people have chosen and come up with **a solution for the group**. You can either *pick one of the existing solutions* or *work together to create a combined solution* from the different approaches that people have come up with. You can use GitHub's reviews as a way to discuss the code with each other and make improvements.

- **By Tuesday, July 17th you should have a solution the group ready to be merged:** *the group members will act as reviewers* for this assignment instead of your mentor.

Work together to create the best solution you can come up with!

When you are ready, get someone in your group to approve it and merge the corresponding pull request.

- At this point, a few optional challenges will be released. Between **Tuesday, July 17th and Tuesday, July 24th**, you will get a chance to *work together to tackle as many challenges as you would like*, or you can *iterate over the solution to improve it the algorithm, add more tests, or make the code healthier*. See the **Judging criteria** for assignment #6 for guidance.

Make good use of your time by *working in parallel and communicating over Slack*: for example, while someone is focusing on adding more tests, two other people can discuss a solution for one of the optional challenges, and someone else can be focusing on cleaning up the code to improve code health.

- **In the Hangout session with your mentor**, you will get a chance to discuss what worked and what did not when tackling the problem together: this is a great chance to

get tips about how to work effectively together, which you can then apply for assignment #6.

## Assignment #6

**Assignment #6 will follow a similar process**, but feel free to start collaborating as early as the assignment is released. There will be **no Hangout session with your mentor** for assignment #6 and the best solution will be announced at the retreat and the group that submitted it will get a cool prize.

### Judging criteria:

The assignment will be judged based on the following criteria by the CodeU mentors as a group. Remember that getting a perfect solution on one dimension (e.g., completing all the optional challenges) but doing very poorly on another (e.g., not writing any tests at all) is unlikely to lead to the best solution.

Here are the criteria:

- *Optional challenges*
  - How many optional challenges were solved correctly?
  - How elegant (concise, efficient, etc) is the solution?
- *Testing*
  - Does the solution provide test cases?
  - Are all cases covered?
  - Do tests include input validation?
  - Do tests check that the results are correct?
- Following the style-guide:
  - How well does the solution adhere to the style guide (<https://google.github.io/styleguide/>)?
  - Does the solution use the correct language coding conventions?
- Code Health
  - How well is the code structured?
  - Is the code readable?
  - Is it divided into several parts each with a single responsibility?
  - How is the naming of functions and variables?
  - How easy is the code to reuse in a larger project?
- Group Code review
  - How many group members participated in creating a group solution?
  - How much value did the group member's reviews add to the final solution?

We will announce the winning group at the Retreat on Thursday July 9th.

Good luck!



