

## Sprint 3 Deliverables

May 3, 2019 is the official end of sprint 3. All teams will demonstrate what they have accomplished for the team project this semester. Project presentation is one of the deliverables for sprint 3.

The goal of sprint 3 is to enhance the product developed for sprint 2, as specified in user stories 7, 8, and 9 (from the product backlog updated on 2019-04-09). You will be graded on how well your team achieved this goal.

For sprint 3, your team is required to submit a detailed sprint backlog. The initial sprint backlog is due on April 12, 2019 by 11am. The sprint backlog needs to be kept updated throughout the sprint and must be **accessible to all team members and the instructor**. I will monitor your sprint backlog during sprint 3. The final copy of the sprint backlog needs to be submitted on May 3, 2019 by 11am. Sprint backlog is a list of tasks, sorted in priority order. For each task, indicate:

- Date when the task was added to the backlog. Most your tasks should be added during sprint planning or shortly after that. However, there may be tasks that get added during sprint 3.
- Task description: detailed description of the task.
- User story number – which user story does this task support. If it does not support any user story, an explanation of why this task is on the list.
- Point value – the relative point value for this task (as discussed in the story point estimation POGIL activity and related reading).
- Status: TODO, DOING, or DONE.
- Owner: who is responsible for this task. This field should only get assigned a value when the task moves from TODO to DOING state. As you complete tasks from the backlog, and take on the next task, update the owner.
- Date completed: when the task changed status to 'DONE'.

Keep your sprint backlog updated by:

- Keeping the tasks in priority order.
- Adding tasks to the backlog (in the proper priority order), when new tasks come up.
- Update the 'status' and 'date completed' when you finish a task.
- Update the 'status' and 'owner' when you take on a new task.

I recommend using Google Sheets for your sprint backlog (see example linked to April 10 lecture). If you would like to use a different approach, please check with me first. The sprint backlog will have a direct impact on your grade for sprint 3, as described next.

Sprint 3 will contribute to 20% of your final grade and is worth 25 points, as specified below:

[5 points] User story 7: Does your simulation support simulation of multiple processing units in an “assembly line”?

[5 points] User story 8: Does your simulation support per-microsecond input rates from an input file? Does it support the previous mode of operation where input rates in a file were provided as peak messages per second (for each minute) and you split them into per-microsecond rate?

[5 points] User story 9: Did you provide thorough system level tests for your simulation? Tests must include:

- Constant input rate > processing unit rate
- Constant input rate == processing unit rate
- Constant input rate < processing unit rate
- Increasing input rate
- Decreasing input rate

[5 points] Sprint backlog quality: initial and final.

[5 points] Project presentation.

Your individual grade will be calculated by multiplying your team grade by your contribution factor.

The contribution factor is an estimate of how much you contributed to sprint 3. I will use your sprint backlog to calculate the average number of story points completed per team member and the standard deviation and will determine your contribution factor as follows:

If the total point value you completed is	Then your contribution factor is
Less than [average - standard deviation] (rounded down)	1
Less than [average - 2 standard deviations] (rounded down)	0.5
Less than [average - 3 standard deviations] (rounded down)	0.1
Less than [average - 4 standard deviations] (rounded down)	0

To grade sprint 3, I will need:

1. SHA hash of your git repo's master branch, that corresponds to the commit you want me to grade for sprint 3. Put the SHA has in the README.md file of your git project.
2. Your final sprint backlog, approved by all team members (signed by all team members).
3. Basic instructions on how to run your simulation and tests. The instructions need to be simple and easy to understand. Please use README.md file of your team git repo to document the steps I need to take to run your simulation (use git markdown language to format README.md: <https://guides.github.com/features/mastering-markdown/> ).