



Project Milestones

ENGG1500

Semester 1 2020

Patrick Harper, Dylan Cuskelly.

1 Project Milestones

A goal is defined as “the object of a person’s ambition or effort, an aim or desired result.”

Goals assist teams by focusing each individual’s effort on a common purpose. Poorly defined goals can lead to confusion, and disappointment due to lack of planning and poor execution.

You might be familiar with the common trope of New Year’s Resolutions; and the accompanying question 10 months later, “Did you end up running that marathon?”¹. That’s where project milestones come in.

A milestone is a task that represents an important achievement in a project. They are rigorously defined, and progressively build toward a completed final objective. In business; milestones are negotiated between parties and often determine project funding. They are defined by a time limit, a specific event that signifies success and individual(s) responsible for the task. They can be additionally accompanied by a breakdown of specific equipment and resources required.

- **Event:** I will run one kilometre without stopping.
- **Time:** I will complete this by this week ending 29th March 2020.
- **Person Responsible:** Pat Harper.

Equipment Required

- A pair of joggers.

You may find just before the execution stage that your legs are too stiff, and a lack of socks are hindering your ability to achieve the run. Fortunately, you attempted this day one, and now have six more days to perform leg stretches, warm up walks and a trip to K-Mart for themed socks. This approach is essential for team engineering projects. We have the added benefit of not doubling up on any tasks, and we have reasonable expectations as to how our project will look at any given time.

1.1 Planning

Fortunately, initial planning is not difficult! When done well (enough) any team can achieve total victory.

1. Start with the end-goal and a time/date.
2. Calculate the number of weeks/days until the task is due.
3. Make a list of tasks that the end-project requires.
4. List the tasks by dependency.
5. Divide the tasks per week with time to spare.
6. Assign people responsible for each task.

Congratulations, you have now developed a rough project plan for you and your crew. For the next three weeks, your technical team will pitch milestones to your tutor. They will hold you accountable to your ability to plan and execute successful milestones and the total result is factored into your final project mark.

¹[Wikipedia: List of Clowns](#)

You will be supplied with a template to use. Keep your milestones brief. This task is not about arbitrary paperwork, it is about developing your time-management skills as an engineer.

An example of a milestone may be:

Developer Accountable: Pat Harper Start Date: 23 rd March 2020 Due Date: 29 th March 2020	Supervising Engineer: Tom Davies Milestone commission: 23 rd March 2020 Milestone Completion: <i>T. Davies :)</i>
<p>Task: Completing lab work on weighted average light detection for four downward facing IR sensors.</p> <p>Success Criteria: The serial monitor outputs expected distance (in mm) from the line and the centre of the sensor array measurable with a ruler.</p> <p>Equipment Required:</p> <ul style="list-style-type: none"> - 4xIR downward facing sensors - Arduino - Printed Track Part - Jumper-cables 	

Figure 1: Example milestone, completed in Microsoft Word

Hint

- Keep the milestones relatively small. The goal is to under-promise and overdeliver.
- Make start and end-dates clearly defined.
- Develop a success criteria that is very specific and does not leave room for interpretation.
- In general it is best to have a single person is responsible for this specific task.