

SWE30010 Development Project 2: Design, Planning and Management

Sprint #2 Stage

Overview

You have done your first sprint (Sprint #1). Now, it is time for your second sprint. In this sprint, you use your previous data to help your sprint planning process, that is how the agile process is supposed to be and how the professionals do it. I also want you to experience these changes.

Sprint #2 – Some Differences from Sprint #1

This is Sprint #2.

Your team has just finished the first sprint. Your team is now required to perform another sprint to continue the development of the product, basically by identifying and developing items from your Product Backlog list (may be new or any unfinished items in your previous sprint – these unfinished items should now be put back in your Product Backlog).

Total work hours for the team in Sprint #2: Now that you have your team's actual velocity of your Sprint #1. You need to use this velocity in your current sprint planning meeting (16 Pass Task 9.1). You have a strict guideline to do this, please see the details in the task description below.

How your Sprint works:

We are doing 2-week sprints.

Start Sprint #2 on Monday in Week 9 (Day 1 of Sprint #2).

Day 10 of your Sprint #2 will be Friday the following week.

Suggested time frame of a 2-week sprint in Sprint #2 for DP2 purposes

Week	Your selected day	Tutorial day
9	Day 1	Feedback from Tutor
10	Day 6	Feedback from Tutor
11		Sprint review and Sprint retrospective

Sprint #2 Group:

For the group tasks in Sprint #2, you need to register your team in Doubtfire under the "Sprint #2 Group Tasks" and submit it as a group. Please do not call yourself "Sprint #2 Group" as there will be potential conflicts in group names.

16 Pass Task 9.1P – Group Task

This document describes the pass task 9.1P, for your DoubtFire submission purposes.

Suggested Time Frame: Week 9

Start: Week 9

Feedback: Ask Tutor in Tutorials in Week 9

Due: Week 10, Tuesday, 9:00am

Table 1 Overview of 9.1P for Sprint #2

Purpose:	To practise the sprint planning meeting based on previous sprint's data
Tasks:	Sprint Planning Meeting – Group [16 Pass Task 9.1] <ol style="list-style-type: none">1. Develop the criteria for prioritizing the Product Backlog items for development2. Identify the sprint backlog items to be developed in Sprint #23. Break down the tasks required to develop the sprint backlog items selected in 1 above
Pre-req Task¹	All Pass Tasks for Sprint #1

¹You need to complete the pre-req (pre-requisite) task before doing this task.

Follow-up Task2	17 Pass Task 9.2P
Time:	Duration: 1 hour (at most)
Resources:	Lecture 01 Scrum https://en.wikipedia.org/wiki/Scrum_(software_development) Lecture 04 Sprint Backlog Lecture 04a WBS Lecture 04b Estimating Part 1 Lecture 04c Burndown chart Lecture 06 Estimating Part 2 Lecture 06a Analogy Lecture 06b Size Comparison Lecture 06c Delphi Lecture 07c Risk
Feedback:	Ask your tutor for feedback

16 Pass Task 9.1P Sprint Planning Meeting [Group Task]

After the first sprint, your team may have an updated list of the Product Backlog. In case you have the same list (that is, no new or no obsolete items), that is fine. You are now required to select items from the updated Product Backlog list and put them into your second sprint backlog.

1. Revise your criteria for prioritizing the items from the updated Product Backlog list. This time, "**risk involved in developing a certain item**" is considered as part of your prioritizing criteria. You have to perform a potential risk assessment of those items in the Product Backlog and then decide which item(s) will be in your sprint backlog, based on your agreed and updated criteria.

Things to be included in your criteria:

- a. Business Value
- b. Development Effort
- c. Feature (Backlog Item) Dependency
- d. Date Needed / Timeline
- e. Risk involved in developing the item
- f. Others (as you see fits, but you must have reasonable justification to the tutor's satisfaction)

Document the discussion of the entire team with reasoning (why you think that these are reasonable criteria; which one you think has a higher weighing than the others OR all are of equal importance etc.) and submit it to Doubtfire.

2. Use your criteria in Task 1 above to select **the highest priority backlog item** from the Product backlog that could be developed in one sprint [At the moment, a wild guess will be fine. Task 3 below comes the justification.] **But this time, you need to use your velocity in Sprint #1 for your planning purposes.** Here is what you should do (as an example):

Let's say you are a team of 4 and you planned 64 hours of work in Sprint #1.

- (a) If your actual velocity is 64 hours of work completed within 10% (i.e. your gradient of your burn-down chart is 6.4 hours of work per day), you can still use 64 hours as your planning target.
- (b) If your actual velocity is within 10% of 32 hours of work completed (i.e. a range between 29 and 35), you need to use 32 hours of work as your planning target. These 32 hours of work is your estimation about completing the tasks as you would in Sprint #1 planning meeting. So, you get a consistency.
- (c) What if your actual velocity is 52 hours of work? This belongs to $48 + 10\%$ or $56 - 10\%$. Using either one is fine. But I would suggest you plan for 48 hours of work,

²You (as a group) need to complete this task in order to do the follow-up task because the follow-up task depends on your answer in this one. Strongly suggest you keep the same group if possible. Do the follow-up tasks before the next tutorial and then ask feedback in the tutorial.

meaning that you can spend more time to do good quality work, rather than using 56, which you may end up rushing through things and do things badly. Remember, being conservative will give you some leeway, and “promising delivery”.

Note: In case, this item is too big for one sprint (if you feel that it is too big e.g. take 5 weeks to do – a wild guess will do for the moment), you need to break it down further to “smaller” ones so that you can select one that could be done in one sprint. On the other hand, if the feature is too small for one sprint (if you feel that it is too small e.g. it can be done in 1 week), you need to identify additional backlog item(s) in the product backlog that could be done with the chosen one together in the same sprint.

Potential Questions that you may ask

- Q.1** Why wild guess? How do we know for sure that the feature is too big or too small?
A. You never know until you perform the Task 3 below, especially in the first sprint or for the time being. In later sprints, there are other ways to do it but depends on your results in previous sprints.
- Q.2** Then why are we doing this?
A. I want you to go through the process and reflect. You have to pick one first, then “go through” Task 3 below to determine whether the one that you pick is good enough for the purposes or not. Also the focus here is to identify the highest priority feature based on your criteria.
- Q.3** Would it be simpler if we just pick one and lie about the time/effort?
A. That is unprofessional!

Document the entire group’s discussion with reasoning and submit it to Doubtfire.

3. Perform time / effort estimation using any of the following methods. You may mix and match these methods to suit your need. **Different backlog items can be estimated using different methods.**
- Estimating by analogy
 - Estimating by size comparison
 - Estimating by “experts” / “Delphi” techniques (including Planning Poker)

[Students aiming at Pass grade] Document the entire group’s discussion on your estimation (time efforts) with reasoning and submit it to Doubtfire. **No need to justify the chosen techniques.**

[Students aiming at Credit or above] There is a set of individual Credit Tasks (Credit Tasks 9.3 and 11.6) related to this. Basically, you are required to (1) select what technique(s) to be used in estimating a particular sprint backlog item in Sprint #2, and justify why you think that the selected technique is appropriate in Credit Task 9.3; and (2) review and reflect your estimation accuracy in Credit Task 11.6.

Submission Details and Assessment Criteria

Each team needs to create a new group on Doubtfire called it Your Sprint #2 Group. Each team needs to create a document (pdf) in **portrait** mode³. You need to organize yourselves so that a person in your team will be responsible for uploading the document to Doubtfire, with the following details:

- Your names and student IDs
- Your tutorial class (e.g Thu 12:30 ONL068 or Thu 12:30 ONL069)

³Landscape mode pdf does not work properly in Doubtfire.

- Your tutor's name
- Details (name and student ID) of your team members
- Your group responses to the tasks according to the corresponding instructions

Remember, whoever submits the document the latest will overwrite the previous submissions. Since Doubtfire does not keep the previously submitted documents, the previous submissions will be gone forever.

What to submit

Document all your work as mentioned above and submit it to Doubtfire as a pdf file as mentioned above.