

# 15-413: Introduction to Software Engineering

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## Iteration 2 Plan

**Due: Friday, October 14, 11:30am (hardcopy at beginning of class)**

30 points

This assignment is a group assignment. Each project group should turn in one response to each part, with all the names of the group members.

Parts of this assignment depend on interaction with clients. Occasionally, you may not be able to meet with clients for reasons outside your control, e.g. they are traveling. If this is the case, contact the instructor or TA to get an extension on the assignment. However, you are expected to contact your client promptly so as to avoid any possible delays.

***Grading note:** Please be sure to address any issues raised in grading assignment 4 or discussed in class (see the announcements from September 28), as we will expect these classes of problems to be corrected.*

### **Part 1: Project Plan (20 points)**

Develop a plan for an XP iteration which covers weeks 7-9 of the course.

Turn in:

1. What is your target total of ideal hours for this iteration? This should be  $(3 \text{ weeks}) * (6 \text{ hours per person per week}) * (\# \text{ of people on team}) / (\text{new load factor computed in the iteration 1 report})$ . For example, if you are a 4-member team and your new load factor is 2.5, you should compute  $3 * 6 * 4 / 2.5 = \text{about } 29 \text{ ideal hours}$ .
2. An ordered list of stories in the iteration, as chosen by your clients. Note that the total ideal time of these stories must be close to #1 above.
3. Explain the risk scale you used in prioritizing stories by risk
4. For each story, the name, estimated effort, estimated risk, and priority level
5. Describe any significant changes you made in the estimated effort, risk, or priority level of existing stories. Justify the change; for example, if your experience in iteration 1 led you to raise or lower the risk or effort of your stories, explain why.

It is not necessary to enumerate each change individually; we are looking for larger scale changes which likely affected several stories, or affected one in a

particularly significant way. If you did not make significant changes, explain why you believe changes were not necessary.

Note that you should not change the estimates for stories just because your estimates are running too low or too high; the load factor will account for that. You should change the estimate for a story when you learn that the assumptions you used to generate that estimate in the first place were incorrect; for example, you will have to implement the story a new way (either easier or harder) because of something you learned in your prototype.

If you are using 3x5 cards, you may turn in a photocopy. As in the earlier assignment, make sure the cards are readable and that you interpret where things are on the card and what they mean.

NOTE: this plan is due at the end of week 7, so you will already have done part of the work in this iteration. Therefore, you should try to finish the planning part early in the week.

## **Part 2: Picture of Success and Risk Analysis (10 points)**

Update the picture of success and risk analysis you defined earlier, both based on any feedback you might have gotten from the grading, your experience in iteration 1, and any further interaction with your client. Describe the picture of success and risks as specified in Assignment 4, but add one new field to each risk: whether the risk got worse, better, or remained the same, as measured by risk exposure.

Justify each change in the picture of success or risk analysis, relative to what you wrote in Assignment 4. For example, if your experience in iteration 1 led you to introduce new risks or change the likelihood or impact of old ones, explain why. If changes were already covered in the prototyping assignment, just copy what you wrote earlier (for completeness).