15-413: Introduction to Software Engineering

Jonathan Aldrich

Iteration 4 Plan

Due: Wednesday, November 30, 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.

Part 1: Project Plan (20 points)

Develop a plan for an XP iteration which covers weeks 14-15 of the course (This iteration is two weeks long and includes correspondingly less effort; we omit the week 13 which is mostly taken up with Thanksgiving).

Turn in:

1. What is your target total of ideal hours for this iteration? This should be (2 weeks) * (6 hours per person per week) * (# of people on team) / (new load factor computed in the previous iteration report). For example, if you are a 4-member team and your new load factor is 2.5, you should compute 2 * 6 * 4 / 2.5 = about 19 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 2 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. Also note that even if your load factor seems unreasonable, you should not manipulate your estimates to get them to "come out right"—the load factor will fix itself for the next iteration, and for this iteration you can adjust on the fly by adding or removing stories. 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.

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

Update (a) the picture of success and (b) the risk analysis you defined earlier, based on any feedback you might have gotten from the grading, your experience in the previous iteration, and any further interaction with your client. Describe the picture of success and risks as specified in your previous iteration plan, including 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 the previous iteration plan. For example, if your experience in the previous iteration led you to introduce new risks or change the likelihood or impact of old ones, explain why.