Teaching Agile Estimation Workshop

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Abstract

This workshop will demonstrate how to teach estimation on agile projects. We will review how agile projects perform project planning. Attendees will do an exercise that teaches the concept of Story Points. Attendees will do a planning exercise to estimate story cards using Planning Poker (a variant of wideband Delphi technique.) We'll conclude with a discussion about issues teaching this material.

1. Topic, theme and goals

One of the things SE students most want to learn is how to estimate their project work. Our students are particularly interested in agile development. This workshop explores how agile project planning occurs and how to estimate features on an agile project. In addition, we'll examine at several popular units of measure for estimation such as story points and ideal hours.

At the end of the workshop,

- attendees will be able to demonstrate to their students agile estimation

- attendees will be able to estimate using story points

- attendees will be able to estimate using the planning poker technique

1.1 Additional Context

Agile project planning asks each team to first estimate the size of each story card. During the project each team tracks which story cards are completed in each week or iteration. The team can determine how much "work" was done in a unit of time. This yields the team velocity, which is often tracked as a range, thus conveying the imprecision of the number. (It should be expected that velocity will have some variance over the duration of the project.) The team velocity helps the team predict how much work can be done in each week or iteration as well as help the customer know what features probably will be done by the end of a release.

2. Intended audience and the preparation required of them

No preparation is required of the attendees. Attendees will be given a set of Planning Poker cards for future use.

The intended audience is software engineering educators. This workshop will model how agile estimation can be taught in the classroom. Participants will do the same exercises that our students do. Although familiarly with agile methods is assumed, we will briefly review how agile projects are managed so that we can discuss how and when estimation should occur.

3. Activities and format

The class is structured around a set of power point slides, discussion topics, and exercises for the attendees. These practical exercises and the following debriefing occupy a significant portion of the workshop's schedule.

4. Anticipated time requirements.

This workshop is based upon a class given at Carnegie Mellon Silicon Valley. The original class is two hours long. Additional content can be added to the workshop to extend to three or four hours long.