The Agile Technique Hour

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Abstract. This workshop addresses issues around how various techniques may be integrated within an agile methodology, how these techniques interact with each other, and how certain techniques may be regarded as more or less critical to the success of an agile software development project.

Keywords: Agile technique, workshop, process miniature, simulation.

1 Introduction

In recent years, a large number of agile software development methods have been promoted by various practitioners, with many overlapping techniques. These methods tend to vary in the prescriptiveness of their approach, in the particular combinations of techniques they recommended, and in the balance between technological and managerial emphasis. Some research into agile methods in practice suggests that the combination and usage of particular techniques varies tremendously even within the umbrella of a particular agile method [1]. Therefore agile method adoption is not as significant as agile technique adoption. The main objective of this workshop is to focus on the influence of particular techniques, using an approach based on *process miniatures* [2], a method for simulating agile project processes in a short time scale.

2 The Aims of the Workshop

This workshop aims to explore some of the techniques used within agile methods and to try to assess their relative usefulness within a simulated agile process. This workshop is in the spirit of a number of previous approaches to exploring agile methods by using game-like simulations. These include Process Miniatures [2], the eXtreme Hour [3], the XP Game [4] and the Planning Game [5]. However the focus of most of these other efforts has been to concentrate on the managerial aspects of agile methods. In contrast, the 'Agile Hour' enables us to explore the 'technique' subset of agile practices, which focuses not so much on planning and estimating (though this is necessary too to provide us with a framework for the other activities) but on how agile techniques are used within an iteration. We are particularly interested in what techniques are used within agile methods, how they may synergise with one another, and which practices might be regarded as 'core'.

The approach of the workshop is to do a process miniature that gradually introduces subsets of the available techniques, and by doing so, helps us to assess which techniques

may be the most helpful. Of course we cannot test all the techniques in this way because not all techniques can reasonably be simulated in a workshop. Therefore the techniques that we address are the following; active stakeholder participation, pair programming, co-location, refactoring, regression testing, common coding guidelines, continuous integration and test driven development.

3   Overview of the Process

The task is to design a human powered vehicle. Teams are allocated a set of user stories describing required features of a human powered vehicle. The vehicle is created by overlaying features drawn on A4 transparencies, and each transparency can depict exactly one feature. Teams develop these features concurrently, and new user stories are introduced with each iteration. Each feature has a score representing its business value, which is useful for the teams when choosing development priorities. The teams consist of; stakeholders (who specify requirements on story cards), developers (who estimate and design solutions) QA (who acts as judge and acceptance tester), and Tracker (who records and times everything).

The schedule is broken down into three twenty minute stages. In each stage the first five minutes consist of planning tasks, such as selecting user stories, making estimates, and prioritizing stories. The following ten minutes is a development phase, during which QA writes acceptance tests and developers build using a subset of techniques. This phase includes a mid-term review. The final five minutes is a review stage, including acceptance testing. We have eight techniques in total. The first three techniques are controlled and must be used as advised. Developers may request one additional technique during the first and second post-iteration review.

At the end of the workshop we discuss the design outcomes, discuss our experiences with the different techniques and vote on the perceived usefulness of the techniques. We then reflect on the experience and share our responses.

References

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