

Essay Proposal

COMP150 - Agile Essay

Madeleine Kay

February 26, 2016

Topic

My proposed essay will analyse the effect the use of Agile has on the quality of games. I will look at both the effect on both the code and the game itself. One paper I read suggested that using Agile produced a game with high quality code but the game itself was not fun. I specifically want to look at how using Agile can be used in the design process...

Paper 1

Title: The 3C approach for agile quality assurance

Citation: [1]

Abstract: Continuous Integration is an Agile Practice for the continuous integration of new Source Code into the Code Base including the automated compile, build and running of tests. From traditional Quality Assurance we know Software Metrics as a very good approach to measure Software Quality. Combining both there is a promising approach to control and ensure the internal Software Quality. This paper introduces the 3C Approach, which is an extension to the Agile Practice Continuous Integration: It adds Continuous Measurement and Continuous Improvement as subsequent Activities to CI and establishes Metric-based Quality-Gates for an Agile Quality Assurance. It was developed and proven in an Agile Maintenance and Evolution project for the Automotive Industry at T-Systems International – a large German ICT company. Within the project the approach was used for a (legacy) Java-based Web Application including the use of Open Source Tools from the Java Eco-System. But the approach is not limited to these technical boundaries as similar tools are available also for other technical platforms.

Web link: <http://dl.acm.org.ezproxy.falmouth.ac.uk/citation.cfm?id=2669382>

Full text link: http://delivery.acm.org.ezproxy.falmouth.ac.uk/10.1145/2670000/2669382/p9-janus.pdf?ip=193.61.64.8&id=2669382&acc=ACTIVE%20SERVICE&key=223837E73163AEDA.EAA225A8AB01C582.4D4702B0C3E38B35.4D4702B0C3E38B35&CFID=586277047&CFTOKEN=56353358&__acm__=1456425784_cb8e303a228494a4dd6e6ee3cde3b198

Comments: This paper talks about quality control when using Agile.

Paper 2

Title: Agile Development Iterations and UI Design

Citation: [2]

Abstract: Many agile projects require user interaction (UI) design, but the integration of UI design into agile development is not well understood. This is because both agile development and UI design are iterative - but while agile methods iterate on code with iterations lasting weeks, UI designs typically iterate only on the user interface using low technology prototypes with iterations lasting hours or days. Similarly, both agile development and UI design emphasise testing, but agile development involves automated code testing, while UI must be done by expert inspectors or ideally potential end users. We report on a qualitative grounded theory study of real agile projects involving significant UI design. The key results from our study are that agile iterations facilitates usability testing; allows software developers to incorporate results of those tests into subsequent iterations; and crucially, can significantly improve the quality of the relationship between UI designers and software developers.

Web link: <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=4293575>

Full text link: http://agile2007.agilealliance.org/agile2007/downloads/proceedings/012_ferreria-AgileDevelopmentIterations-Final_585.pdf

Comments:

Paper 3

Title: Extreme programming and agile software development methodologies

Citation: [3]

Abstract: Several agile (i.e., lightweight) development methodologies, especially extreme programming (XP), have been argued to be a solution to many of the problems that continue to plague software development projects. The authors provide a useful evaluation of such approaches, including a discussion of the values that underlie the XP methodology

Web link: <http://www.tandfonline.com/doi/abs/10.1201/1078/44432.21.3.20040601/82476.7?journalCode=uism20>

Full text link: <http://www.nku.edu/~sakaguch/msis655/lindstrom2004.pdf>

Comments: This paper goes into a lot of detail on Agile and the XP method. It seems to contain a lot information that should be useful in my essay.

Paper 4

Title: Developers' perspectives on iteration in game development

Citation: [4]

Abstract: In this article, the findings of an interview study on game developers' perspectives on iteration is presented. A two-part interview study conducted in 2010 and 2013–2014 suggests that from the perspective of game developers, iteration is an essential, natural and important part of the game development – if not even a trivial part of the process. However, there is much to explore on the differences in practice and opinions revealing distinctive details in iterative processes potentially leading towards more elaborate design philosophies and methods on game development.

Web link: <http://dl.acm.org.ezproxy.falmouth.ac.uk/citation.cfm?id=2818298&CFID=586277047&CFTOKEN=56353358>

Full text link: http://delivery.acm.org.ezproxy.falmouth.ac.uk/10.1145/2820000/2818298/p26-kultima.pdf?ip=193.61.64.8&id=2818298&acc=ACTIVE%20SERVICE&key=223837E73163AEDA.EAA225A8AB01C582.4D4702B0C3E38B35.4D4702B0C3E38B35&CFID=586277047&CFTOKEN=56353358&__acm__=1456432804_7959241de423dc03fe691b6e80b7e8c5

Comments:

Paper 5

Title: Bootstrapping Scrum and XP under Crisis A Story from the Trenches

Citation: [5]

Abstract: During 2006 Tain, a Swedish gaming company, underwent a fast and dramatic agile transitioning process driven by a crisis situation. Many of the lessons learned are described in the book "Scrum and XP from the Trenches". This experience report focuses on the actual bootstrapping process - the critical decisions and changes made during the first few months that ultimately transformed a burning and sinking ship into a fairly well-oiled agile software development organization.

Web link: <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=4599519>

Full text link: Couldn't find one

Comments: I couldn't find

Paper 6

Title: Evaluation of continuation desire as an iterative game development method

Citation: [6]

Abstract: When developing a game it is always valuable to use feedback from players in each iteration, in order to plan the design of the next iteration. However, it can be challenging to devise a simple approach to acquiring information about a player's engagement while playing. In this paper we will thus use an evaluation method which focuses on assessing the desire to continue playing as an indicator of player engagement. This feedback can then be applied to detect and prevent any design decisions that would jeopardise a game's level of player engagement. The process is exemplified by a case study concerning a crowd game which is controlled by smartphones and is intended to be played by audiences in cinemas and at venues with large screens. The case study demonstrates how the approach can be used to help improve the desire to continue when developing a game.

Web link: <http://dl.acm.org/citation.cfm?id=2393185>

Full text link: Couldn't find one

Comments:

References

- [1] A. Janus, A. Schmietendorf, R. Dumke, and J. Jäger, "The 3c approach for agile quality assurance," in *Proceedings of the 3rd International Workshop on Emerging Trends in Software Metrics, WETSoM '12*, (Piscataway, NJ, USA), pp. 9–13, IEEE Press, 2012.
- [2] J. Ferreira, J. Noble, and R. Biddle, "Agile development iterations and ui design," in *Agile Conference (AGILE), 2007*, pp. 50–58, Aug 2007.
- [3] L. Lindstrom and R. Jeffries, "Extreme programming and agile software development methodologies," *Information systems management*, vol. 21, no. 3, pp. 41–52, 2004.
- [4] A. Kultima, "Developers' perspectives on iteration in game development," in *Proceedings of the 19th International Academic Mindtrek Conference, AcademicMindTrek '15*, (New York, NY, USA), pp. 26–32, ACM, 2015.
- [5] H. Kniberg and R. Farhang, "Bootstrapping scrum and xp under crisis a story from the trenches," in *Agile, 2008. AGILE '08. Conference*, pp. 436–444, Aug 2008.

- [6] H. Schoenau-Fog, A. Birke, and L. Reng, “Evaluation of continuation desire as an iterative game development method,” in *Proceeding of the 16th International Academic MindTrek Conference*, MindTrek ’12, (New York, NY, USA), pp. 241–243, ACM, 2012.