

Dr Michael Scott

## Introduction

In this assignment, you will conduct research on the agile development methodology in order to bring an academic perspective into your working practice. Specifically, your research should explore:

- (i) What the agile philosophy is;
- (ii) and how developers apply agile principles in the games industry.

Communication and working practices are both important to employers in the games industry. Problems arising from miscommunicated requirements are a large avoidable cost, and productivity is highly valued. Additionally, research skills will help you with your future professional development. Most critically, moving beyond just textbooks and websites to academic peer-reviewed papers will help you to keep your skills up to date in the future.

This assignment is formed of several parts:

- (a) Write a 200-word proposal with references which must:
  - i. state a specific research question which you intend to address;
  - ii. **describe** the way in which you intend to address the question;
  - iii. and then **list** at least **6** appropriate academic references to use to support your research.
- (b) **Present**, as a **group**, a 15-minute summary of your research that will:
  - i. clarify each persons final research question;
  - ii. describe the key findings of your research;
  - iii. and discuss how these findings apply to working practice.
- (c) Write a draft 1000-word essay which will:
  - i. describes the agile philosophy and agile principles associated with the research question;
  - ii. and addresses the research queston.
- (d) Write a final 1000-word essay which will:
  - i. revise any issues raised by your tutor and/or your peers.

**Note:** All research questions must be distinctive. Members of the same development group must **not** target the same research question.



"Individuals and Interactions

over Processes and Tools"

"Working Software over Comprehensive

Documentation"

"Customer Collaboration over

Contract Negotiation"

"Responding to Change over

Following a Plan"

— Agile Manifesto

The Makey Makey allows a multitude of materials to be used to create videogame controllers.

# Assignment Setup

This assignment is an **academic writing task**. Fork the GitHub repository at the following URL:

https://github.com/Falmouth-Games-Academy/comp150-agile

Use the existing directory structure and, as required, extend this structure with sub-directories. Ensure that you maintain the readme.md file.

Modify the .gitignore to the defaults for **TeX**. Please, also ensure that you add editor-specific files and folders to .gitignore.

#### Part A

Part A consists of a **single formative submission**. This work is **individual** and will be assessed on a **threshold** basis. The following criteria are used to determine a pass or fail:

- (a) Submission is timely;
- (b) Research question is appropriate and distinctive;
- (c) At least six academic peer-reviewed sources are cited.

To complete Part A, write your proposal in the readme.md document and then prepare the reference list using a \*.bib file. Show these to your tutor. If acceptable, this will be signed-off.

You will receive immediate informal feedback.

#### Part B

Part B is a **single formative submission**. This work is **collaborative** and will be assessed on a **threshold** basis. The following criteria are used to determine a pass or fail:

- (a) Research questions are adequetely addressed;
- (b) Some evidence of academic rigor;
- (c) Some insight into the relationship between theory and practice.

To complete Part B, prepare a presentation that summarises your research findings. Prepare your slideshow collaboratively in TeX. Use the combined reference list of the group to broadly discuss each individual research question. Help each other. Ensure that the source code and related assets are pushed to GitHub prior to the scheduled session. Then, attend the scheduled session.

You will receive **peer feedback** within 3 working days after the session.

#### Part C

Part C is a **single formative submission**. This work is **individual** and will be assessed on a **threshold** basis. The following criteria are used to determine a pass or fail:

- (a) Submission is timely;
- (b) Enough work is available to conduct a meaningful review;
- (c) A broadly appropriate review of a peer's work is submitted.

To complete Part C, prepare a draft version of the essay. Ensure that the source code and related assets are pushed to GitHub and a pull request is made prior to the scheduled session. Then, attend the scheduled session.

You will receive **peer feedback** within 3 working days after the session.

#### Part D

Part D is a **single summative submission**. This work is **individual** and will be assessed on a **criterion-referenced** basis. The following criteria are used to allocate marks:

- (a) Appropriateness of Referenced Articles;
- (b) Relevance to and Focus on the Research Questions;
- (c) Depth of Insight into the Agile Philosophy;
- (d) Specificity, Verifiability, and Accuracy of Claims;
- (e) Adequacy of Analysis of Research Articles;
- (f) Adequacy of Discussion on Transfer to the Games Industry;
- (g) Quality of Academic Writing;

To complete Part D, revise the essay based on the feedback you have received. Then, upload the essay to the LearningSpace. Please note, the LearningSpace will only accept a single .pdf file.

You will receive **formal feedback** three weeks after the final deadline.

# **Additional Guidance**

Use your experience from the previous essays. Identify weaknesses and feedforward. University is an opportunity for improvement and an effective way to do this is to compare past and current performance.

Developing the research question is the most challenging aspect of this assignment. It is very unlikely that you will settle on the first research question that you propose. This is because the question will often arise out of your individual research and reading efforts. Furthermore, the question should relate to working practices for game developers. An example might be: "how can game developers make effective use of the daily scrum?". You will need to discuss your question with your tutor and your peers to help focus it.

Areas where students tend to lose marks are: depth of insight; analytical skill; and evaluative skill. Depth of insight implies rigorous research, addressing one key challenge in much detail, rather than several challenges with weaker research and/or in less detail. Adequete analysis implies going beyond mere descrption, perhaps through: performing calculations, comparing sources, or even deploying reasoning to generate new insights. Adequete evaluation implies making appropriate reference to evidence and ensuring that evidence is of appropriate quality. Further to this, sound and valid arguments are constructed, criticising the claims made by other authors.

Focus on answering your research question. You have but 1000-words! Depth over breadth. Quality over quantitiy. Write concisely. Your ability to recall facts is not under assessment, your ability to construct an argument through critical analysis and making it relevant to practice is.

#### FAQ

#### • What is the deadline for this assignment?

Falmouth University policy states that deadlines must only be specified on LearningSpace. Please examine the assignment area where you located this document.

#### What should I do to seek help?

You can email your tutor for informal clarifications. For informal feedback, make a pull request on GitHub.

#### • Is this a mistake?

If you have discovered an issue with the brief itself, the source files are available at:

https://github.com/Falmouth-Games-Academy/bsc-assignment-briefs. Please make a pull request and comment accordingly.

### Additional Resources

- Keith, C. (2010) Agile Game Development with Scrum. Pearson Education.
- http://agilemanifesto.org/

# Marking Rubric

| Criterion                                       | Weight             | F (0 – 39)   | D (40 – 49)  | C (50 – 59)   | B (60 – 69)   | A (70 – 79)   | A* (80 – 100)  |
|---|--------------------|--|--|---|---|---|--|
| Parts A—C                                       | 10%<br>(Threshold) | Parts A—C have not been sub                          | mitted, are incomplete, or are u                       | insatisfactory.   | Two parts incomplete.   | One part incomplete.  | Parts A—C are complete.  |
| Appropriateness of<br>Referenced Articles       | 10%                | No relevant article is referenced.                   | At least three relevant sources are referenced.        | At least six relevant sources have been referenced.  Where appropriate, some sources report scholarly research. | At least eight relevant sources have been referenced. Where appropriate, most articles report scholarly research.                 | At least ten relevant sources have been referenced.   | At least ten relevant sources have been referenced.  |
|   |                    |  |  |   |   | Where appropriate, all sources report scholarly research.   | Where appropriate, all articles report scholarly research.   |
|   |                    |  |  |   |   | Some appropriate seminal and highly reputed sources have been referenced.   | Many appropriate seminal and highly reputed sources have been referenced.  |
| Relevance to and Focus on the                   | 5%                 | No focus on the research question.                   | Little focus on the research question.                 | Some focus on the research question.  | Much focus on the research question.  | Significant focus on the research question.   | Extensive focus on the research question.  |
| Research Question                               |                    |  |  |   | Research questions are explicitly defined.  | Research question is explicitly or otherwise clearly defined.   | Research question is explicitly or otherwise clearly defined.  |
|   |                    |  |  |   |   | Conclusion explicitly refers back to the question.  | Conclusion explicitly refers back to the question.   |
| Depth of Insight into<br>the Agile Philosophy   | 20%                | No depth of insight into the agile philosophy.       | Little depth of insight into the agile philosophy.     | Some depth of insight into the agile philosophy.  | Much depth of insight into the agile philosophy.  | Significant depth of insight into the agile philosophy.   | Exemplary depth of insight into the agile philosophy.  |
|   |                    |  |  | Reference to the agile manifesto or related work.   | Articulation of the agile manifesto and related work.   | Exploration of the agile manifesto with reference to appropriate related work.  | Critical insight into the agile manifesto with support from related work.  |
| Specificity,<br>Verifiability, &                | 5%                 | No citations to evidence to claims.                  | Few claims have a clear source of evidence.            | Some claims have a clear source of evidence.  | Many claims have a clear source of evidence.  | Most claims have a clear source of evidence.  | All claims have a clear source of evidence.  |
| Accuracy of Claims                              |                    | Substantial errors and/or misinterpretations.        | Significant errors and/or misinterpretations.          | Many errors and/or misinterpretations.  | Some errors and/or misinterpretations.  | Few errors and/or misinterpretations.   | Almost no errors and/or misinterpretations.  |
| Adequacy of<br>Analysis of Research<br>Articles | 20%                | No analysis has been presented.                      | Little analysis has been presented.                    | Some analysis has been presented.   | Much analysis has been presented.   | Significant analysis has been presented.  | Exemplary analysis has been presented.   |
| Adequacy of Discussion on                       | 15%                | No transfer to the games industry.                   | Little transfer to the games industry.                 | Some transfer to the games industry.  | Much transfer to the games industry.  | Significant transfer to the games industry.   | Exemplary transfer to the games industry.  |
| Transfer to the<br>Games Industry               |                    |  |  | Appropriate references to the games industry and/or game development practice.                                  | Appropriate argument suggesting effective game development practice.  | Relevant criticism of game<br>development practices,<br>demonstrating insight into<br>pitfalls and arguing for<br>possible solutions. | Relevant criticism of game development practices, demonstrating insight into key pitfalls and effectively defending appropriate solutions with evidence. |
| Appropriateness of<br>Academic Writing          | 5%                 | No evidence for partial-mastery of academic writing. | Some evidence for partial-mastery of academic writing. | Much evidence for partial-mastery of academic writing.  | Some evidence for mastery of academic writing.  | Much evidence for mastery of academic writing.  | Significant evidence for mastery of academic writing.  |
|   |                    | The reference section is missing.                    | The reference section is incomplete and/or malformed.  | The reference section is complete and well-formed in either ACM or IEEE format.                                 | The reference section is complete and well-formed in either ACM or IEEE format. All in-text citations and quotations are correct. | The reference section is complete and well-formed in either ACM or IEEE format. All in-text citations and quotations are correct.     | The reference section is complete and well-formed in either ACM or IEEE format.  |
|   |                    |  |  | Most in-text citations and quotations are correct.  |   |   | All in-text citations and quotations are correct.  |
| Appropriateness of<br>Spelling & Grammar        | 5%                 | Substantial spelling and/or grammar errors.          | Many spelling and/or grammar errors.                   | Some spelling and/or grammar errors.  | Few spelling and/or grammar errors.   | Almost no spelling and/or grammar errors.   | No spelling or grammar errors.   |
| Appropriateness of<br>Essay Structure           | 5%                 | There is no structure, or the structure is unclear.  | There is little structure.                             | There is some structure. A few sentences and paragraphs are well constructed.                                   | There is much structure.  Some sentences and paragraphs are well constructed.  There is a clear introduction and conclusion.      | There is much structure, highlighting the argument.   | There is much structure, highlighting the argument.  |
|   |                    |  |  |   |   | Most sentences and paragraphs are well constructed.   | All sentences and paragraphs are well constructed.   |
|   |                    |  |  |   |   | There is a clear and well-constructed introduction and conclusion.  | There is a clear and well-constructed introduction and conclusion.   |