Dr Edward Powley

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;
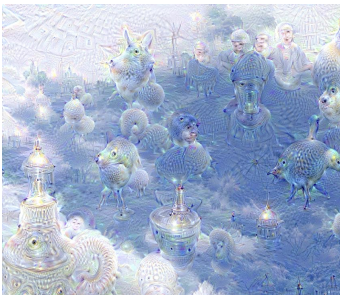(ii) and how developers apply agile principles in the games industry.

"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

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.

Assignment Setup

DeepDream is a computer vision program created by Google which uses a convolutional neural network to find and enhance patterns in images via algorithmic pareidolia, thus creating a dream-like hallucinogenic appearance in the deliberately over-processed images.

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 feed-*forward*. 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 calculatons, 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	Refer for Resubmission	Basic Competency	Basic Proficiency	Novice Competency	Novice Proficiency	Professional Competency
Parts A—C	10% (Threshold)	Parts A—C have not been submitted, are incomplete, or are unsatisfactory.			Two parts incomplete.	One part incomplete.	Parts A—C are complete.
Appropriateness of 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. Where appropriate, all sources report scholarly research. Some appropriate seminal and highly reputed sources have been referenced.	At least ten relevant sources have been referenced. Where appropriate, all articles report scholarly research. Many appropriate seminal and highly reputed sources have been referenced.
Relevance to and Focus on the Research Question	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. Research questions are explicitly defined.	Significant focus on the research question. Research question is explicitly or otherwise clearly defined. Conclusion explicitly refers back to the question.	Extensive focus on the research question. Research question is explicitly or otherwise clearly defined. Conclusion explicitly refers back to the question.
Depth of Insight into 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. Reference to the agile manifesto or related work.	Much depth of insight into the agile philosophy. Articulation of the agile manifesto and related work.	Significant depth of insight into the agile philosophy. Exploration of the agile manifesto with reference to appropriate related work.	Exemplary depth of insight into the agile philosophy. Critical insight into the agile philosophy with support from related work.
Specificity, Verifiability, & Accuracy of Claims	5%	No citations to evidence to claims. Substantial errors and/or misinterpretations.	Few claims have a clear source of evidence. Significant errors and/or misinterpretations.	Some claims have a clear source of evidence. Many errors and/or misinterpretations.	Many claims have a clear source of evidence. Some errors and/or misinterpretations.	Most claims have a clear source of evidence. Few errors and/or misinterpretations.	All claims have a clear source of evidence. Almost no errors and/or misinterpretations.
Adequacy of Analysis of Research 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 Transfer to the Games Industry	15%	No transfer to the games industry.	Little transfer to the games industry.	Some transfer to the games industry. Appropriate references to the games industry and/or game development practice.	Much transfer to the games industry. Appropriate argument suggesting effective game development practice.	Significant transfer to the games industry. Relevant criticism of game development practices, demonstrating insight into pitfalls and arguing for possible solutions.	Exemplary transfer to the games industry. Relevant criticism of game development practices, demonstrating insight into key pitfalls and effectively defending appropriate solutions with evidence.
Appropriateness of Academic Writing	5%	No evidence for partial-mastery of academic writing. The reference section is missing.	Some evidence for partial-mastery of academic writing. The reference section is incomplete and/or malformed.	Much evidence for partial-mastery of academic writing. The reference section is complete and well-formed in either ACM or IEEE format. Most in-text citations and quotations are correct.	Some evidence for mastery of academic writing. The reference section is complete and well-formed in either ACM or IEEE format. All in-text citations and quotations are correct.	Much evidence for mastery of academic writing. The reference section is complete and well-formed in either ACM or IEEE format. All in-text citations and quotations are correct.	Significant evidence for mastery of academic writing. The reference section is complete and well-formed in either ACM or IEEE format. All in-text citations and quotations are correct.
Appropriateness of 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.

Criterion	Weight	Refer for Resubmission	Basic Competency	Basic Proficiency	Novice Competency	Novice Proficiency	Professional Competency
Appropriateness of 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. Most sentences and paragraphs are well constructed. There is a clear and well-constructed introduction and conclusion.	There is much structure, highlighting the argument. All sentences and paragraphs are well constructed. There is a clear and well-constructed introduction and conclusion.