

RESEARCH JOURNAL — COMPUTING

Version 1.0
BSc Computing for Games

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Introduction

In this assignment, you will produce a journal detailing your research on the principles of computing. In addition to your individual journal, as a group you will create a community wiki to collect and discuss your findings.

Familiarity with the scientific literature is extremely helpful for the computing professional, both to understand the seminal works that lay the foundations of the field, and to keep abreast of recent developments at the cutting edge. Scientific papers are written in a way that is sometimes daunting to newcomers; it is essential to practice the skill of reading and comprehending such papers. Keeping a research journal is a useful way to record your thoughts (questions, hypotheses, connections, ideas, ...) as you explore the literature.

This assignment is formed of several parts:

- A. **Read** at least n papers from the scientific literature on computing.
- B. **Write** a journal entry for each paper you read. The journal entry should record your thoughts on the paper, which may include but not necessarily be limited to:
 - i. A **summary**, in your own words, of the content of your paper;
 - ii. Why you think the paper is **significant** and/or **influential**;
 - iii. Anything in the paper that you **do not understand**;
 - iv. Anything in the paper that is **counterintuitive**, **surprising** or that you **disagree with**;
 - v. Any **research questions** that the paper suggests to you;
 - vi. Ways in which this paper **supports** or **contradicts** other papers you have read.
- C. **Collate** your individual journal entries and **synthesise** them into a cohesive report.
- D. **Edit** the community wiki to share and debate your findings with your peers.
- E. **Discuss** your research journal with the tutor in the viva session in class.

how will this make you a better game dev – games is a fast-moving field and keeping up is important

working software over Comprehensive

additional guidance: One paper will be suggested in class every two weeks; this is the bare minimum that you should read. You should also read around the subject areas covered by these papers.

move into additional guidance

combine with part B

Assignment Setup

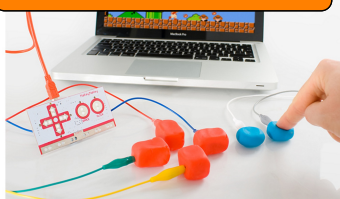
This assignment is an **academic writing task** and **wiki task**. Fork the GitHub repository at the following URL:

<https://github.com/Falmouth-Games-Academy/comp110-journal>

Use the existing directory structure and, as required, extend this structure with sub-directories.

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

is this the best term? Define in course hand-book



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

Part A

No separate submission is required for Part A, however it is a prerequisite for completing the other parts.

Part B

Part B consists of **multiple formative submissions**. This work is **individual** and will be assessed on a **threshold** basis.

To complete Part B, edit your `readme.md` file to contain a journal entry for each article you read, as well as any other material you feel will be relevant or useful in preparing your final report. Bring this to your personal tutor meetings to be signed off, at least once every three weeks during semester 1.

You will receive **immediate informal feedback**.

Part C

Part C is a **single summative submission**. This work is **individual** and will be assessed on a **criterion-referenced** basis using the criteria listed in the marking rubric at the end of this document.

To complete Part C, edit your `readme.md` file to contain your final report. You should already have written much of the material for your report in Part B; at this stage you should concentrate on revising that material in response to feedback and on ensuring that the material is structured in a coherent way. How you structure your report is up to you; however for higher grades the report should be formed around a clear thread of arguments framed by a suitable introduction and conclusion.

Compress your `readme.md` file, along with any required images or other external files, into a `.zip` file and upload it to LearningSpace.

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

Part D

Part D consists of **multiple summative submissions**. This work is **group-based** and will be assessed on a **criterion-referenced** basis. The criterion used to assess this part relates to the level and nature of your participation.

To complete Part D, contribute to the wiki at the following URL:

<https://github.com/Falmouth-Games-Academy/comp110-journal/wiki>

Please ensure that you are editing the wiki for the Falmouth-Games-Academy repository, and **not** the wiki for your fork of the repository! The wiki is intended to be a group counterpart to your individual research journal.

During your personal tutor meetings, make your tutor aware of your contributions to the wiki.

You will receive **immediate informal feedback** as well as **ongoing peer feedback**.

Part E

Part E is a viva, after the summative 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. Adequate analysis implies going beyond mere description, perhaps through: performing calculations, comparing sources, or even deploying reasoning to generate new insights. Adequate 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 quantity. 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
Participation in viva	Threshold 10%	The student did not participate in the viva, or did not submit sufficient work to discuss in the viva.					The student participated in the viva.
Breadth of reading	15%	No articles are referenced. numbers?	all 6 Some but not all of the suggested articles are referenced.	6 + 6 All of the suggested articles are referenced. No other relevant scholarly articles are referenced.	6 + 12 All of the suggested articles are referenced. Some other relevant scholarly articles are referenced.	All of the suggested articles are referenced. Many other relevant scholarly articles are referenced.	All of the suggested articles are referenced. A wide variety of highly relevant scholarly articles are also referenced.
Depth of insight	20%	F	D	C	B	A	A*
Specificity, verifiability & accuracy of claims	10%	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.
Synthesis	20%	F	D list of papers	C superficial connections	B basic synthesis	A inference / analysis	A* evaluative skills bloom's taxonomy kind of or kraftwohl's taxonomy?
Community engagement	15%	No contribution has been made to the wiki.	A few minor contributions have been made to the wiki.	Some contributions have been made to the wiki. The student has made some attempt to engage in community discussion.	Many contributions have been made to the wiki. good quality contributions The student has actively engaged in the community discussion.	A significant number of contributions have been made to the wiki. really good quality contributions The student has participated in steering the community discussion.	An extensive number of contributions have been made to the wiki. academically sound and well-reasoned contributions The student has played a key role in driving the community discussion.
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.
Appropriateness of journal 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 key themes. Most sentences and paragraphs are well constructed. There is a clear and well-constructed introduction and conclusion. are intro+conc needed for journals?	There is much structure, highlighting the key themes. All sentences and paragraphs are well constructed. There is a clear and well-constructed introduction and conclusion.