**Higher Nationals - Summative Assignment Feedback Form**

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| **Student Name/ID** | John Doe / Student Code | | |
| **Unit Title** | Unit 06: Planning a Computing Project | | |
| **Assignment Number** | 1 | **Assessor** | Tran Thi Kim Khanh |
| **Submission Date** |  | **Date Received 1st submission** |  |
| **Re-submission Date** |  | **Date Received 2nd submission** |  |
| **Assessor Feedback:**  \*Please note that constructive and useful feedback should allow students to understand:   1. Strengths of performance 2. Limitations of performance 3. Any improvements needed in future assessments   Feedback should be against the learning outcomes and assessment criteria to help students understand how these inform the process of judging the overall grade.  Feedback should give full guidance to the students on how they have met the learning outcomes and assessment criteria. | | | |
| **Grade:** | **Assessor Signature:** | | **Date:** |
| **Resubmission Feedback:**  \*Please note resubmission feedback is focussed only on the resubmitted work | | | |
| **Grade:** | **Assessor Signature:** | | **Date:** |
| **Internal Verifier’s Comments:** | | | |
| **Signature & Date:** | | | |

\* Please note that grade decisions are provisional. They are only confirmed once internal and external moderation has taken place and grades decisions have been agreed at the assessments.

Unit 06: Planning a Computing Project

Assignment Brief 1

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| --- | --- |
| Unit Number and Title | Unit 06: Planning a Computing Project |
| Academic Year | 2023 - 2024 |
| Unit Tutor | Nguyen The Lam Tung |
| Assignment Title | Plan and conduct a small scale research activity |
| Issue Date | 01 September 2023 |
| Submission Date | 01 August 2023 |
| Submission Format | |
| |  |  | | --- | --- | | *Format* | The submission is in the form of an individual written report that shows how you have manage the project. This should be written in a concise, formal business style using single spacing and font size 12. You are required to make use of headings, paragraphs and subsections as appropriate, and all work must be supported with research and referenced using the Harvard referencing system. Please also provide a bibliography using the Harvard referencing system. | | *Submission* | Students are compulsory to submit the assignment in due date and in a way requested by the Tutors. The form of submission will be a soft copy in PDF posted on corresponding course of <http://cms.greenwich.edu.vn/> | | *Note* | The Assignment must be your own work, and not copied by or from another student or from books etc. If you use ideas, quotes or data (such as diagrams) from books, journals or other sources, you must reference your sources, using the Harvard style. Make sure that you know how to reference properly, and that understand the guidelines on plagiarism. *If you do not, you definitely get fail*. | | |
| Unit Learning Outcomes | |
| LO1: Establish project aims, objectives and timeframes based on the chosen theme.  LO2: Conduct small-scale research, information gathering and data collection to generate knowledge to support the project. | |
| Transferable skills and competencies developed | |
| The assignment offers students the chance to explore various aspects of big data from the perspective of computing professionals or data scientists. It also encourages investigations into the applications, benefits, limitations, and responsibilities associated with big data and provides solutions to the problems it aims to solve. | |
| Vocational scenario | |
| Introduction to theme  Application of Big Data and IoT/AI to potential future developments  Over the past decade, the term "big data" has gained increasing popularity. Initially, it referred to data generated in massive volumes, such as internet search queries, weather sensor data, and social media information. Nowadays, big data represents large amounts of information from diverse sources that cannot be processed conventionally or without computational intervention. Big data can be stored in structured, unstructured, or semi-structured formats. Many systems and organizations generate massive quantities of big data on a daily basis, some of which are publicly available for analysis. Consequently, machine learning systems have been developed to sift through this data, rapidly identify patterns, and solve problems. This has led to the emergence of data science analytics as a discipline to design, build, and test machine learning and artificial intelligence systems. Leveraging big data requires a broad range of knowledge and skills, creating new opportunities for previously inaccessible organizations. It allows businesses to gain a comprehensive understanding of global trends, enabling more accurate and up-to-date decision-making. Big data can help identify potential business risks earlier and minimize costs without compromising innovation. However, the rapid application of big data raises concerns about security, the ethical storage of personal data from multiple sources, and the sustainability of energy requirements in large data warehouses.  Task  As a member of Research and Development department, you have been assigned a mini-project to find out the application of Big Data and IoT/AI to potential future developments e.g. automated manufacturing, medicine and healthcare, virtual worlds, scientific research, etc. | |
| Assignment activity and guidance | |
| You need to do primary research (both qualitative and quantitative research) and secondary research to find out that impact and conduct a report for your research. Even it’s a mini-project, you must apply project management (PM) techniques such as project charter with aims, objectives, cost etc. As for time management, you need to produce WBS and Gantt chart with reasonable tasks and time. A project logbook is required to provide evidence of the project development process and ongoing reflection for every week. This logbook will be needed later for your reflection and evaluation in Assignment 2. As part of QA (quality assurance) policy, in the report you also need to critically evaluate the PM process and appropriate research methodologies applied.  Your report must have an introduction stating the project aims and objectives. This must be followed by a copy of your project management plan. Your plan should show the milestones when you will review with your tutor your ongoing progress so far. You will submit your logbook which shows how you have carried out the project. | |
| **Recommended Resources**   1. **Article: 6V’s of Big Data** [**https://www.geeksforgeeks.org/5-vs-of-big-data/**](https://www.geeksforgeeks.org/5-vs-of-big-data/) 2. **Article: Business Ethics and Big Data** [**https://www.ibe.org.uk/resource/business-ethics-and-big-data.html**](https://www.ibe.org.uk/resource/business-ethics-and-big-data.html) 3. **Article: What is Big Data Security? Challenges & Solutions** [**https://www.datamation.com/big-data/big-data-security/**](https://www.datamation.com/big-data/big-data-security/) 4. **Article: What is Big Data?** [**https://www.oracle.com/uk/big-data/what-is-big-data/**](https://www.oracle.com/uk/big-data/what-is-big-data/) 5. **Magazine: Information Sciences** [**https://www.sciencedirect.com/journal/information-sciences**](https://www.sciencedirect.com/journal/information-sciences) 6. **Magazine: Big Data Research** [**https://www.sciencedirect.com/journal/big-data-research**](https://www.sciencedirect.com/journal/big-data-research) 7. **Report: Big Data & Investment Management: The Potential to Quantify Traditionally Qualitative Factors** [**https://tinyurl.com/yff4uenz**](https://tinyurl.com/yff4uenz) 8. **Webinar: Big Data Sources & Analysis Webinar** [**https://tinyurl.com/2p85d7mb**](https://tinyurl.com/2p85d7mb) 9. **Video: Big Data In 5 Minutes|What Is Big Data?|Introduction To Big Data|Big Data Explained** [**https://www.youtube.com/watch?v=bAyrObl7TYE**](https://www.youtube.com/watch?v=bAyrObl7TYE) 10. **Video: Challenges of Securing Big Data** [**https://www.youtube.com/watch?v=3xIuIcPzMVs**](https://www.youtube.com/watch?v=3xIuIcPzMVs) 11. **Video: The Importance of Data Ethics** [**https://www.youtube.com/watch?v=gLHMhCtxEYE**](https://www.youtube.com/watch?v=gLHMhCtxEYE) 12. **Book: A Bite-Sized Guide to Visualising Data** [**https://tinyurl.com/38d6thsk**](https://tinyurl.com/38d6thsk) 13. **Book: Business Intelligence Strategy and Big Data Analytics** [**https://www.sciencedirect.com/book/9780128091982/business-intelligence-strategy-and-big-data-analytics**](https://www.sciencedirect.com/book/9780128091982/business-intelligence-strategy-and-big-data-analytics) 14. **Book: Principles and Practice of Big Data Preparing, Sharing, and Analysing Complex Information** [**https://www.sciencedirect.com/book/9780128156094/principles-and-practice-of-big-data**](https://www.sciencedirect.com/book/9780128156094/principles-and-practice-of-big-data) 15. **Book: Systems Simulation and Modelling for Cloud Computing and Big Data Applications** [**https://tinyurl.com/2s3wkehn**](https://tinyurl.com/2s3wkehn) 16. **Journal: Big Data in Construction: Current Applications and Future Opportunities** [**https://www.mdpi.com/2504-2289/6/1/18**](https://www.mdpi.com/2504-2289/6/1/18) 17. **Journal: Big Data with Cloud Computing: Discussions and Challenges** [**https://www.sciopen.com/arti cle/pdf/10.26599/BDMA.2021.9020016.pdf**](https://www.sciopen.com/arti%20cle/pdf/10.26599/BDMA.2021.9020016.pdf) 18. **Journal: Mobile Big Data Solutions for a Better Future** [**https://tinyurl.com/hpk2zvvw**](https://tinyurl.com/hpk2zvvw) 19. **Journal: The social implications, risks, challenges and opportunities of big data** [**https://tinyurl.com/yw593svk**](https://tinyurl.com/yw593svk) 20. **Journal: Policy discussion – Challenges of big data and analytics driven demand-side management** [**https://tinyurl.com/kyb3j6x7**](https://tinyurl.com/kyb3j6x7) 21. **Journal: Explore Big Data Analytics Applications and Opportunities: A Review** [**https://tinyurl.com/597j8nd3**](https://tinyurl.com/597j8nd3) 22. **Journal: What is Big Data?** [**https://www.oracle.com/cl/a/ocom/docs/what-is-big-data-ebook- 4421383.pdf**](https://www.oracle.com/cl/a/ocom/docs/what-is-big-data-ebook-%204421383.pdf) 23. **Journal: Towards felicitous decision making: An overview on challenges and trends of Big Data** [**https://www.sciencedirect.com/science/article/abs/pii/S002 0025516304868**](https://www.sciencedirect.com/science/article/abs/pii/S002%200025516304868) 24. **Journal: Critical analysis of Big Data challenges and analytical methods** [**https://www.sciencedirect.com/science/article/pii/S014829631630488X**](https://www.sciencedirect.com/science/article/pii/S014829631630488X) 25. **Journal: Big Data Security Issues and Challenges** [**https://tinyurl.com/wabx7zya**](https://tinyurl.com/wabx7zya) 26. **Journal: IoT Big Data Security and Privacy Versus Innovation** [**https://ieeexplore.ieee.org/abstract/document/8643026**](https://ieeexplore.ieee.org/abstract/document/8643026) 27. **Journal: Big Data Security and Privacy Protection** [**https://www.atlantis-press.com/proceedings/icmcs-18/25904185**](https://www.atlantis-press.com/proceedings/icmcs-18/25904185) 28. **Journal: Big data analytics in Cloud computing: an overview** [**https://journalofcloudcomputing.springeropen.com/articles/10.1186/s13677-022-00301-w**](https://journalofcloudcomputing.springeropen.com/articles/10.1186/s13677-022-00301-w)   **Please note that the resources listed are examples for you to use as a starting point in your research – the list is not definitive.** | |

**Learning Outcomes and Assessment Criteria**

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| --- | --- | --- |
| Pass | Merit | Distinction |
| **LO1** Establish project aims, objectives and timeframes based on the chosen theme | | **LO1 & LO2**  **D1** Critically evaluate the project management process and appropriate research methodologies applied. |
| **P1** Devise project aims and objectives for a chosen scenario.  **P2** Produce a project management plan that covers aspects of cost, scope, time, quality, communication, risk and resources.  **P3** Produce a work breakdown structure and a Gantt Chart to provide timeframes and stages for completion. | **M1** Produce a comprehensive project management plan, milestone schedule and project schedule for monitoring and completing the aims and objectives of the project. |
| **LO2** Conduct small-scale research, information gathering and data collection to generate knowledge to support the project | |
| **P4** Carry out small-scale research by applying qualitative and quantitative research methods appropriate for meeting project aims and objectives. | **M2** Evaluate the accuracy and reliability of different research methods applied. |

# Part 1: Project Management

## I. Introduction (about the chosen scenario)

* 1. Title

Name your project (word limit: 12-15 words)

* 1. IT Project
* *What is IT project?*
* *The introduction of your project*
* *Big data and AI / Big Data anh IoT*
* *Big Data for.......? AI for .....? IoT for.....?*
* *Purposes: what you will solve*
* *Benefits: why it will be useful for our life*
  1. Project Management

The introduction of Project management in general, in all fields

* 1. Project Management in Software Engineering

The introduction of Project management in IT development or Software engineering in detail.

* 1. Project Phases
* How many? What are Project Phases?

## II. Project initialization (P1)

* 1. The concept of Project initiation
* What is it?
* The importance of project initiation
  1. Main aim of the project

According to your project: Which system? for what? By using (technique /approach /tool /model ...)

* 1. List of Objectives to achieve the aim

*I will back to this section after you have already had a specific idea.*

## III. Project Management Plan: (P2)

* 1. Scope
* What is scope management in IT project?
* The importance of scope management
* In your project:
  + What are acceptance criteria?
  + What are exclusions?
  1. Time
* Introduction of time management
* Total Duration:
  + Start date:
  + End date
* Milestone: (name/date)
  1. Communication
* Introduction of communication management
* List of meeting(team, stakeholder, client...)

## IV. Planning

### 4.1. WBS

- What is WBS?

- Your WBS