

## ASSIGNMENT BRIEF

<b>HTU Course No:</b> 30202290	<b>HTU Course Name:</b> Computing Research Project
<b>BTEC Unit Code:</b> K/618/7425	<b>BTEC UNIT Name:</b> Computing Research Project

**Version: 3**



<b>Student Name/ID Number/Section</b>	
<b>HTU Course Number and Title</b>	30202290 Computing Research Project
<b>BTEC Unit Code and Title</b>	K/618/7425 Computing Research Project
<b>Academic Year</b>	2023-2024 Fall
<b>Assignment Author</b>	Islam Alomari
<b>Course Tutor</b>	Islam Alomari
<b>Assignment Title</b>	Big Data
<b>Assignment Ref No</b>	1
<b>Issue Date</b>	17/12/2023
<b>Formative Assessment dates</b>	From 17/12/2023 to 11/01/2024
<b>Submission Date</b>	28/01/2024
<b>IV Name &amp; Date</b>	Sinan Kamal 16/12/2023
<b>Submission Format</b>	
<ol style="list-style-type: none"> <li>1. You must obey the deadline for submission.</li> <li>2. Hand-written reports are not allowed. Only typed reports are accepted.</li> <li>3. Soft copies submissions should be done through the university's eLearning system within the deadline specified above from the below link: <a href="https://elearning.htu.edu.jo/login/index.php">https://elearning.htu.edu.jo/login/index.php</a>.</li> <li>4. HTU policies will apply if you are found guilty of plagiarism.</li> <li>5. All references must be in Harvard Style.</li> </ol> <ul style="list-style-type: none"> <li>• You are required to submit the followings: <ol style="list-style-type: none"> <li>1. Research Proposal.</li> <li>2. Reflection Report.</li> <li>3. A presentation consisting of a maximum of 15 slides to summarize your work in the proposal.</li> <li>4. Research Ethics Approval Form.</li> <li>5. Student Declaration Form.</li> </ol> </li> </ul> <p><b>Note:</b> All submissions must be in Word Format except the presentation.</p>	
<b>Unit Learning Outcomes</b>	
<b>LO1</b> Examine appropriate research methodologies and approaches as part of the research process <b>LO2</b> Conduct and analyse research relevant to a computing research project <b>LO3</b> Communicate the outcomes of a research project to identified stakeholders <b>LO4</b> Reflect on the application of research methodologies and concepts	
<b>Assignment Brief and Guidance</b>	
<ol style="list-style-type: none"> <li>1. <b>Construct a research proposal</b> that defines a research question or hypothesis related to one of the following topics on <b>Big Data</b> and clearly identifies the objective(s). <ul style="list-style-type: none"> <li>• Storage models.</li> <li>• Cyber security risks.</li> <li>• Future developments and driving innovation.</li> </ul> </li> </ol>	

- Legal and ethical trade-offs.

**The research proposal must contain the following:**

- Title Page
- Introduction: background and introduction to the subject of the research
- Literature Review
- Research objective(s), research questions and/or research hypothesis.
- Methodology:
  - Analyze what is qualitative, quantitative and mixed method.
  - Assess qualitative and quantitative methods such as (grounded theory, survey, experimental etc.) and justify the selection of these methods based on the philosophical position.
  - Select and define the methodology that you will use and critically assess the application of research methodologies and processes in a computing research project (your project) to support your selection.
  - Design a flowchart that summarize your proposed methodology.

2. **You have found data** about the selected topic (you have to perform a primary and secondary research), once you finished task 1 you need to collect the data but before that: **Consider and discuss the goodness and issues (access and ethical issues) of data collection and analysis techniques taking into consideration the research strategy applied.**

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3. It is time to **carry out your research**, to do so:
  - Collect the data that will help you in answering the research question(s) proposed. Include in the report the data collection tool (i.e., Survey, interview, ...).
  - Apply an analysis tool and then examine the results and findings of your research.
  - Explain how the findings meet your research objectives and what was the answers to your research questions.
  - Based on the analysis and findings, present some recommendations, and justify them.
4. It is time to **reflect on the whole process** of conducting the research:
  - Assess the effectiveness of the application of the research methods on meeting the research aims.
  - Discuss alternative research methodologies and what was the experience gained.
  - Based on the lessons learnt, suggest future improvements, and research consideration and then show how you recommend these actions based on your personal reflection.
  - Design a folw chart that includes the proposed improvements.

Learning Outcomes and Assessment Criteria			
Learning Outcome	Pass	Merit	Distinction
<b>LO1</b> Examine appropriate research methodologies and approaches as part of the research process	<p><b>P1</b> Produce a research proposal that clearly defines a research question or hypothesis supported by a literature review.</p> <p><b>P2</b> Examine appropriate research methods and approaches to primary and secondary research.</p>	<b>M1</b> Evaluate different research approaches and methodology and make justifications for the choice of methods selected based on philosophical/theoretical frameworks.	<b>D1</b> Critically evaluate research methodologies and processes in application to a computing research project to justify chosen research methods and analysis.
<b>LO2</b> Conduct and analyse research relevant to a computing research project	<p><b>P3</b> Conduct primary and secondary research using appropriate methods for a computing research project that consider costs, access and ethical issues.</p> <p><b>P4</b> Apply appropriate analytical tools analyse research findings and data.</p>	<b>M2</b> Discuss merits, limitations and pitfalls of approaches to data collection and analysis.	
<b>LO3</b> Communicate the outcomes of a research project to identified stakeholders	<b>P5</b> Communicate research outcomes in an appropriate manner for the intended audience.	<b>M3</b> Coherently and logically, communicate outcomes to the intended audience demonstrating how outcomes meet set research objectives.	<b>D2</b> Communicate critical analysis of the outcomes and make valid, justified recommendations.
<b>LO4</b> Reflect on the application of research methodologies and concepts	<p><b>P6</b> Reflect on the effectiveness of research methods applied for meeting objectives of the business research project.</p> <p><b>P7</b> Consider alternative research methodologies and lessons learnt in view of the outcomes.</p>	<b>M4</b> Provide critical reflection and insight that result in recommended actions for improvements and future research considerations.	<b>D3</b> Demonstrate reflection and engagement in the resource process leading to recommended actions for future improvement.

## STUDENT ASSESSMENT SUBMISSION AND DECLARATION

When submitting evidence for assessment, each student must sign a declaration confirming that the work is their own

<b>Student name:</b>	<b>Assessor name:</b>	
<b>Issue date:</b> 17/12/2023	<b>Submission date:</b> 28/01/2024	<b>Submitted on:</b>

**Programme:** Computing

**HTU Course Name:** Computing Research Project  
**HTU Course Code:** 30202290

**BTEC Course Title:** Computing Research Project  
**BTEC Course Code:** K/618/7425

**Assignment number and title:** 1, Big Data

### Plagiarism:

Plagiarism is a particular form of cheating. Plagiarism must be avoided at all costs and students who break the rules, however innocently, may be penalised. It is your responsibility to ensure that you understand **correct referencing practices**. As a university level student, you are expected to use appropriate references throughout and keep carefully detailed notes of all your sources of materials for material you have used in your work, including any material downloaded from the Internet. Please consult the relevant unit lecturer or your course tutor if you need any further advice.

**I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice.**

**Student Name:**

**Student Signature:**

**Date:**