

Assignment 1: Applied Research 381

Introduction

Research is a systematic process aimed at discovering new knowledge, validating existing theories, solving problems, or answering specific questions. The process helps us to gain insights and contribute to the understanding of a particular topic.

Objectives of the assignment

The primary objective of this assignment is to create a research problem. Specifically, the assignment aims to achieve the following:

- Formulate a research topic.
- Develop a research problem.
- Articulate the significance of the problem.
- Describe the potential impact of your research problem.

Research Problem

Information Technology (IT) plays a crucial role in modern society, enabling businesses to streamline operations, improve productivity, enhance communication, and innovate in various fields. The IT sector continues to evolve, driving advancements in areas such as:

- Artificial Intelligence and Machine Learning (AI/ML)
- Cloud Computing
- Internet of Things (IoT)
- Cybersecurity and Privacy

Based on the IT advancements itemised above, select one and propose a research problem. Your research problem should be clearly defined, relevant, and significant, with the potential to contribute new insights or solutions to the field. Provide a brief rationale for why this problem is worth investigating and outline the key questions and objectives of your proposed research. Your problem should be supported by at least five (5) references from accredited sources. Remember to use the Harvard referencing style.

Additional Information

- Do this assignment as an individual. You can collaborate with your peers for discussions and brainstorming but the write-up should be done alone.
- The document will be scanned for plagiarism via Turnitin.

- This assignment should not exceed one page using Times New Roman Font, size 12.
- Late assignments will not be accepted under whatever circumstance and all the candidates who will submit this assignment late will get a zero (0).
- Marks will be awarded according to the rubric below.

Rubric

Criteria	Excellent 5	Good 4	Fair 3	Poor 2	Very Poor 1
Clarity and Specificity	The research problem is clearly defined, specific, and focused.	The research problem is mostly clear and specific but lacks some precision.	The research problem is somewhat clear but lacks specificity or focus.	The research problem is vague, making it difficult to understand.	The research problem is poorly defined and lacks clarity.
Significance	The research problem addresses an important gap in knowledge and understanding within the field.	The research problem is significant but may need further justification of its importance.	The significance of the research problem is somewhat unclear or not well-supported.	The research problem lacks clear significance to the field.	The research problem is trivial or lacks any apparent significance.
Relevance and Impact	The research problem has clear relevance and potential impact within the field.	The research problem is relevant and may have a moderate impact on practical applications.	The relevance and potential impact of the research problem are somewhat unclear and or limited.	The research problem lacks clear relevance or potential impact within the field.	The research problem is irrelevant and unlikely to have any meaningful impact.
Research topic and problem	Research topic is clear, focused on scope, relevant, and concise with a research problem that correctly addresses the topic.	Research topic is mostly clear, but lacks scope, relevance, or conciseness with a research problem that mostly correctly address each question.	Clarity can be improved, with average overall scope, relevance, and conciseness. Problem reflects these as well.	Topic and problem lack sufficient clarity, with below-average scope, relevance, and conciseness.	Topic and problem are unclear, vague, irrelevant, and do not adhere to standard research practise.
Overall Quality, Presentation and References	The research problem is well-presented, logically organized, and effectively communicated.	The research problem is mostly well-presented but may have some minor issues.	The presentation of the research problem is somewhat lacking in clarity or coherence.	The research problem is poorly presented, making it difficult to follow or understand.	The research problem is highly deficient, hindering comprehension.