COMP2212 Programming Language Concepts
Coursework I

Module Code:	COMP2212		
Module Title:	PROGRAMMING LANGUAGE CONCEPTS		
Module Leader:	Muhammad Imran Babar		
Assessment Type:	Individual	**Weighting:**	10%
Submission Due Date:	06/05/2024 5.00 PM (Malaysia time)		
Method of Submission:	Blackboard		

This assessment relates to the following Module Learning Outcomes:

A. Knowledge and Understanding	A1. A2. The principles of evaluation of programming language. A3.
B. Subject Specific Intellectual and Research Skills	B1. B2. B3.
C. Subject Specific Practical Skills	C1. C2. C3.

Coursework Brief:

INSTRUCTIONS:

1. This coursework accounts for 1**0%** of the total marks for the course. It will be assessed based on the rubrics attached in this draft.
2. Submit your coursework through blackboard.
3. Upon submission feedback will be given after 3 weeks.

Report Guidelines:

- The report contents should be well-organized, clearly written, and properly formatted. Must have an introduction, contents as mentioned in the coursework components, conclusion, references, and a Turnitin report.
- The report should consist of **minimum 10 pages** and a **maximum of 15 pages**.
- Include relevant figures, tables, or graphs to support key points if taken from other sources then please add references.
- Format:

  Font: Times New Roman, **Size:** 12, **Line spacing:** 1.5.
- Use academic language and adhere to the specified citation style. References must be in APA style.
- Must be submitted in **PDF** and **.docx** format.

WEIGHTAGE:

Weightage: 10%

Total Marks: 100

PLAGIARISM POLICY

Marks will be deducted based on the plagiarism similarity index. Please see the report rubric for plagiarized work.

STUDENT DECLARATION

I/We hereby declare that this coursework is written by me/us and is a result of my/our own work. I/We have not copied ideas/research and academic sources.

Signatures

COURSEWORK COMPONENTS

The objective of this coursework is to conduct a Systematic Literature Review (SLR) on programming language concepts. Students are expected to critically analyse and synthesize existing research literature to gain a comprehensive understanding of the key concepts, trends, and advancements in the field of programming languages. Your solution for the given assessment is due by the given hand in date but may be submitted at any point before that.

Repeated multiple submissions are allowed before the deadline. You will be given feedback on how well you have critically evaluated the different programming languages. Marks will only be given to your final submission after the deadline.

a) Introduction:
Provide an overview of the importance of programming languages in computer science. Clearly state the objectives of the systematic literature review. Define the scope of the review, including the specific programming language concepts to be covered. [Marks: 10]

b) Literature Search Strategy:
Describe the search strategy used to identify relevant literature (e.g., databases, search terms, inclusion/exclusion criteria). Include a flowchart or diagram illustrating the literature search and selection process. [Marks: 5]

c) Inclusion and Exclusion Criteria:
Clearly outline the criteria used to include or exclude literature. Specify the types of sources considered (e.g., academic journals, conference proceedings, books, blogs, weblinks and other sources). Explain any time or language restrictions applied. [Marks: 5]

d) Data Extraction:
Describe the process of data extraction from selected literature. Specify the key information to be extracted, such as programming language concepts, methodologies, findings, and publication details. [Marks: 5]

e) Quality Assessment:
Discuss the criteria used to assess the quality of the selected literature. Evaluate the reliability and validity of the included studies. [Marks: 5]

f) Synthesis and Analysis:
Summarize the main programming language concepts identified in the literature. Analyse trends and patterns across different studies. Identify gaps, inconsistencies, and areas where further research is needed. [Marks: 25]

g) Discussion:
Interpret the findings in the context of the broader field of programming languages. Discuss the implications of the identified concepts for the development and evolution of programming languages. Highlight any challenges or controversies in the literature. [Marks: 15]

h) Conclusion:
Summarize the key findings of the systematic literature review. Provide recommendations for future research in programming language concepts. [Marks: 5]

i) References:
Include a comprehensive list of all the sources cited in the literature review, following APA citation style. [Marks: 10]

j) Plagiarism
The similarity index should be less than 19%. [Marks: 15]

Note:

For more details about Systematic Literature Review (SLR) please visit the following link:

- https://www.researchgate.net/publication/302924724_Guidelines_for_performing_Systematic_Literature_Reviews_in_Software_Engineering

Any work submitted after the deadline's time will be subject to the standard University late penalties unless an extension has been granted, in writing by the Senior Tutor, in advance of the deadline. Details on the University's late penalties can be found here:

- https://www.southampton.ac.uk/~assets/doc/quality-handbook/Late%20Submission.pdf

COMP2212 PROGRAMMING LANGUAGE CONCEPTS
COURSEWORK I

Criteria	Wtg	Excellent (5)	Good (4)	Satisfactory (3)	Needs Improvement (2)	Inadequate (1)	Mark (Wtg x Score)
Introduction	2	Clearly articulates the importance of programming languages. States clear and focused objectives.	Provides a solid introduction. Clearly states objectives.	Introduction is present but lacks clarity or specificity.	Introduction is unclear, lacks focus, or does not address the objectives adequately.	Extremely inadequate.	/10
Literature Search Strategy	1	Demonstrates a comprehensive and well-thought-out search strategy. Clearly presented flowchart or diagram.	Presents a well-defined search strategy. Provides a flowchart or diagram.	Describes the search strategy but lacks clarity or completeness. Flowchart or diagram is somewhat unclear.	Search strategy is unclear or incomplete. Flowchart or diagram is missing or confusing.	Extremely inadequate.	/5
Inclusion and Exclusion Criteria	1	Clearly defined criteria for inclusion/exclusion. Specifies source types and any restrictions.	Defines inclusion /exclusion criteria. Identifies source types and restrictions.	Criteria are somewhat defined but lack clarity or specificity. May not include source types or restrictions.	Inclusion/exclusion criteria are unclear or incomplete. Missing details on source types or restrictions.	Extremely inadequate.	/5
Data Extraction	1	Clearly outlines the data extraction process and identifies key information to be extracted.	Describes the data extraction process and specifies key information.	Data extraction process is somewhat clear, and key information is mentioned.	Data extraction process is unclear or incomplete. Key information is not well-defined.	Extremely inadequate.	/5
Quality Assessment	1	Thoroughly discusses the criteria used to assess the quality of literature. Evaluates reliability and validity effectively.	Discusses criteria for quality assessment. Provides a thoughtful evaluation of reliability and validity.	Criteria for quality assessment are somewhat discussed, and evaluation is present but may lack depth.	Quality assessment criteria are unclear or incomplete. Limited evaluation of reliability and validity.	Extremely inadequate.	/5
Synthesis and Analysis	5	Provides a comprehensive synthesis of programming language concepts.	Synthesizes programming language	Synthesis of concepts is present but may lack depth. Analysis of trends	Synthesis lacks depth or clarity. Limited or ineffective	Extremely inadequate.	/25

Criteria	Wtg	Excellent (5)	Good (4)	Satisfactory (3)	Needs Improvement (2)	Inadequate (1)	Mark (Wtg x Score)
		Analyses trends and patterns effectively.	concepts well. Analyses trends and patterns.	and patterns is somewhat effective.	analysis of trends and patterns.		
Discussion	3	Interpretation of findings demonstrates a deep understanding of the field. Discusses implications thoroughly.	Interprets findings well. Discusses implications effectively.	Interpretation is present but may lack depth. Implications are discussed, but some aspects may be overlooked.	Interpretation lacks depth or clarity. Limited or ineffective discussion of implications.	Extremely inadequate.	/15
Conclusion	1	Clearly summarizes key findings. Provides insightful recommendations for future research.	Summarizes key findings effectively. Offers reasonable recommendations for future research.	Conclusion is present but may lack depth or clarity. Recommendations for future research are somewhat generic.	Conclusion lacks depth or clarity. Limited or ineffective recommendations for future research.	Extremely inadequate.	/5
References	1	All references are correctly cited in the specified style. Comprehensive list of cited sources.	References are mostly correct. Minor errors in citation style. Adequate list of cited sources.	References have noticeable errors in citation style. Incomplete or somewhat inadequate list of cited sources.	References are significantly incorrect or incomplete.	Extremely inadequate.	/10
Plagiarism	3	<10%	11%-15%	16%-19%	20%-30%	>30%	/15
Total							/100