Unit:
Mobile App Development

Mobile App Development Assignment: Building a Task Management App

[Cycle] [Year]

Marking Scheme

Markers are advised that, unless a task specifies that an answer be provided in a particular form, then an answer that is correct (factually or in practical terms) **must** be given the available marks. If there is doubt as to the correctness of an answer, the relevant NCC Education materials should be the first authority.

This marking scheme has been prepared as a **guide only** to markers and there will frequently be many alternative responses which will provide a valid answer.

Each candidate's script must be fully annotated with the marker's comments (where applicable) and the marks allocated for each part of the tasks.

Throughout the marking, please credit any valid alternative point.

Where markers award half marks in any part of a task, they should ensure that the total mark recorded for the task is rounded up to a whole mark.

Marker's comments:

Moderator's comments:

Mark:	Moderated mark:	Final mark:

Penalties applied for academic malpractice:

TO BE BROKEN DOWN AS REQUIRED

Project Overview:

You are tasked with developing a task management mobile application for Android devices. The app should allow users to create, edit, and delete tasks, set deadlines, save task locations, and prioritise tasks based on urgency. The app also allows users to register and log in via the app. All the data will be saved in a MySQL Server Database via a PHP-based web service. Additionally, the app should have a user-friendly interface and intuitive navigation.

Written Report:

Task 1 (LO1)– 15 Marks

Understanding the Scope and Position of Mobile Apps

Mark Scheme

0-4 marks	5-6 marks	7-9 marks	10-11 marks	12-15 marks
Fails to meet minimum requirements or completely deviates from the project scope.	*Meets some requirements but lacks completeness or accuracy.*	*Meets all basic requirements outlined in the project overview.*	*Exceeds basic requirements and demonstrates a thorough understanding of the project objectives.*	*Exceptional execution, demonstrating creativity, innovation, and advanced problem-solving skills.*
Marker's comments/Justifications:				

Task 2 (LO2)– 15 Marks

Understanding Development Architectures, Platforms, Languages, and Tools

Mark Scheme

0-4 marks	5-6 marks	7-9 marks	10-11 marks	12-15 marks
The understanding of native app advantages and disadvantages; cross-platform frameworks comparison, trends in development tools and evaluation of development approaches are insufficient or inaccurate.	*While addressing the topics, the understanding lacks depth or clarity, and some key aspects might be missing or inaccurately presented.*	*Adequate understanding and coverage of native app advantages and disadvantages, cross-platform frameworks comparison, trends in development tools, and evaluation of development approaches are demonstrated.*	*The analysis shows depth and insight beyond basic requirements, offering nuanced perspectives on native app advantages and disadvantages, cross-platform frameworks, development tools trends, and development approaches evaluation.*	*Exceptional depth, insight, and innovation are evident in the analysis of native app advantages and disadvantages, cross-platform frameworks comparison, trends in development tools, and evaluation of development approaches, showcasing advanced critical thinking and understanding.*

Marker's comments/Justifications:

Task 3 (LO3)– 15 Marks

Planning and Designing the Mobile Application

Mark Scheme

0-4 marks	5-6 marks	7-9 marks	10-11 marks	12-15 marks
Demonstrates a lack of understanding of fundamental mobile app development concepts.	*Shows some understanding of concepts but lacks depth or accuracy.*	*Demonstrates a clear understanding of mobile app development concepts and their application in the project.*	*Displays a comprehensive understanding of advanced concepts, theories, and methodologies in mobile app development.*	*Shows exceptional mastery of mobile app development concepts, with insightful analysis and application.*
Marker's comments/Justifications:				

Task 4 (LO4)– 40 Marks

Developing Application Functionality

Mark Scheme

0-11 marks	12-15 marks	16-23 marks	24-27 marks	28-40 marks
App lacks basic functionality, usability, and fails to meet user requirements.	*App partially meets user requirements but contains significant bugs or usability issues.*	*App meets user requirements with acceptable functionality, usability, and minimal bugs.*	*App demonstrates high-quality functionality, usability, and user experience, with few or no bugs.*	*App showcases exceptional functionality, usability, and user experience, with innovative features and flawless execution.*
Marker's comments/Justifications:				

Task 5 (LO5)– 15 Marks

Employing Object-Oriented Techniques

0-4 marks	5-6 marks	7-9 marks	10-11 marks	12-15 marks
Shows a lack of understanding or ineffective application of object-oriented principles.	*Demonstrates some use of object-oriented techniques but lacks consistency or relevance.*	*Effectively applies object-oriented principles in app development, demonstrating clear understanding and appropriate usage.*	*Demonstrates advanced application of object-oriented techniques, with sophisticated design and implementation.*	*Exhibits exceptional mastery of object-oriented principles, with elegant design, robust architecture, and efficient implementation.*

Learning Outcomes matrix

Task	Learning Outcomes assessed	Marker can differentiate between varying levels of achievement
1	1.1 - 1.3	Yes
2	2.1 - 2.4	Yes
3	3.1 - 3.2	Yes
4	4.1 - 4.3	Yes
5	5.1 - 5.2	Yes

Grade descriptors

Learning Outcome	Fail	Referral	Pass	Merit	Distinction
Understand the scope and position of mobile apps within the context of software development	Limited or inaccurate understanding of key characteristics, scope, and limitations of mobile apps.	Partial understanding with some inaccuracies or incomplete coverage of the topics.	Demonstrates clear understanding and accurate explanation of key characteristics, scope, and limitations of mobile apps.	Provides comprehensive and insightful analysis, demonstrating a deep understanding of the topics and their implications.	Exceptional analysis, showing nuanced understanding, critical evaluation, and advanced insights into the scope and position of mobile apps.
Demonstrate a critical understanding of the range of current development architectures, platforms, languages and tools	Limited or incorrect understanding of native and cross-platform development, current trends, and relative merits.	Partial understanding with some inaccuracies or gaps in coverage.	Provides clear explanations and comparisons of native and cross-platform development, current trends, and relative merits for the task management app.	Offers comprehensive analysis and evaluation, demonstrating a deep understanding of development architectures, platforms, languages, and tools.	Exceptional analysis, with sophisticated insights, critical evaluation, and innovative solutions.
Plan and design a mobile application with appropriate features	Limited or inadequate planning and design process, with incomplete or unclear specifications.	Partial planning and design with some inconsistencies or weaknesses in the approach.	Presents a well-structured and comprehensive plan and design for the task management app, addressing all relevant aspects.	Demonstrates advanced planning and design skills, with thorough specifications and innovative solutions to potential challenges.	Exceptional planning and design, showing creativity, foresight, and meticulous attention to detail.
Develop application functionality with an appropriate programming language and software	Incomplete or non-functional app development, with significant coding errors or deficiencies.	Partial functionality with some bugs or usability issues.	Implements core functionality of the task management app effectively, with minimal bugs and	Develops high-quality and robust functionality, with excellent usability and user experience.	Implements advanced features and functionalities, demonstrating innovation, elegance, and

development kit (SDK)			satisfactory usability.		seamless integration.
Employ Object Oriented techniques in development of a mobile App	Limited or ineffective use of object-oriented principles, with poor design or implementation choices.	Partial use of object-oriented techniques with some inconsistencies or weaknesses.	Applies object-oriented principles effectively in app development, with clear design and implementation choices.	Demonstrates advanced application of object-oriented techniques, with elegant design, reusable code, and effective use of inheritance.	Exhibits exceptional mastery of object-oriented principles, with sophisticated design patterns, extensibility, and maintainability.