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ANDROID APPLICATION DEVELOPER



ASSESSMENT PACKAGE
National Vocational Certificate Level 3

Version 1 - June, 2019



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ASSESSMENT PACKAGE
National Vocational Certificate Level 3

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Title of Qualification National Vocational Certificate Level 2 Android Application Developer – Junior Assistant	CS Code:	Level:2	Version:1
Competency Standard Title: Comply Personal Health and Safety Guidelines Communicate the Workplace Policy and Procedure Perform Basic Communication (Specific) Perform Basic Computer Application (Specific) Use information technology skills capable of Android Development Use Basics of Programming Interpret Technical Requirements for Apps Development Use Data Bases for Apps Development Design User Interface for Mobile Apps	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Title of Qualification: National Vocational Certificate Level 2 Android Application Developer –Junior Assistant	CS Code:	Level: 2	Version:
Competency Standard Title: Comply Personal Health and Safety Guidelines Communicate the Workplace Policy and Procedure Perform Basic Communication (Specific) Perform Basic Computer Application (Specific)	Assessment Date (DD/MM/YY):		

Use information technology skills capable of Android Development Use Basics of Programming Interpret Technical Requirements for Apps Development Use Data Bases for Apps Development Design User Interface for Mobile Apps	
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WRITTEN ASSESSMENT

Question	Candidate's answer
What is a CPU?	Central processing unit
What are the components of CPU?	There are two main components of CPU, ALU and CU
Differentiate between input and output devices and give examples of each.	Everything that is given to the computer in the form of data is called input. The devices that are used to enter input in computer is called input devices such as keyboard. Mouse etc
What is a variable	A variable is nothing but a name given to a storage area that our programs can manipulate.
What are the elements of a flow chart	<p>The Oval. An End or a Beginning. Oval.</p> <p>The Rectangle. A Step in the Flowcharting Process. Rectangle.</p> <p>The Arrow. Directional Flow.</p> <p>The Diamond. Call for a Decision.</p>
Define algorithms	It is a step-wise representation of a solution to a given problem, which makes it easy to understand.

Question	Candidate's answer
What items are important in every Android project?	These are the essential items that are present each time an Android project is created: AndroidManifest.xml build.xml bin/ src/ res/ assets
What is the AndroidManifest.xml?	This file is essential in every application. It is declared in the root directory and contains information about the application that the Android system must know before the codes can be executed.
What are the types of mobile apps?	There are mainly three types of apps: Native app Hybrid app Web-based app

Question	Candidate's answer
2. Identify competitors	<p>Any person or entity which is a rival against another. Three types of competition and how to tackle them</p> <ol style="list-style-type: none"> 1) Direct competitors 2) Indirect competitor 3) Phantom competitors
3. Understand market research	<p>The action or activity of gathering information about consumers' needs and preferences is known as market research. Quantitative and Qualitative market research types and methods such as surveys, focus groups, online interviews and phone surveys are examples of market research.</p>
4. Understand social marketing techniques	<p>Social marketing is an approach used to develop activities aimed at changing or maintaining people's behavior for the benefit of individuals and society as a whole.</p>
5. Understand marketing strategy	<p>a plan of action designed to promote and sell a product or service.</p>
6. Understand basics of ASO (App Store Optimization)	<p>App Store Optimization (ASO in short) is all about gaining visibility in the app stores and increasing your organic downloads. This way, more people are able to find your app and download it.</p>
7. Understand App authentication	<p>Authentication refers to the process of confirming identity. In authentication, a user or application proves they are who they say they are by providing valid credentials for verification.</p>
8. Understand intellectual property	<p>intangible property that is the result of creativity, such as patents, copyrights, etc.</p>
9. Understand cryptography	<p>The art of writing or solving codes. Cryptography involves creating written or generated codes that allow information to be kept secret. Cryptography converts data into a format that is unreadable for an unauthorized user, allowing it to be transmitted without unauthorized entities decoding it back into a readable format, thus compromising the data.</p>
10. Understand tokenization	<p>Tokenization is the act of breaking up a sequence of strings into pieces such as words, keywords, phrases, symbols and other elements called tokens. Tokens can be individual words, phrases or even whole sentences.</p>

Title of Qualification: National Vocational Certificate Level 3 Android Application Developer (Assistant)	CS Code: 0613001021	Level: 3	Version:
Competency Standard Title: Develop Android Apps Communicate at Workplace Perform Computer Application Skills	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 1. Assessment Task 1: Install ,configure and validate any type of Android App project given by assessor using android development environment within 2 hours timeframe 2. Assessment Task 2: Perform Data Management of already developed Mobile App using internal, External file storage (45 Minutes) 3. Assessment Task 3: Perform Data Management of already developed Mobile App using shared preferences (30 Minutes) 4. Assessment Task 4: Perform Data Management of already developed Mobile App using data basis for structures (40 minutes) <p>And complete:</p> <ol style="list-style-type: none"> 5. Knowledge assessment test (Written or Oral) 6. Portfolios at the time of assessment (if any)

Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: (CU1)-P1: Install Java Development Kit (JDK) for Android Studio according to requirement.</p> <p>Performance Criteria 2: (CU1)-P2: Install Android Studio for Development</p> <p>Performance Criteria 3: (CU1)-P3: Connect Physical Device for Testing</p> <p>Performance Criteria 4: (CU1)-P4: Create Emulator for Testing</p> <p>Performance Criteria 5: (CU2)-P1: Create a new Project using android studio</p> <p>Performance Criteria 6: (CU2)-P2: Create Activity and Fragments</p> <p>Performance Criteria 7: (CU2)-P3: Create Layout by using View Elements</p> <p>Performance Criteria 8: (CU2)-P4: Make Layout Responsive for Different Screens</p> <p>Performance Criteria 9: (CU4)-P1: Create Multi-Screen App using different Activities</p> <p>Performance Criteria 10: (CU3)-P1: Make App Interactive for Users</p> <p>Performance Criteria 11: (CU3)-P2: Process data from the prospective of generating results.</p> <p>Performance Criteria 12: (CU4)-P2: Create Multi-View App using Fragments</p> <p>Performance Criteria 13: (CU5)-P1: Use Java Script Object Notation (JSON) parsing for the creation of Plain Old Java Object (POJO)</p> <p>Performance Criteria 14: (CU5)-P2: Establish connection with source network for getting relevant data</p> <p>Performance Criteria 15: Identify relevant procedures for written information</p> <p>Performance Criteria 16: Perform graphic fundamentals in basic applications</p>
	<p>Assessment Task 2</p> <p>Performance Criteria 1: (CU6)-P1: Use internal file storage for data management</p> <p>Performance Criteria 2: (CU6)-P2: Use external file storage for data management</p>
	<p>Assessment Task 3</p> <p>Performance Criteria 1: (CU6)-P3: Use shared-preferences for data management</p>

Assessment Task 4

Performance Criteria 1: (CU6)-P4: Use databases for structures data management

Performance Criteria 2: Use strategies to ensure correct communication in writing

Performance Criteria 3: Ensure written information meets required standards of style, format and detail

Performance Criteria 4: Create workbook according to information requirements

Performance Criteria 5: Use a range of common tools during spreadsheet development

Performance Criteria 6: Save the spreadsheet to a folder on a storage device

Performance Criteria 7: Format spreadsheet using formatting features as required

Portfolios required at the time of assessment (if any) for

Performance criteria 1 for the evaluation of portfolio

Performance criteria 2 for the evaluation of portfolio

Performance criteria 3 for the evaluation of portfolio

.....

Assessment Task 1		Assessment Task 1: Install ,configure and validate any type of Android App project given by assessor using android development environment		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Performance Criteria 1: (CU1)-P1: Install Java Development Kit (JDK) for Android Studio according to requirement.			
2.	Performance Criteria 2: (CU1)-P2: Install Android Studio for Development			
3.	Performance Criteria 3: (CU1)-P3: Connect Physical Device for Testing			
4.	Performance Criteria 4: (CU1)-P4: Create Emulator for Testing			
5.	Performance Criteria 5: (CU2)-P1: Create a new Project using android studio			
6.	Performance Criteria 6: (CU2)-P2: Create Activity and Fragments			
7.	Performance Criteria 7: (CU2)-P3: Create Layout by using View Elements			
8.	Performance Criteria 8: (CU2)-P4: Make Layout Responsive for Different Screens			
9.	Performance Criteria 9: (CU4)-P1: Create Multi-Screen App using different Activities			
10.	Performance Criteria 10: (CU3)-P1: Make App Interactive for Users			
11.	Performance Criteria 11: (CU3)-P2: Process data from the prospective of generating results.			
12.	Performance Criteria 12: (CU4)-P2: Create Multi-View App using Fragments			
13.	Performance Criteria 13: (CU5)-P1: Use Java Script Object Notation (JSON) parsing for the creation of Plain Old Java Object (POJO)			
14.	Performance Criteria 14: (CU5)-P2: Establish connection with source network for getting relevant data			
15.	Identify relevant procedures for written information			
16.	Perform graphic fundamentals in basic applications			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 2		Description of assessment task 2 Perform Data Management of already developed Mobile App using internal, External file storage (45 Minutes)		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: (CU6)-P1: Use internal file storage for data management			
2	Performance Criteria 2: (CU6)-P2: Use external file storage for data management			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 3		Perform Data Management of already developed Mobile App using shared preferences (30 Minutes)		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: (CU6)-P3: Use shared-preferences for data management			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 4		Perform Data Management of already developed Mobile App using data basis for structures (40 minutes)		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Performance Criteria 1: (CU6)-P4: Use databases for structures data management			
2.	Use strategies to ensure correct communication in writing			
3.	Ensure written information meets required standards of style, format and detail			
4.	Performance Criteria 4: Create workbook according to information requirements			
5.	Performance Criteria 5: Use a range of common tools during spreadsheet development			
6.	Performance Criteria 6: Save the spreadsheet to a folder on a storage device			
7.	Performance Criteria 7: Format spread-sheet using formatting features as required			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Portfolio (if any)		Description of portfolio			
Current <input type="checkbox"/>		Sufficient <input type="checkbox"/>	Authentic <input type="checkbox"/>	Valid <input type="checkbox"/>	Reliable <input type="checkbox"/>
Portfolio meet the following performance standards:		Yes	No	Remarks	
1	Performance criteria 1 CU2-P1: Create a new Project using android studio CU2-P2: Create Activity and Fragments CU2-P3: Create Layout by using View Elements CU2-P4: Make Layout Responsive for Different Screens				
2	Performance criteria 2 CU4-P1: Create Multi-Screen App using different Activities CU4-P2: Create Multi-View App using Fragments				
3	Performance criteria 3 CU3-P1: Make App Interactive for Users CU3-P2: Process data from the prospective of generating results				
4				
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>			

Question	Candidate's answer
16. What is JSON Parsing	Parsing JSON means interpreting the data with whatever language u are using at the moment. ... When weparse JSON, it means we are converting the string into a JSON object by following the specification

Title of Qualification: National Vocational Certificate Level 3 Android Application Developer (Assistant)	CS Code: 0613001025	Level: 3	Version:
Competency Standard Title: Integrate new Features for android Apps Perform Computer Application Skills	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
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Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 7. Assessment Task 1: Create and test a responsive screen design for three different android phones. (Time: 120 minutes) 8. Assessment Task 2: Add new features in the developed app as provided by assessor. (Time: 120 minutes) 9. Assessment Task 3: Integrate third party API like payment method API in developed android app. (Time: 120 minutes) <p>And complete:</p> <ol style="list-style-type: none"> 10. Knowledge assessment test (Written or Oral) 11. Portfolios at the time of assessment (if any)
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: (CU1)-P1: Create simple design to fulfill the requirements</p> <p>Performance Criteria 2: (CU1)-P2: Implement backend functionality on design to make the design functional</p> <p>Performance Criteria 3: (CU1)-P3: Test design on different screens resolutions</p> <p>Performance Criteria 4: Perform graphic fundamentals in basic applications</p> <p>.....</p>
	<p>Assessment Task 2</p> <p>Performance Criteria 1: (CU2)-P1: Maintain application code as per new technology.</p> <p>Performance Criteria 2: (CU2)-P2: Maintain application database size for better application performance.</p> <p>Performance Criteria 3: (CU2)-P3: Maintain application storage capacity for better memory management.</p> <p>Performance Criteria 4: (CU3)-P2: Enable the code for better security measures</p> <p>Performance Criteria 5: (CU5)-P1: Add New features in the App as per requirement.</p> <p>Performance Criteria 6: (CU5)-P2: Finalize up gradation of App</p>
	<p>Assessment Task 3</p> <p>Performance Criteria 1: (CU3)-P1: Check leakage of web API's to ensure vulnerability</p> <p>Performance Criteria 2: (CU4)-P1: Check third party API compatibility</p> <p>Performance Criteria 3: (CU4)-P2: Connect 3rd party Application Programming Interface (API) using Android Studio</p>

Continued on following page

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓		✓		
Knowledge Assessment	✓	✓					
Other Requirement				✓			
Each Assessment Task (with performance criteria)							
Assessment Task 1			Create and test a responsive screen design for three different android phones. (Time: 120 minutes)				
During the practical assessment, candidate demonstrated the following:					Yes	No	Remarks
1	Create simple design to fulfill the requirements						
2	Implement backend functionality on design to make the design functional						
3	Test design on different screens resolutions						
4	Perform graphic fundamentals in basic applications						
Competent <input type="checkbox"/>			Not Yet Competent <input type="checkbox"/>				

Assessment Task 2		Add new features in the developed app as provided by assessor. (Time: 120 minutes)		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Maintain application code as per new technology.			
2	Maintain application database size for better application performance.			
3	Maintain application storage capacity for better memory management.			
4	Enable the code for better security measures			
5	Add New features in the App as per requirement.			
6	Finalize up gradation of App			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 3		Integrate third party API like payment method API in developed android app. (Time: 120 minutes)		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	P1: Check leakage of web API's to ensure			
2	P1: Check third party API compatibility			
3	Connect 3rd party Application Programming Interface (API) using Android Studio			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Title of Qualification: National Vocational Certificate Level 3 in Android Application Developer (Assistant)	CS Code: 0613001025	Level:3	Version:1
Competency Standard Title: Integrate new Features for android Apps	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Title of Qualification: National Vocational Certificate Level 3 in Android Application Developer (Assistant)	CS Code:	Level: 3	Version:
Competency Standard Title: Integrate new Features for android Apps	Assessment Date (DD/MM/YY):		

WRITTEN ASSESSMENT

Question	Candidate's answer
17. What are the important features to consider while mobile app development	Registration fields should few, click feedback is great, quick response and think of compactness

Question	Candidate's answer
18. What is PIP feature	PIP (Picture In Picture) is a special type of multi-window mode mostly used for video play back
19. What is product requirement gathering document	A product requirements document (PRD), fully defines the value and purpose of a mobile app to your product and development teams.
20. What is API	API is a collection of routine tools, protocols that together all required for building the application API stands for Application Programming Interface
21. What is JSON	JSON is a simple data exchange format JSON means JavaScript Object Notation, it is a language and plate form independent
22. Explain what is JSON objects?	An object can be defined as an unordered set of name/value pairs. An object in JSON starts with {left brace} and finish or ends with {right brace}. Every name is followed by: (colon) and the name/value pairs are parted by, (comma).
23. Mention whether you can use GET request instead of PUT to create a resource?	No, you are not supposed to use PUT for GET. GET operations should only have view rights, while PUT resource is used for updating a data.
24. What is information leakage	Information leakage is a category of software vulnerabilities in which information is unintentionally disclosed to end user.

Title of Qualification: National Vocational Certificate Level 3 Android Application Developer (Assistant)	CS Code: 0613001022	Level: 3	Version:
Competency Standard Title: Integrate new Features for android Apps	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>Scenario: Develop an android app for checking the rate of heart beat of a person.</p> <ol style="list-style-type: none"> 1. Assessment Task 1: Reference subject scenario, perform the following tasks: (45 min) <ol style="list-style-type: none"> a) Verify the responsiveness of app b) Verify the flow of appearance c) Test the main design of app elements d) Apply testing tools 2. Assessment Task 2: Reference subject scenario, perform the following tasks: (30 min) <ol style="list-style-type: none"> a) Perform integration of different units/modules using Android Studio b) Perform integration testing using Android Studio <p>And complete:</p> <ol style="list-style-type: none"> 3. Knowledge assessment test (Written or Oral) 4. Portfolios at the time of assessment (if any)
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: CU1-P1 Verify the responsiveness of application</p> <p>Performance Criteria 2: CU1-P2 Verify the flow of application</p> <p>Performance Criteria 3: CU1-P3 Test the main design of app elements the main design of app elements</p> <p>Performance Criteria 4: CU1-P4 Apply testing tools</p> <p>Performance Task 5: CU2-P1 Apply testing techniques.</p> <ul style="list-style-type: none"> • Statement coverage • Branch coverage <p>A1 Performance Task 6: Apply unit testing tools using JUnit</p> <p>Performance Task 7: Identify test cases for unit testing</p> <p>.....</p>

Assessment Task 2	
A2	Performance Criteria 1: CU3 –P1: Perform integration of different units/modules using Android Studio
A3	Performance Criteria 2: CU3-P2: Perform integration testing using Android Studio
A4	Performance Criteria 3: Perform testing under different environments <ul style="list-style-type: none"> • Run the software in different android versions • Run on different machines • Run on different networks
A5	Performance Criteria 4: Validate the system in different environment
Portfolios required at the time of assessment (if any) for	
Performance criteria 1 CU2 – P1: Testing Techniques <ul style="list-style-type: none"> ▪ Statement Coverage ▪ Branch Coverage 	
Performance criteria 2 CU2 – P2: Unit Testing using JUnit	
Performance criteria 3 CU4 – P1: Different Android versions Features & limitations	

Continued on following page

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Nature of Activity							
Practical Skill Demonstration			✓		✓		
Knowledge Assessment	✓	✓					
Other Requirement				✓			
Each Assessment Task (with performance criteria)							
Assessment Task 1			: Reference subject scenario, perform the following tasks: (45 min) a) Verify the responsiveness of app b) Verify the flow of appearance c) Test the main design of app elements d) Apply testing tools				
During the practical assessment, candidate demonstrated the following:					Yes	No	Remarks
1.	Performance Criteria 1: CU1-P1 Verify the responsiveness of application						
2.	Performance Criteria 2: CU1-P2 Verify the flow of application						
3.	Performance Criteria 3: CU1-P3 Test the main design of app elements the main design of app elements						
4.	Performance Criteria 4: CU1-P4 Apply testing tools						
5.	Performance Task 5: CU2-P1 Apply testing techniques. <ul style="list-style-type: none"> • Statement coverage • Branch coverage 						
6.	Performance Task 6: Apply unit testing tools using JUnit						
7.	Performance Task 7: Identify test cases for unit testing						
Competent <input type="checkbox"/>				Not Yet Competent <input type="checkbox"/>			

Assessment Task 2		Reference subject scenario, perform the following tasks: (30 min) a) Perform integration of different units/modules using Android Studio b) Perform integration testing using Android Studio		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	A6 Performance Criteria 1: CU3 –P1: Perform integration of different units/modules using Android Studio			
2	A7 Performance Criteria 2: CU3-P2: Perform integration testing using Android Studio			
3	A8 Performance Criteria 3: Perform testing under different environments <ul style="list-style-type: none"> • Run the software in different android versions • Run on different machines • Run on different networks A9			
4	A10 Performance Criteria 4: Validate the system in different environment			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Portfolio (if any)		Description of portfolio		
Current <input type="checkbox"/>		Sufficient <input type="checkbox"/>		Authentic <input type="checkbox"/>
		Valid <input type="checkbox"/>		Reliable <input type="checkbox"/>
Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria 1			
2	Performance criteria 2			
3	Performance criteria 3			
4			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Title of Qualification: National Vocational Certificate Level 3 in Android Application Developer (Assistant)	CS Code: 0613001022	Level:3	Version:1
Competency Standard Title: Integrate new Features for android Apps	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Title of Qualification: National Vocational Certificate Level 3 in Android Application Developer (Assistant)	CS Code:	Level: 3	Version:
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Competency Standard Title: Integrate new Features for android Apps	Assessment Date (DD/MM/YY):
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WRITTEN ASSESSMENT

Question	Candidate's answer
25. What is meant by Mobile Application Testing	Mobile application testing is a process by which application software developed for handheld mobile devices is tested for its functionality, usability and consistency. Mobile application testing can be an automated or manual type of testing.
26. What is User interface testing	User interface testing, a testing technique used to identify the presence of defects is a product/software under test by using Graphical user interface [GUI].
27. Why Test cases are important	Test case writing is a major activity and considered as one of the most important parts of software testing. It is used by the testing team, development team as well as the management. ... It means that test cases clarify what needs to be done to test a system.
28. What is Unit Testing, Explain with Example?	Unit testing is usually an automated process and performed within the programmers IDE. Unit testing is an action used to validate that separate units of source code remains working properly. Example: - A function, method, Loop or statement in program is working fine. It is executed by the Developer.
29. What is Android Studio	Android Studio is the official integrated development environment (IDE) for Android application development.
30. What is app compatibility testing?	Compatibility testing is a part of non-functional testing conducted on application software to ensure the application's compatibility with different computing environment.
31. What is meant by Test Environment	Test Environment consists of elements that support test execution with software, hardware and network configured. Test environment configuration must mimic the production environment in order to uncover any environment/configuration related issues.
32.	

Title of Qualification: National Vocational Certificate Level 3 Android Application Developer (Assistant)	CS Code: 0613001024	Level: 3	Version:
Competency Standard Title: Use Social Media for marketing	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>12. Assessment Task 1: Optimize any given app by assessor on google plays store using any ASO tool. Allocated time 60 min.</p> <p>13. Assessment Task 2: Analyze, register app on ad mob and promote app as per instructions of google play store and offer free promotions in exchange. Allocated time 90 min.</p> <p>And complete:</p> <p>14. Knowledge assessment test (Written or Oral)</p> <p>15. Portfolios at the time of assessment (if any)</p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: CU1-P1: Optimize app store to improve the accessibility of a mobile app in the Google Play store as per given application</p> <p>Performance Criteria 2: CU1-P2: Use any ASO Tool to optimize app in google play store</p> <p>.....</p>

Assessment Task 2

Performance Criteria 1: CU2-P1: Analyze reports as per given app

Performance Criteria 2: CU2-P2: Integrate Google analytics with given app

Performance Criteria 3: CU3- P1: Create AdMob account and register app

Performance Criteria 4: CU3-P2: Include ads in your app as client requirement:

- banner ads
- rewarded ads
- Interstitial ads

Performance Criteria 5: CU4-P1: Promote App with Social Media Influencers as per given instructions of Google Play Store

Performance Criteria 6: CU4-P2: Offer free promotions in exchange for App downloads as per required task

Performance Criteria 7: CU4-P3: Analyze Social Media Demographics on Channel (e.g. Facebook, YouTube, LinkedIn etc.) as per given instructions

Portfolios required at the time of assessment (if any) for

Performance criteria 1 for the evaluation of portfolio

Performance criteria 2 for the evaluation of portfolio

Performance criteria 3 for the evaluation of portfolio

.....

Continued on following page

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓		✓		
Knowledge Assessment	✓	✓					
Other Requirement				✓			
Each Assessment Task (with performance criteria)							
Assessment Task 1			Description of assessment task 1				
During the practical assessment, candidate demonstrated the following:					Yes	No	Remarks
1	Performance Criteria 1: CU1-P1: Optimize app store to improve the accessibility of a mobile app in the Google Play store as per given application						
2	Performance Criteria 2: CU1-P2: Use any ASO Tool to optimize app in google play store						
Competent <input type="checkbox"/>			Not Yet Competent <input type="checkbox"/>				

Assessment Task 2		Description of assessment task 2		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: CU2-P1: Analyze reports as per given app			
2	Performance Criteria 2: CU2-P2: Integrate Google analytics with given app			
3	Performance Criteria 3: CU3- P1: Create AdMob account and register app			
4	Performance Criteria 4: CU3-P2: Include ads in your app as client requirement: <ul style="list-style-type: none"> • banner ads • rewarded ads • Interstitial ads 			
	Performance Criteria 5: CU4-P1: Promote App with Social Media Influencers as per given instructions of Google Play Store			
	Performance Criteria 6: CU4-P2: Offer free promotions in exchange for App downloads as per required task			
	Performance Criteria 7: CU4-P3: Analyze Social Media Demographics on Channel (e.g. Facebook, YouTube, LinkedIn etc.) as per given instructions			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Portfolio (if any)		Description of portfolio		
Current <input type="checkbox"/>		Sufficient <input type="checkbox"/>		Authentic <input type="checkbox"/>
		Valid <input type="checkbox"/>		Reliable <input type="checkbox"/>
Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria 1			
2	Performance criteria 2			
3	Performance criteria 3			
4			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Title of Qualification: National Vocational Certificate Level 3 in Android Application Developer (Assistant)	CS Code: 0613001024	Level:3	Version:1
Competency Standard Title: Use Social Media for marketing	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Title of Qualification: National Vocational Certificate Level 3 in Android Application Developer (Assistant)	CS Code:	Level: 3	Version:
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Competency Standard Title: Use Social Media for marketing	Assessment Date (DD/MM/YY):
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WRITTEN ASSESSMENT

Question	Candidate's answer
33. What is App Store Optimization	App Store Optimization (ASO in short) is all about gaining visibility in the app stores and increasing your organic downloads. This way, more people are able to find your app and download it. More downloads mean more users and more users mean more revenue
34. What is meant by Google Analytics	Google Analytics is a website traffic analysis application that provides real-time statistics and analysis of user interaction with the website. Google analytics enables website owners to analyze their visitors, with the objective of interpreting and optimizing website's performance.
35. What is meant by Ad Network Integration	Developers integrate the ad network into their app through an SDK. The ad network works by aggregating ad inventory from the apps that it's integrated with, and then selling that inventory to advertisers.
36. What are the types of Ad format	There are 6 most common mobile ad formats: Interstitials, Native ads, Banner, Video, Rich media and List / panel ad formats. Interstitials — The word interstitial means “between spaces”. The name itself says that ad is used as a transitional screen between two portions of an app.
37. What is social media marketing	Social media marketing is the use of social media platforms to connect with your audience to build your brand, increase sales, and drive website traffic.
38. What is meant by demographics.	Statistical data relating to the population and particular groups within it.
39. What are examples of Demographics	Most Common Demographics Examples Age. Gender. Race. Marital status. Number of children (if any) Occupation. Annual income. Education level.

Question	Candidate's answer
40. How does social media marketing work	Social media marketing involves promoting your content and engaging with your target consumers on social media channels like Facebook, Instagram, LinkedIn, and Pinterest. This tactic is used in digital marketing to help businesses increase brand awareness, generate more leads, and improve customer engagement.

Title of Qualification: National Vocational Certificate Level 3 in Android Application Developer (Assistant)	CS Code: 0613001024	Level:3	Version:1
Competency Standard Title: Use Social Media for marketing	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Title of Qualification: National Vocational Certificate Level 3 in Android Application Developer (Assistant)	CS Code:	Level: 3	Version:
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Competency Standard Title: Use Social Media for marketing	Assessment Date (DD/MM/YY):
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WRITTEN ASSESSMENT

Question	Candidate's answer
41. What is App Store Optimization	App Store Optimization (ASO in short) is all about gaining visibility in the app stores and increasing your organic downloads. This way, more people are able to find your app and download it. More downloads mean more users and more users mean more revenue
42. What is meant by Google Analytics	Google Analytics is a website traffic analysis application that provides real-time statistics and analysis of user interaction with the website. Google analytics enables website owners to analyze their visitors, with the objective of interpreting and optimizing website's performance.
43. What is meant by Ad Network Integration	Developers integrate the ad network into their app through an SDK. The ad network works by aggregating ad inventory from the apps that it's integrated with, and then selling that inventory to advertisers.
44. What are the types of Ad format	There are 6 most common mobile ad formats: Interstitials, Native ads, Banner, Video, Rich media and List / panel ad formats. Interstitials — The word interstitial means “between spaces”. The name itself says that ad is used as a transitional screen between two portions of an app.
45. What is social media marketing	Social media marketing is the use of social media platforms to connect with your audience to build your brand, increase sales, and drive website traffic.
46. What is meant by demographics.	Statistical data relating to the population and particular groups within it.
47. What are examples of Demographics	Most Common Demographics Examples Age. Gender. Race. Marital status. Number of children (if any) Occupation. Annual income. Education level.

Question	Candidate's answer
48. How does social media marketing work	Social media marketing involves promoting your content and engaging with your target consumers on social media channels like Facebook, Instagram, LinkedIn, and Pinterest. This tactic is used in digital marketing to help businesses increase brand awareness, generate more leads, and improve customer engagement.

Title of Qualification: National Vocational Certificate Level 3 Android Application Developer (Assistant)	CS Code:	Level:	Version:
Competency Standard Title: <ul style="list-style-type: none"> • Develop Android Apps • Test & Integrate Mobile App Components • Deploy Mobile Apps • Use Social Media For Marketing • Integrate new Features for Android Apps • Perform Computer Application Skills • Communicate at Workplace • Apply Work Health and Safety Practices (WHS) • Identify and Implement Workplace Policy and Procedures Manage Personal Finances	Assessment Date (DD/MM/YY):		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/>

Name of the Assessor: Assessor's code:			
Signature of the Assessor:			
Title of Qualification: National Vocational Certificate Level 3 Android Application Developer (Assistant)		CS Code:	Level:
		Version:	
Competency Standard Title: <ul style="list-style-type: none"> • Develop Android Apps • Test & Integrate Mobile App Components • Deploy Mobile Apps • Use Social Media For Marketing • Integrate new Features for Android Apps • Perform Computer Application Skills • Communicate at Workplace • Apply Work Health and Safety Practices (WHS) • Identify and Implement Workplace Policy and Procedures Manage Personal Finances		Assessment Date (DD/MM/YY):	

WRITTEN ASSESSMENT

Question	Candidate's answer
49. What is the mean of communication	The exchanging of information by speaking, writing or using some other medium
50. What is Android App components	There are four main Android app components: activities, services, content providers, and broadcast receivers. Whenever you create or use any of them, you must include elements in the project manifest
51. What is API	API is a collection of routine tools, protocols that together all required for building the application API stands for Application Programming Interface
52. What is user interface	The means by which the user and a computer system interact. A good user interface provides a "user-friendly" experience, allowing the user to interact with the software or hardware in a natural and intuitive way.
53. What is android Activity?	An Android activity is one screen of the Android app's user interface. In that way an Android activity is very similar to windows in a desktop application. An Android app may contain one or more activities, meaning one or more screens.

Question	Candidate's answer
54. What are the different media of communication effectively?	There are at least 6 distinct types of communication : non-verbal, verbal-oral-face-to-face, verbal-oral-distance, verbal-written, formal and informal
55. What is information leakage	Information leakage is a category of software vulnerabilities in which information is unintentionally disclosed to end user.
56. What is JSON	JSON is a simple data exchange format JSON means JavaScript Object Notation, it is a language and plate form independent
57.	
58.	
59.	
60.	
61.	
62.	

Question	Candidate's answer
63.	

