Qualification	Module Number and Title
HD in Computing and Software Engineering	CSE5011 - Mobile Application Development
Student Name & No.	**Assessor**
Hand out date	**Submission Date**

Assessment type	Duration/Length of Assessment Type	Weighting of Assessment
WRIT1- Coursework	3000 words equivalent	100%

Learner declaration

I certify that the work submitted for this assignment is my own and research sources are fully acknowledged.

Marks Awarded			
First assessor			
IV marks			
Agreed grade			
Signature of the assessor		Date	

FEEDBACK FORM
INTERNATIONAL COLLEGE OF BUSINESS & TECHNOLOGY

Module:

Student:

Assessor:

Assignment:

Strong features of your work:

Areas for improvement:

Marks Awarded:

Coursework – A mobile application for Dog Nutrition– 100 Marks

Learning outcomes

- Explain mobile operating systems, development tools and technologies for the mobile application development
- Design mobile application solutions
- Develop mobile application solutions
- Test mobile application solutions.

Scenario and the Tasks

The app's primary purpose is to help dog owners find and purchase high-quality dog food and nutrition-related products. Users should be able to browse products, read detailed descriptions, make purchases, and manage their orders. The app should also provide educational content about dog nutrition.

Key Functions to Implement:

- User Authentication and Profiles:
  User registration and login with email account.
  User profile management with the ability to update personal information, address, and payment methods.

- Product Catalog:
  Display a list of dog food and nutrition-related products.
  Filter and sort products based on criteria such as brand, type, age, etc.
  Each product should have a detailed description, price, and customer reviews.

- Shopping Cart:
  Enable users to add products to their cart.
  Show the cart's contents, including product details, quantities, and total price.
  Allow users to adjust quantities, remove items, and view the subtotal.

- Educational Content:

  Include a section with articles, videos, and guides about dog nutrition.

  Provide information on different dog breeds, life stages, dietary requirements, and health tips.

NOTE: You can use Android Studio as a development tool, or if you are good with cross-platform tools like Flutter, React Native, or Ionic, you can use them for development.

Tasks

a) Critically compare mobile operating systems, development tools and technologies for the above mention application. (Word count 1000) (LO 1) **(10 Marks)**

b) Provide the UML diagrams for the given problem with clear explanations on the design decisions. (Use case/Class/Activity). (LO 1) **(10 Marks)**

c) Design attractive user interfaces for the given scenario. (LO 2) **(20 Marks)**

d) Develop an interactive mobile application. Make sure to implement proper validation mechanisms in order to restrict invalid entries to the system. (LO 3) **(40 Marks)**

e) Include test plan, test data and proper application of the test plan. Test your mobile application according to the test plan. (LO 4) **(10 Marks)**

f) Create user and technical documentation for the developed solution. (LO 4) **(10 Marks)**

Guidelines for the report format

- Paper: A4
- Margins: 1.5” left, 1” right, top and bottom
- Page numbers: bottom, right
- Line spacing 1.5
- Font style: Times New Roman
- Headings size: 14pt, Bold
- Normal size: 12pt
- Referencing and in-text citation should be done strictly using **Harvard Referencing System.**

Submission Details

Please see Moodle for confirmation of the Assessment submission date.

Any assessments submitted after the deadline will not be marked and will be recorded as a Non-Attempt.

Report must be submitted to the as a MS word file to the Turnitin.

SMIS submission: Must submit a .zip file throw the SMIS. Zip file must contain Turnitin report with project files (contain all the project elements)

Your .zip should be titled with your Student ID Number, module code and assessment id, **e.g. st12345678_ CSE5011WRIT1.zip**

Assessment Criteria

Task (a) contain 10 marks.

Criteria	**Marks** **Out of 10**	**Marks obtained by the student for the answer provided**
Poor Limited understanding of related tools and poor comparison. Limited reading, lack of depth and breadth of study	**0-4**	
Pass • Reasonable level of understanding of related tools and technologies for the given scenario, satisfactory level of depth and breadth of study.	**4-6**	
Good Reasonable level of understanding of mobile platforms and critical comparison technically, Good level of depth and breadth of study.	**6-7**	
Excellent • Excellent level of understanding of mobile platforms, development tools, technologies and critical comparison and proper justification for the answer, Higher level of depth and breadth of study with extensive reading and integration of information from a wide range of sources.	**7-10**	

Task (b) contain 10 marks.

Diagrams should be evaluated according to the following criteria.

Criteria	**Marks** **Out of 10**	**Marks obtained by the student for the answer provided**
Poor Poor use of Design Methodology Poor diagrams, notations and relationships	**0-4**	

Pass Proper use of Design Methodology Use case Diagram • Identification of correct use cases • Identification of correct Actors and associations Class Diagram • Identification of associated methods, with correct signatures and attributes in each class • Correct identification of relationships	**4-6**	
Good Average Design • Clear identification of private, public access modifiers & it is visible in the class diagram • Accurate use of <<include> <<extend>> stereo types in use case diagram • Correct use of UML notations with minor mistakes Evaluation • Student has given basic description about the design and given a reasonable justification • Effective judgments have been made about the content and levels of information to be included	**6-7**	
Excellent Excellent Design • Highly detailed diagram • Backed by relevant assumptions • Multiplicity, navigability aggregation & compositions visible in class diagrams • Excellent use of UML notation Evaluation • Good justification of the design • Judge validity of results • Use critical reflection to evaluate the work and justify with valid explanations Fluency (Of design) • Evidence of critical analysis on different perspectives covering how, use case & class diagrams support in designing.	**7-10**	

Task (c) contains 20 marks

Criteria	Marks Out of 20	Marks obtained by the student for the answer provided
Poor • Poor database design/ data storing mechanism • Poor interface design	**0-8**	
Pass • Use a database (simple design)/data storing mechanism • Have simple user interface	**8-12**	
Good • More sophisticated database design and queries • Good user interface design with proper alignments.	**12-14**	
Excellent • More sophisticated UI, • Control alignments, Color themes, appropriate icons, images. • More sophisticated database design and queries	**14-20**	

Task (d) contains 40 marks

Criteria	Marks Out of 40	Marks obtained by the student for the answer provided
Poor • Poor system implementation • Functions not working properly	**0-16**	
Pass • Basic data management system features.	**16-24**	
Good • More sophisticated data representation (e.g. several		

classes at business logic level) • Standard coding structure.	**24-28**	
Excellent • Complex functionality (Innovative aspects) • Reports being proposed to facilitate decision making. • Effective use of database operations. • Naming convention (Controls and Variables) • Proper authentication system (user login and Security concerns)	**28-40**	

Task (e) contains 10 marks

Criteria	**Marks** **Out of 10**	**Marks obtained by the student for the answer provided**
Poor • Poor test plan and test cases. • No conclusion	**0-4**	
Pass • Simple test plan and test cases. • Conclusion of each test case.	**4-6**	
Good • Good test plan and test cases with average explanations • Suitable test data used in testing.	**6-7**	
Excellent • Good test plan and test cases with screen shots & average explanations. • Suitable test data used in testing.	**7-10**	

Task (f) contains 10 marks

Criteria	**Marks** **Out of 10**	**Marks obtained by the student for the answer provided**
Poor Poor standard of documentation with poor explanations. Poor user and technical documentation for the developed solution	**0-4**	
Pass Acceptable standard of documentation with poor explanations. Acceptable standard of user and technical documentation for the developed solution.	**4-6**	
Good High standard of documentation with screen shots & average explanations. High standard of user and technical documentation for the developed solution.	**6-7**	
Excellent Professional standard of documentation with screen shots & good explanation. Professional standard of user and technical documentation for the developed solution.	**7-10**	

Total Marks	**Out of 100**	

Final Grading criteria:

Marks	Final Grade
>=70	Distinction
69-55	Merit
54-40	Pass
<40	Fail