



Qualification		Module Number and Title
HND in Software Engineering (Level 5)		SED5211 - Mobile Application Development
Student Name & No.		Assessor
		Mr. Sanaka Perera
Hand out date		Submission Date
17/03/2021		25/04/2021
Assessment type	Duration/Length of Assessment Type	Weighting of Assessment
Coursework	6000 words	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 – Mobile Application for “*The LOLA’s cupcakes*”– 100 Marks

### **Learving outcomes covred**

1. Understand the principles of mobile application development
2. Be able to design mobile application solutions
3. Be able to implement mobile application solutions
4. Be able to test and document mobile application solutions

### **Scenario**

"The LOLA’s cupcakes” management has decided to implement a mobile application for their small bakery situated in Colombo. They have cupcakes for all occasions and rangers (Classic cupcakes, Themed cupcakes, Birthday cupcakes, Anniversary, New Baby, Valentine’s day, Graduation, Mother’s day etc ). And also they have special offers on the different seasons.

There are two type of users in the system

Administrative functions:

- Administrator can logging to the system and Add/modify cupcakes, prices ,description
- Process the order

Member functions:

- View the different categories of cupcakes with prices (based on the occasion, range, price, best sellers, special offers etc )
- Placing order (only for the registered users )
- View order
- User registration and login

Provide a well-designed, user friendly system addressing the following features:

- System should have different authentication levels. (Administrator , members).
- Interactive user friendly interfaces.
- Clear implementation of the business flow via the system.
- Design & implement suitable sets of reports, which you think will add more value to the entire business.

## **Tasks**

- a) Provide the UML for the given problem with clear explanations on the design decisions. (Use case and Class diagrams). (LO 1) (10 Marks)
- b) Design user interfaces to get the necessary user inputs. (LO 2 ) (20 Marks)
- c) 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)
- d) Include test plan, test data and proper application of the test plan. Test your mobile application according to the test plan. (LO 4) (15 Marks)
- e) Create user and technical documentation for the developed solution. (LO 4) (15 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**.

**Source code and installation package files should be submitted in a single zip file.**

## Assessment Criteria

Task (a) contain 10 marks.

Diagrams should be evaluated according to the following criteria.

Criteria	Marks	Marks obtained by the student for the answer provided
	Out of 10	
<b>Poor</b> Poor use of Design Methodology  Poor diagrams, notations and relationships	<b>0-4</b>	
<b>Pass</b> Proper use of Design Methodology  Use case Diagram <ul style="list-style-type: none"><li>• Identification of correct use cases</li><li>• Identification of correct Actors and associations</li></ul> Class Diagram <ul style="list-style-type: none"><li>• Identification of associated methods, with correct signatures and attributes in each class</li><li>• Correct identification of relationships</li></ul>	<b>4-6</b>	
<b>Good</b> Average Design <ul style="list-style-type: none"><li>• Clear identification of private, public access modifiers &amp; it is visible in the class diagram</li><li>• Accurate use of &lt;&lt;include&gt; &lt;&lt;extend&gt;&gt; stereo types in use case diagram</li><li>• Correct use of UML notations with minor mistakes</li></ul> Evaluation <ul style="list-style-type: none"><li>• Student has given basic description about the design and given a reasonable justification</li><li>• Effective judgments have been made about the content and levels of information to be included</li></ul>	<b>6-7</b>	
<b>Excellent</b> Excellent Design <ul style="list-style-type: none"><li>• Highly detailed diagram</li><li>• Backed by relevant assumptions</li></ul>	<b>7-10</b>	

<ul style="list-style-type: none"> <li>• Multiplicity, navigability aggregation &amp; compositions visible in class diagrams</li> <li>• Excellent use of UML notation</li> </ul> <p>Evaluation</p> <ul style="list-style-type: none"> <li>• Good justification of the design</li> <li>• Judge validity of results</li> <li>• Use critical reflection to evaluate the work and justify with valid explanations</li> </ul> <p>Fluency (Of design)</p> <ul style="list-style-type: none"> <li>• Evidence of critical analysis on different perspectives covering how, use case &amp; class diagrams support in designing.</li> </ul>		
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**Task (b) contains 20 marks**

Criteria	Marks	Marks obtained by the student for the answer provided
	Out of 20	
<b>Poor</b> <ul style="list-style-type: none"> <li>• Poor database design/ data storing mechanism</li> <li>• Poor interface design</li> </ul>	<b>0-8</b>	
<b>Pass</b> <ul style="list-style-type: none"> <li>• Use a database (simple design)/data storing mechanism</li> <li>• Have simple user interface</li> </ul>	<b>8-12</b>	
<b>Good</b> <ul style="list-style-type: none"> <li>• More sophisticated database design and queries</li> <li>• Good user interface design with proper alignments.</li> </ul>	<b>12-14</b>	
<b>Excellent</b> <ul style="list-style-type: none"> <li>• More sophisticated UI,</li> <li>• Control alignments, Color themes, appropriate icons, images.</li> <li>• More sophisticated database design and queries</li> </ul>	<b>14-20</b>	

**Task (c) contains 40 marks**

Criteria	Marks	Marks obtained by the student for the answer provided
	Out of 40	
<b>Poor</b> <ul style="list-style-type: none"> <li>Poor system implementation</li> <li>Functions not working properly</li> </ul>	<b>0-16</b>	
<b>Pass</b> <ul style="list-style-type: none"> <li>Basic data management system features.</li> </ul>	<b>16-24</b>	
<b>Good</b> <ul style="list-style-type: none"> <li>More sophisticated data representation (e.g. several classes at business logic level)</li> <li>Standard coding structure.</li> </ul>	<b>24-28</b>	
<b>Excellent</b> <ul style="list-style-type: none"> <li>Complex functionality (Innovative aspects)</li> <li>Reports being proposed to facilitate decision making.</li> <li>Effective use of database operations.</li> <li>Naming convention(Controls and Variables)</li> <li>Proper authentication system (user login and Security concerns)</li> </ul>	<b>28-40</b>	

**Task (d) contains 15 marks**

Criteria	Marks	Marks obtained by the student for the answer provided
	Out of 15	
<b>Poor</b> <ul style="list-style-type: none"> <li>Poor test plan and test cases.</li> <li>No conclusion</li> </ul>	<b>0-6</b>	
<b>Pass</b> <ul style="list-style-type: none"> <li>Simple test plan and test cases.</li> <li>Conclusion of each test case.</li> </ul>	<b>6-9</b>	
<b>Good</b> <ul style="list-style-type: none"> <li>Good test plan and test cases with average explanations</li> <li>Suitable test data used in testing.</li> </ul>	<b>9-11</b>	
<b>Excellent</b>		

<ul style="list-style-type: none"> <li>• Good test plan and test cases with screen shots &amp; average explanations.</li> <li>• Suitable test data used in testing.</li> </ul>	<b>11-15</b>	
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**Task (e) contains 15 marks**

<b>Criteria</b>	<b>Marks</b>	<b>Marks obtained by the student for the answer provided</b>
	<b>Out of 15</b>	
Poor standard of documentation with poor explanations	<b>0-6</b>	
Acceptable standard of documentation with poor explanations	<b>6-9</b>	
High standard of documentation with screen shots & average explanations	<b>9-11</b>	
Professional standard of documentation with screen shots & good explanation	<b>11-15</b>	

<b>Total Marks</b>	<b>Out of 100</b>	
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