



**Module Name:** Software Architecture

Module Code: 5N2772

**Section/technique:** Skills demonstration

**Course:** Software Development 5

**Teacher:** Fachtna Roe

Weighting: 10%

**Title of brief:** Skills Demo 5: Use case diagram

**Due:** 2024-04-19

Indicative duration: 1 hour

**Brief:** "Use straightforward UML use-case diagram(s) to depict the interaction between an actor and our system"

## Instruction(s):

Create UML use-case diagram(s) to describe the interaction between the user and your BMI system, which you have/will create for your Android native application.

These will satisfy the Software Architecture module requirement to "Use straightforward UML use-case diagram(s) to depict the interaction between an actor and our system. Before starting you should:

- Discover what a "use-case" is.
- Enumerate the elements that may be represented in a UML use-case diagram, including,
  - Actors
  - Use-Case
  - System boundary
  - Relationships (extends, includes, data transfer)
- Understand the relationship between the different elements, the differences between them, and enumerate them from our system
- Create a use-case diagram using any available tools, or by hand".

Though you may create the diagram(s) by hand, any such must be scanned for electronic submission. Alternatively (preferably), tools such as plantUML may be used.

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**Submission:** Single HTML file (index.html) with all resources (images etc) linked in, in a folder called *eg* red/1/SOFTARC5-RED1/ submitted via **t.fachtnaroe.net**.

Software Architecture 5N2772 Learner Marking Sheet 1 Skills Demonstration 70%	Software Architecture 5N2772	
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Learner's Name:	Learner's PPSN:

Assessment Criteria	Maximum Mark	Learner Mark
Engage and document Agile Software Development Methodology / Methodologies to develop a piece of software		
<ul> <li>Skills Demonstration 1 (12 Marks) (1 Hour)         <ul> <li>Engage a modern methodology to aid the design of a system from initial requirements</li> </ul> </li> </ul>	10	
<ul> <li>Skills Demonstration 2 (12 Marks) (1 Hour)         <ul> <li>Describe the role of modern methodologies in the software development process</li> </ul> </li> </ul>	10	
<ul> <li>Skills Demonstration 3 (12 Marks) (1 Hour)         <ul> <li>Apply the main tools and techniques used in the gathering, recording and analysis of information relating to an existing information system</li> </ul> </li> </ul>	10	
	10	
<ul> <li>Skills Demonstration 4 (12 Marks) (1 Hour)</li> <li>Generate Java (or suitable Object- Oriented language)</li> <li>classes from UML class diagram specifications</li> </ul>	10	
<ul> <li>Skills Demonstration 5 (12 Marks) (1 Hour)         O Use straightforward UML use-case diagrams to depict the interaction between an actor and system     </li> </ul>	10	
<ul> <li>Skills Demonstration 6 (12 Marks) (1 Hour)         O Test the design specification of a new information system based on a provided use-case     </li> </ul>		
Subtotal	60	
<ul> <li>Skills Demonstration 7 (10 Marks) (1 Hour)         O Explain the development of an information system using a traditional systems development life cycle model     </li> </ul>	10	
Subtotal	10	

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