

University of Brighton

School of Computing, Engineering and Mathematics

Assessment Brief Form

Module Title:	Object-Oriented Design & Implementation
Module Code:	CI228
Author(s)/Marker(s) of Assignment	Ali Hamie

Assignment No:	2
Assignment Title:	Modelling Requirements using UML
Assignment weighting:	25%
Module Learning Outcome/s Covered: (Refer to module syllabus)	LO1 Translate set of requirements for a problem of limited complexity into a set of well-formed models
	LO3 Use effectively a graphical modelling and programming environment.

Assignment Brief and Assessment Criteria:	
See attached Brief	
Assessment Criteria	
See attached Brief	

Date of issue:	07/02/2019
Deadline for submission:	14/03/2019 at 15.00
Method of submission:	Electronically through student central.
Date feedback will be provided	26/04/2019

- A copy of your coursework submission may be made as part of the University of Brighton's and School of Computing, Engineering & Mathematics procedures which aim to monitor and improve quality of teaching. If a copy is made, it will be kept only for this purpose and will be destroyed once this purpose has been fulfilled. You should refer to your student handbook for details.
- All work submitted must be your own (or your team's for an assignment which has been specified as a group submission) and all sources which do not fall into that category must be correctly attributed. The markers may submit the whole set of submissions to the JISC Plagiarism Detection Service.

Cl228 (Object-Oriented Software Architecture, Design and Implementation)

Coursework assignment 2 - February 2019

1. Rationale

To give you practice in defining the requirements of a system.

2. Task

To develop a use case model and an object model (UML class diagram) for the patient monitoring system, based on the requirements document provided.

3. Deliverables

- (a) List of actors and use cases initiated by each actor.
- (b) Realistic descriptions of two fundamental use cases.
- (c) An object model (class diagram) of the problem (core) domain documented in UML. The model should include the main **classes**, with their main **attributes** and **associations**.
- (d) A list of <u>three major</u> omissions, ambiguities or areas of uncertainty that you have found in the requirements document.

4. Assessment

- (a) 25%
- (b) 25%
- (c) 40%
- (d) 10%

5. Assessment criteria

- (a) Plausible choice of actors and use cases according to the guidelines explained in the lectures
- (b) Choice of main use case. Compliance with the requirements. Clear description of pre-conditions, sequence of events and post-conditions of the use case. Demonstration of understanding of use cases and relation of use cases to functional requirements.
- (c) Correspondence of the classes and attributes in the model with significant core domain concepts. Correspondence of the associations in the model with significant real-world connections between the corresponding concepts.
- (d) An answer reporting no problems in the requirements document will gain no marks. An answer with a long list of minor problems, or problems about non-essential requirements, will not gain many marks. The list must contain three problems, and they must be about the essential requirements (e.g. the document does not say what must happen in a given situation). Remember that the document deliberately leaves out all details of user and device interfaces

6. Use of Tools

You could use WhiteStarUML (or any other tool) to produce diagrams for deliverable c). Neatly drawn hand or word-processed diagrams are also acceptable for the coursework.

7. Organisation

You may work in **pairs** or **individually**. If you work individually, you may hand in only **one** fundamental use case rather than **two** - for deliverable b). If you are working as a pair, include a table (similar to the one attached at the end of this brief) which indicates the tasks that have been performed by each member and indicate if a task has been performed individually or collaboratively. Marks for the work of a pair will be shared equally where there is evidence of equal participation by both members.

8. Deadline

Your work must be submitted online by **15.00** on **Thursday 14th March 2019**. Submit a single file (PDF or word document) that contains the written part and the diagrams of your coursework. The file name should have the following format **ci228_your_name.pdf** (or **ci228_your_name.docx**)

Statement of Contribution: Only to be used for those working in pairs
Student Name:
Contribution Summary:
Student Name:
Contribution Summary: