## SWE30003 – 2023 Software Architectures and Design Assignment 2 – worth 25 marks

Tutorial day and time:

Group/team name:

Area	Elements	Breakdown (in %)	Actual mark
Executive Summary,	Overview of the document, summary or problem to be	5	
Introduction	addressed, outlook of solution to be taken etc.		
Assumptions	What assumptions are made? Are they realistic and within the	5	
	given constraints? Are they described in enough detail?		
Evidence of Problem	Does submission illustrate some form of problem analysis?	5	
Analysis	Brief discussion of "simplifications" made during analysis		
Overview of	Full list of candidate classes contained in design solution	20	
Candidate Classes	UML-type class diagram (or similar notation) highlighting		
	the relationships between the candidate classes		
	o deduct up to 5 marks if full method signatures (or the-		
	like) are used.		
	Must include a brief justification of the chosen classes and		
	why other candidate classes were discarded (if applicable)		
	Up to 15 marks for classes and overview; 5 marks for		
	justification.		
CRC Cards of	For each of the classes given in "Overview", a CRC card with	20	
Candidate Classes	the following must be given:		
	• Class name, and parent class (if applicable)		
	Brief description of this class		
	List of responsibilities plus all their collaborators		
	Deduct 4 marks per missing class, 1 mark per item of CRC		
Quality of Design	• Are all necessary responsibilities of the <i>system</i> covered?	15	
Solution	• Are the responsibilities described consistently and precisely?		
	• Are the responsibilities "evenly" distributed or are "god"		
	classes present?		
	• Use of design heuristics made explicit (if applicable)?		
	• Use of Design Patterns made explicit (if applicable)?		
Illustration of Bootstrap process	• Illustration of which class(es) create instances of other	5	
	class(es) and in which order		
	• Deduct marks if undefined classes are used for the process.		
Basic Verification of	Must contain at least four non-trivial use scenarios of the	20	
given solution	system and how the design solution covers these scenarios		
	o Illustration using UML sequence diagrams (or similar)		
Coherent Document	Document has a suitable overall structure	5	
	• Clarity and consistency of the various parts of the document.		
	• Title page, Table of Content, Section, Page numbering etc.		
	• Use of English, diagrams with legends/notations used, etc.		
	Pitched at appropriate audience?		
Meeting the	Only electronic submission is required	-xx	
requirements of the	Assignment 1 submission attached as appendix (otherwise,		
assignment	penalty up to 5 marks)		
specification	• Cover sheet signed (otherwise, penalty up to 5)		
	Work sheet (contribution document) completed and signed		
	(otherwise, penalty up to 10)		
	• Others		
Total		100	