

SWE30003 – 2025
Software Architectures and Design
Assignment 2 – worth 25 marks

Tutorial day and time:

Group/team name/number:

Area	Elements	Breakdown (in %)	Actual mark	Comments
Executive Summary, Introduction	Overview of the document, summary or problem to be addressed, outlook of solution to be taken etc.	5		
Assumptions	What assumptions are made? Are they realistic and within the given constraints? Are they described in enough detail?	5		
Evidence of Problem Analysis	<ul style="list-style-type: none"> Does submission illustrate some form of problem analysis? Brief discussion of “simplifications” made during analysis 	5		
Overview of Candidate Classes	<ul style="list-style-type: none"> Full list of candidate classes contained in design solution UML-type class diagram (or similar notation) highlighting the relationships between the candidate classes <ul style="list-style-type: none"> 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.	20		
CRC Cards of Candidate Classes	For each of the classes given in “Overview”, a CRC card with the following must be given: <ul style="list-style-type: none"> 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	20		
Quality of Design Solution	<ul style="list-style-type: none"> Are all necessary responsibilities of the <i>system</i> covered? Are the responsibilities described consistently and precisely? Are the responsibilities “evenly” distributed or are “god” classes present? Use of design heuristics made explicit? Use of Design Patterns made explicit? 	15		
Illustration of Boot-strap process	<ul style="list-style-type: none"> Illustration of which class(es) create instances of other class(es) and in which order Deduct marks if undefined classes are used for the process. 	5		

Basic Verification of given solution	<ul style="list-style-type: none"> • Must contain at least four non-trivial use scenarios of the system and how the design solution covers these scenarios <ul style="list-style-type: none"> ◦ Illustration using UML sequence diagrams (or similar) 	20		
Coherent Document	<ul style="list-style-type: none"> • Document has a suitable overall structure • 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? 	5		
Meeting the requirements of the assignment specification	<ul style="list-style-type: none"> • Only electronic submission is required • Assignment 1 submission attached as appendix (otherwise, penalty up to 5 marks) • Cover sheet signed (otherwise, penalty up to 5 marks) • Work sheet (contribution and collaboration document) completed and signed (otherwise, penalty up to 10 marks) • Others (lateness, lack of contributions or collaborations) 	-xx		
Total		100		