

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) <p>Up to 15 marks for classes and overview; 5 marks for justification.</p>	20		
CRC Cards of Candidate Classes	<p>For each of the classes given in “Overview”, a CRC card with the following must be given:</p> <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 <p>Deduct 4 marks per missing class, 1 mark per item of CRC</p>	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		