

Software Engineering with Objects and Components 1
Group Tutorial Project: Deliverable 1
Marking Scheme

Part 1 - Team Information

Tutorial Group (T01-T07)		Tutor's Name	
Tutorial Group's Name		Team: S, P or A	
Team Members			

Part 2 - Individual Marking Scheme

Individual Marking Scheme								
	Estimated Contribution				Individual Mark			
	[tick one box only]				[Basic + Bonus + Team Bonus]			
Team Member	0%	25%	50%	100%	Basic	Bonus	Team Bonus	Total

Part 3 - Deliverable Marking Scheme

Deliverable Marking Scheme		
Deliverable Part	Questions	Marks
Requirements Marks Limit: [10/100]	Q1. Did you organise/collect the system requirements by using a Requirements Specification template (e.g., Volere)? Assess the quality of your Software Requirements Specification (SRS) document. Q2. Did you distinguish different types of requirements (e.g., functional or non-functional)? Assess how your SRS identifies different types of requirements. Q3. Do you believe you got most of the system requirements (requirements completeness)? Assess the extent to which you have elicited and gathered requirements from the main sources. Q4. Have you identified/resolved conflicting requirements (requirements correctness)? Assess the extent to which you have resolved conflicting requirements among different types (e.g., functional and non-functional) or across teams.	[/ 3] [/ 3] [/ 2] [/ 2]
Use Cases Marks Limit: [33/100]	Q5. Did you graphically represent the functional requirements by Use Cases? Assess to which extent your use case diagram captures main system functionalities and actors. Q6. Did you refine the use cases by generalization or extension? Assess to which extent you have refined use cases. Q7. Did you use a template for organising/collecting the use cases? Assess to which extent you have clarified use cases by filling in templates (use case information completeness and correctness).	[/ 9] [/ 12] [/ 12]
Class Diagrams Marks Limit: [33/100]	Q8. Does your class diagram identify the main classes of the system? Assess to which extent your class diagram realizes system use cases. Q9. Did you specify Attributes and Operations for each class? Assess the completeness of class specification. Q10. Did you identify Associations, Generalizations, Aggregations and Compositions? Assess the object orientation quality of your class diagram.	[/ 9] [/ 12] [/ 12]
CRC Cards Marks Limit: [24/100]	Q11. Did you construct CRC cards for your system design? Assess the completeness of CRC cards. Q12. Did you verify your Class Diagrams? Did you play any use case with the CRC Cards in order to verify your class diagram? Assess the quantity and the coverage of your requirements and design verification by CRC cards.	[/ 12] [/ 12]
Deliverable Mark		[/100]

Deliverable 1 Marking Scheme - Instructions

This form is to be used by your team to assess your deliverable 1 and to distribute the mark among your team's individual members. Please complete and return the form together with your deliverable 1. This form is in three parts.

Part 1 - Team Information. This part records your team's details. Please fill in the table in the Part 1 with the relevant information.

Part 2 - Individual Marking Scheme. This part records your team's distribution of the mark among individual team members. The final mark for an individual is the sum three parts: [Basic + Bonus + Team Bonus]. Bonus marks are only available to individuals and teams who provided a (100% and) distinguishable contribution. Basic marks are calculated by a fixed calculation. Bonus marks are to be determined **democratically** by the team.

Basic Mark: The basic mark for each individual is equal to the **estimated contribution** percentage proportion of the **Deliverable Mark** (see Part 3). For example, if your team's deliverable mark is 68%, the basic mark for an individual who contributed 0% is 0; for an individual who contributed 25% is 17 (25% of 68); for an individual who contributed 50% is 34 (50% of 68); for an individual who contributed 100% is 68.

Bonus Mark: The **Bonus Mark** available for distribution is 10% of **Deliverable Mark** divided by the number n of individuals in your team.

$$\text{Bonus Mark} = \frac{\text{Deliverable Mark} * 10\%}{n}$$

For example, if your team's deliverable mark is 68% and there are 4 of you in your team, the total bonus mark available is 1.7. Your team should decide, democratically and - preferably - amicably, how this total mark should be given to the individual who provided a (100% and) distinguishable contribution towards your deliverable.

Team Bonus Mark: Let n be the number of individuals in your team. The **Team Bonus Mark** available for distribution is 10% of **Deliverable Mark** divided by the number n of individuals in your team.

$$\text{Team Bonus Mark} = \frac{\text{Deliverable Mark} * 10\%}{n}$$

For example, if your team's deliverable mark is 68% and there are 4 of you in your team, the total bonus mark available is 1.7. and there are 4 of you in your team, the total bonus mark available is 1.7. Your team should decide whether to give the team bonus mark to each individual by assessing the overall team work (e.g., performance, collaboration, task and effort distribution, communication, etc.).

Note that (i) no final mark of greater than 100 will be accepted; and (ii) the individual marks will be checked and adjusted if necessary.

Part 3 - Deliverable Marking Scheme. This part provides you a marking scheme for your deliverable 1. Your deliverable 1 should consist of four different parts: *Requirements*, *Use Cases*, *Class Diagrams* and *CRC Cards*. The Deliverable Marking Scheme in Part 2 shows the maximum mark allocated to each part. You have to assess each part of your deliverable 1. The table provides relevant questions that structure your assessment process. You should assign (part of) the allocated marks for each question. The marks depend on the quality of your work. You should justify your mark assignment by answering the question in a separate sheet. The **Deliverable Mark** is the sum of the marks of each part.