

# Software Specification

## Evaluation Criteria for the Practical Project

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### 1 Syntax and Integrity

Half of the total mark is dedicated to the syntax and integrity of the components of the final report. The final report should contain a syntactically correct and sufficiently comprehensive account of the following components (each component constitutes 10% of the final mark):

1. Use case diagram and the description of use-cases
2. Class diagram
3. Sequence diagrams or (high-level) message sequence charts
4. State diagrams or statecharts
5. Hennessy-Milner formulae and their informal description

One of the most important criteria in judging items 1 to 4 is the extent to which the given feedback for each item is applied in the final version.

### 2 Consistency

The remaining 50% of the mark is divided equally between the following aspects of consistency:

1. Uses cases should be consistent with the informal requirements and all informal requirements should be captured by the use case descriptions.
2. Each non-trivial method in the class diagram should have a Z or Alloy specification.
3. Each use case description should be modeled by one or more (high-level) message sequence chart or sequence diagram. Each entity in the MSC (SD) should be an object of a class given in the class diagram. Each message received by an object in the MSC (SD) should be a method of the target class in the class diagram.
4. Each class (or each combination of classes) should have a statechart (state diagram). Each scenario specified by an MSC (SD) should be a trace of the system-level composition of statecharts (state diagrams).
5. Each HML formula should correctly reflect its informal description.

The report should clearly indicate that the above items are taken into account.