

First Report: Information for Marker

The aim of the First Report is to provide written documentation of the team's work in the initial overall system design phase of the project. It thus covers similar work to the Initial Presentation but should include more detailed engineering documentation rather than a narrative description. It is marked primarily on the quality of the design process followed, in particular the clarity and scope of the specifications, selection and evaluation of concepts and the overall ability of the robot to perform the task.

The report should contain:

- A coversheet specifying the team identifier, team name and robot name together with the name, lab group and College of each team member
- Approach for solving the problem
- Sketches of the concepts you have considered (which may be photocopied/scanned from your lab book). Evaluation charts of these concepts together with a brief discussion of the advantages and disadvantages of each
- Approach for solving the problem
- Robot Concept and diagram. This could be hand-drawn diagrams, CAD models or any format which conveys the approach and concept
- Overall System Level Diagram. Detailing how the electronics, hardware and software interacts
- Electronics/Sensing. This could include circuit diagrams/block diagrams as to the approach
- Exploration and navigation algorithms
- Integration between hardware electronics and software
- What is the most risky/challenging aspect of the project?
- Gantt Chart (resource/time allocation)

Where possible, teams should aim to update their plans to reflect feedback given in the first presentation.

Teams should submit the report on Moodle by 4pm on on the day of the deadline.

First Report Mark Scheme

Team:

Date:

Marker:

Presentation Area	Comments	
Team Planning/Organisation <ul style="list-style-type: none"> - Team structure/management - Gantt Chart - Reasonable Expectations 		/20
Overall Concept <ul style="list-style-type: none"> - Exploration of concepts - Concept selection - Reasonable Approach 		/20
Mechanical <ul style="list-style-type: none"> - Consideration of materials - Consideration of fabrication methods - Reasonable Size - Consideration of sensors/motor placement 		/20
Electrical <ul style="list-style-type: none"> - Sensor selection - Appropriate choice of sensors - Interface to software 		/20
Software <ul style="list-style-type: none"> - Interface to electronics considered - Overall strategy/structure - Appropriate algorithms chosen - Implementation realistic 		/20
Total Mark		/100

Comments: