Final Report

(Max.25 pages including appendix)

This report details project implementation, including the team's success in achieving objectives and requirements from the conceptual/detailed design stage (EEE491).

Building upon the detailed design report from the previous semester, this report should include the following sections:

1. Front Page
2. Table of Contents
3. Executive Summary: Scope of the report, Content and conclusions, Specifically address the problem, your solution, and its implementation details
4. Introduction: Problem statement, Overview of requirements regarding the detailed design in the previous semester
5. Proposed Design Description and Implementation Details (regarding the detailed design in the previous semester)
    a. General description of your design (in a top-down approach)
    b. Include technical details of the design, such as mathematical derivations, formulas, illustrations, tables, figures, circuits, software tools, diagrams, flowcharts, and relevant standards. Some technical content may be placed in the appendix.
6. Performance Analysis Results (testing, verification, validation): Demonstrate that your design meets the requirements by providing test reports (unit, module, integration, acceptance tests)
7. Cost Analysis: Realized costs based on the cost analysis anticipated in the detailed design report, Updated commercialization plan
8. Discussions: Demonstrate how your design meets standards, certification, and safety regulations. Explain how you ensured your design's safety for users and the environment (considering widespread use as a commercial product). Discuss the societal impact of your design.
9. Appendix
    a. Product Description Document (max. 3 pages)
    b. Proofs regarding teamwork, and testing/measurements (max. 2 pages)
        i. task distribution, roles of members
        ii. at least one picture/screenshot from meetings, and list the decisions
        iii. at least one picture/screenshot from test/measurement phase

Feel free to embed internet links if you want to provide more within (b)

Product Description Document (PDD)
(Max. 3 pages)

The Product Description Document (PDD) describes your project's final product from a customer's perspective, considering all stages after purchase, including potential mass production and commercialization.

1. **Title**: Name of the product (the system or device you have produced in the project, this may not be the project title)
2. **Purpose:** How this product will be used, and who will use it (user/customer description)
3. **Composition:** List all parts of the product (For example, list of components/modules/sub-system if it is a system, list of functionalities if it is software or algorithm)
4. **Development Skills Required:** Skills required to develop the product (if one can try to develop it)
5. Quality Criteria: Quality specifications and quality measurements for the product (To what quality specification must the product be produced, and what quality measurements will be applied by those inspecting the finished product? This simply refers to one or more common standard at national and/or international level. If the product is to be developed and approved in different countries, then the quality criteria should be grouped into those that apply for each country)
6. **Quality Tolerance and Method**: Details of any range in the quality criteria within which the product would be acceptable, What kinds of quality method- for example, design verification, pilot, test, inspection or review – are to be used to check the quality or functionality of the product.
7. **Quality Skills Required**: An indication of the skills required to undertake the quality method or a pointer to which area(s) should supply the checking resources. Identification of the actual people may be left until planning the stage in which the quality inspection is to be done.

ID	Evaluation Criterion (Report)	%
1	Organisation and format (easy to follow, it complies with guideline of report, front page, executive summary, PDD/appendix)	10
2	Teamwork (organisation of the team, wel-planned task distribution)	10
3	Preliminary (491->needs identification, problem statement, literature survey, requirements, proposed concept, detailed design-L0,1,2)	10
4	Implementation (details of implementation)	20
5	Demonstration (testing and demonstration, to meet the requirements, user needs)	20
6	Commercialization (cost analysis, marketing, economical, standardization, certification, legal and safety issues)	10
7	Product description document (complies with guideline)	10
8	Language (grammar, spelling, punctuation)	10
	Total	100