E96A

Introduction to Engineering Design

<Enter Project Title Here>

Design Document

<Enter Group Team Members Names Here>

**Version 1**

**Date**

Revision History

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| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Comments** |
| Version No | Date Completed | Author(s) | Comments on Versions |
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# Abstract

Brief abstract here. Length is one quarter page.

# Team

Please list team members

It is also **critical** to define responsibilities for each team member.

Each team member responsibilities must include software development contributions to the IoT platforms for the project. Assessment of team member contributions will be made to ensure that all team members are engaged.

# Technical Approach

For this section please include:

1. One page description
2. This includes a discussion of general objectives, planned methods and algorithms

# System Design

For this section please include:

1. One page description of implementation
   * Include architectural diagrams

# Implementation Description

For this section please include:

1. Two to five pages
2. This is an Implementation narrative description that should guide others who will learn about the architecture and approach you have used.
3. This augments Section 3&4 and should discuss your design approach and the systems you used to compose your solution.
4. Please describe approaches used for implementation. This may include a description of the development of your system state machine, individual software modules, data acquisition methods, or others.

# Implementation Schedule

This is a critical step. For this section please include dates for:

1. Design completion date
2. Test plan completion date
3. Implementation completion date
4. Testing phase complete

# System Source Code

1. This may include description of the functionalities of your source code.
2. This can be descripted with pseudocode or/and narratives.

# Test and Evaluation System

1. This description of the design of your test and evaluation system developed to test the design hypotheses described above.

# Analysis

1. This is flexible. Please use as many pages as required here.
2. This is an opportunity to highlight the success of your development. Please note that there will be discoveries that show performance better than expectations and less than expectations. It is important that we describe both and give reasons. Of course, our objective is to be successful, but ,we recognize that there will be shortfalls. Experience in development helps us reduce the frequency and severity of shortfalls in design.
3. This section provides a discussion of results including:
   1. Comparison of actual operation with the operation expected at the time of design
   2. Discussion of this performance describing reasons why performance may exceed or not meet objectives.
   3. Discussion of regions of applicability for our designs. That is, this section should describe regions where performance meets objectives and those where it does not.

# References

1. Please list references from publications or web sources that have been useful in your development.