

[Project Title]

[\[Project Title\]](#)

[Project Overview](#)

[High-Level Block Diagram \(use DrawIO or plantUML for diagrams\)](#)

[Hardware Requirements](#)

[Software Components](#)

[Implementation Approach](#)

[Learning Outcomes](#)

[How to Continue This Project in the Driver Development Course](#)

[Getting Started](#)

[Prerequisites](#)

[Project Structure](#)

[Build Instructions](#)

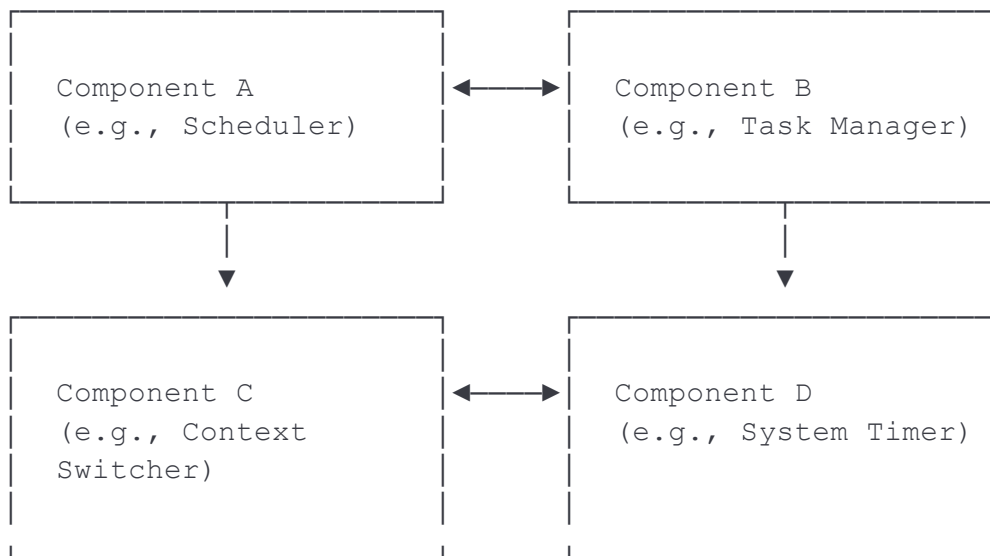
[Assessment Criteria](#)

[References](#)

Project Overview

Brief description of the project, its purpose, and main functionality.

High-Level Block Diagram (use DrawIO or plantUML for diagrams)



Hardware Requirements

- STM32 microcontroller model
- Required peripherals
- Additional hardware components

Software Components

- Component 1: Description and purpose
- Component 2: Description and purpose
- Component 3: Description and purpose

Implementation Approach

Detailed description of how the project should be implemented, including:

- Initialization sequence
- Main algorithms
- Critical functions
- Hardware configuration

Learning Outcomes

Key skills and knowledge students will gain from this project:

- Outcome 1
- Outcome 2
- Outcome 3

How to Continue This Project in the Driver Development Course

Describes how students can extend this project in the next course:

- Extension 1
- Extension 2
- Extension 3

Getting Started

Prerequisites

- Development environment requirements
- Required libraries or tools

Project Structure

```
project/
├── inc/
│   ├── main.h
│   └── [other header files]
├── src/
│   ├── main.c
│   └── [other source files]
├── Makefile
└── README.md
```

Build Instructions

Steps to build the project:

1. Step 1
2. Step 2
3. Step 3

Assessment Criteria

How the project will be evaluated:

- Criterion 1
- Criterion 2
- Criterion 3

References

- Relevant documentation
- Useful resources
- Reference materials