

# Project Proposal

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## 1 Introduction

- **Project Name:** Mud
- **Team Members:** Samir, Joyal

## 2 Overall Vision

Mud is a modern C-like programming language that offers simplicity, performance, and advanced features like zero cost abstraction, concurrency, and a powerful type system. It is a great language for teaching programming basics in a modern environment. Our complete project will be a fully fledged and bootstrapped compiler that can reliably and efficiently compile Mud to a variety of targets.

## 3 Milestones:

### 1. Week 4

- (a) Outline the design goals of the language
- (b) Have a concrete definition of syntax
- (c) Implement a prototype lexer and parser

### 2. Week 8

- (a) Implement a C transpiler written in rust
- (b) Create documentation that covers the basic functionality of the language
- (c) Possibly bootstrap the compiler here

### 3. Week 12

- (a) Implement a LLVM backed compiler
- (b) definitely bootstrap the compiler here