

# COAL PROJECT PROPOSAL

## Team members

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## Overview:

A simple inventory management system that will utilize file management to allow users to Create an account, login in and manage their inventory stock through the command-line interface via MIPS MARS.

## Objective:

The objective is to implement file management system strategies and allow users to manage their inventory through the MIPS MARS command-line

## Learning Outcomes:

- File handling using Assembly
- User Authentication
- Loops
- Switch
- Array manipulation
- Functions
- Research and development of Assembly language programs

## Application:

- Prototyping for Low-Level Systems
- Educational Tool
- Personal Inventory Tracking

## Working Implementation:

**MIPS Assembly Language:** To write the program.

**MARS Simulator:** For assembling, debugging, and running the MIPS code.

**File I/O in MARS:** To handle inventory data storage and retrieval.

**Command-Line Interface (CLI):** For user interaction and input.

**Text Files:** To store user accounts and inventory data persistently.