# MEKELLE UNIVERSITY

# DEPARTMENT OF SOFTWARE ENGINEERING

# SRS FOR STUDENTS REGISTRATION SYSTEM

# By;

Daniel kindeya g/HER

Ugr/179057/12

# Software Requirements Specification (SRS)1. Introduction

## 1.1 Purpose

This document defines the detailed functional and non-functional requirements for a Student Registration System built using Laravel, SQLite, PHP, and integrated with Stripe for payment processing. The system is designed for students to register, browse courses, enroll in courses, and make secure payments.

## 1.2 Scope

The system provides a self-service platform for students to:

- Register and authenticate themselves.

- View course offerings and related details.

- Enroll in selected courses.

- Pay for courses securely using the Stripe payment gateway.

The application ensures smooth operation by managing student information, course enrollment, and payment records using an SQLite database.

## 1.3 Definitions, Acronyms, and Abbreviations

- SRS: Software Requirements Specification

- CRUD : Create, Read, Update, Delete

- Stripe : A payment gateway for secure transactions

- Enrollment : The process of registering for a specific course

# 2. Overall Description

## 2.1 Product Perspective

This project is a standalone web application built with Laravel, providing a single-user role (Student) to perform the following tasks:

- Registering an account and logging in.

- Viewing course details.

- Enrolling in courses by making secure payments.

Stripe API is integrated for handling payment transactions, ensuring the system adheres to high-security standards. Data is managed via an SQLite database, offering lightweight and efficient storage.

## 2.2 Product Features

Student Functionalities:

- Register and log in to the platform.

- Browse available courses.

- Enroll in one or multiple courses.

- Make payments for enrolled courses.

- View enrollment history.

## 2.3 User Classes and Characteristics

Student

- The sole actor in the system.

- A person who registers, browses courses, and makes payments for selected courses.

## 2.4 Operating Environment

- Server: Apache/Nginx with PHP 8.x support

- Database: SQLite for lightweight, server-side storage

- Platform: Laravel Framework

- Payment Gateway: Stripe

## 2.5 Constraints

- Stripe is the only payment gateway supported for transactions.

- The application must run on desktop.

- Database storage is limited to the capabilities of SQLite.

# 3. Functional Requirements

3.1 User Registration and Authentication

- Students can register with their name, email, and password.

- Validate email addresses during registration.

- Provide login functionality using registered email and password.

3.2 Course Management

- Students can view a catalog of courses. Each course must display:

- Course title

-Course Code

- Description

- credit hour

- Fee

3.3 Enrollment Process

- Students can select one or multiple courses to enroll in.

- Students must confirm enrollment by making payment.

3.4 Payment Processing

- Integrate Stripe API to handle payment transactions.

- The payment process should include:

- Payment page with course details and total amount.

- Secure transaction through Stripe’s hosted solutions.

- Email confirmation for successful payments.

- Store payment details

- Stripe transaction Id

- Timestamp of the transaction