Software Requirements Specification

**EGERTON UNIVERSITY**

****

**FACULTY: SCIENCE**

**DEPARTMENT: COMPUTER SCIENCE**

**PROJECT SUPERVISOR: MR. KORIR**

**PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR …………..IN COMPUTER SCIENCE.**

Abstract

……

……..

Acknowledgement

……

…….

ApprovalTable of Content

# Introduction

## Purpose

It explains the functional features of the system, along with interface details, design constraints and related considerations such as performance characteristics. The SRS is intended for users and developers.

## Scope

Gives the functional areas which the proposed system will cover, e.g it will deal with student registration, collection of fees, reports, etc.

## Definitions, Acronyms and Abbreviations

Here you provide all the definitions, acrononyms, etc that will make readers to understand the document.

## References

List of references here

## Overview

The rest of the SRS examines the specifications of system including in section X it deals with …… and section YY deals with……

# Overall Description

## Product Perspective

e.g the system will be web based and will ……

## Product Functions

Provide the highlights of the functions of the system,

e.g

The system will allow users to create a computerized database that will store students details, record fees payments, generate receipts, reports, etc.

(should be in line with what the system intends to be capable of providing solutions to identified problem)

## Constraints

e.g will work with Pentium … with speeds ….

## Assumptions and dependencies

A number of factors that may affect the requirements specified in the SRS include:

1. E.g users will be conversant with network O/S, there will be Internet and etc…

# Specific Requirements

This is where you give the details of the requirements from functional requirements (functions, features and conditions) to non functional requirements. Each requirement analyzed and recorded must be numbered, traceable, non ambiguous, consistent and complete.

## Functionality

This section is organized by the processes and features encapsulated in the system; each is given and its flow of events are also given.

e.g

3.1.1 Add student detail

Include flow of events here.

## Reliability

### Maintenance

### Security Considerations

e.g Users will be authenticated before accessing data or parts of the system. You may write the following parts will be accessed by -----

## Performance Requirements

### Response time

e.g The maximum response time for the submission of a job will be …. seconds

### Capacity

e.g the database may store up to …. records

## Supportability

### Naming Convention

e.g All code will be written as specified by the policy

### Coding Standards

e.g All code will be written as required by the GNU General Purpose License.

## Design Constraints

### Parent Component:

e.g the system will be part of ERP of the company

### Software Language

All coding will be done in …. language.

## Online User Documentation and Help System Requirements

e.g All documentation will be made in accordance with requirements pertaining to open source software under the GNU General Purpose License. Additionally, on-line user documentation will be in the form of **man** pages accessible through Linux.

## Interfaces

### User Interfaces- Include a list of all user interfaces that will be there including

1. Input/output forms
2. Images
3. Icons
4. Hyperlinks

You must explain the purpose of each and who will use them.

1. E.g There will be a login screen with labels Username, password and category where users will fill the fields.
2. There will be an input form for entering students details with the fields registration number, name, year of study, programme where a user with authority to insert student details will do so.

### Hardware Interfaces

Mention issues such as

* CPU usage
* Memory usage
* Swap file creation
* Network communication

### Software Interfaces

e.g system will be interfacing with the operating system and any other software components it requires (list those software).

### Communications Interfaces

e.g e-mail, etc

## Logical Database Requirements

Will a database be used? If so, what logical requirements exist for data formats, storage capabilities, data retention, data integrity, etc. Here, you will give the data domain description, the E/R diagram, the mapping to the tables (data dictionary), the table structures

# Analysis Models

List all analysis models used in developing specific requirements previously given in this SRS. Each model should include an introduction and a narrative description. Furthermore, each model should be traceable the SRS’s requirements.

## Sequence Diagrams (if used as in O.O design)

## Data Flow Diagrams (DFD) - (structured design)

# Change Management Process

Identify and describe the process that will be used to update the SRS, as needed, when project scope or requirements change. Who can submit changes and by what means, and how will these changes be approved.

# Supporting Information

### Appendix –E/R digram

### Appendix e.g – Data Flow Diagrams

### Appendix C – Data Dictionary