Department of Information and Communication Technology

Faculty of Technology

University of Ruhuna

Database Management Systems Practicum

ICT 1222

Software Requirement Specification

Group – 06

Submitted to: Mr. P.H.P. Nuwan Laksiri

Submitted by: -   TG/2021/1081 – M.D.V.Dias

TG/2021/1012 – Sihina Nimnada

TG/2021/1017 – M.M.N.D.Seneviratne

TG/2021/1048 – Maneesha Geethanga

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1. Introduction

1.1 Purpose

- The purpose of this document is to present the requirements of this Student Management Information System for the Faculty of Technology.

1.2 Scope of Student Management Information System

- This Management information system will support to handle student details, CA marks status, Final Exam marks status, attendance details e, Time tables, Notices, Submitted Medicals and User profiles. In this system there are lot of user profiles and some of the users have specials privileges according to their designation. Those are Admins, Dean, Lecturers, Technical officers, and Students. Each user has different authorities and privileges in this system.

  - ➢ Students can view their attendance, CA status, Final marks for a particular course module, Submit medicals and view Notices and timetables.

  - ➢ Lecturers can update enter CA and final exam marks, view notices, timetables and Upload lecture materials and lab sheets.

  - ➢ System admins can update user details, Adding and deleting students, lecturers and Technical officers and View notices and publish notices.

  - ➢ Technical officers can update student's attendance, view time tables and view submitted and approved details.

  - ➢ Dean can view student's and lecture's details, manage facilities and equipment and financial management and budgeting.

User Requirements

Login and logout requirements

User Authentication – User must provide valid credentials, such as a username and password, for authentication.

Session Management - Users stay logged in until they decide to log out or until their account logs out automatically when they're not using it.

Use case name	Login
Use case ID	UC-001
Actors	Staff and student
Precondition	The user should have username and password
User action	The user opens the **login** page. User enters the username and password on the form. User click theSign In button.
Postcondition	User logs into the system and performs other tasks.

Use case name	Logout
Use case ID	UC-002
Actors	Staff and student
Precondition	The user should login first.
User action	The user clicks the logoutbutton.
Postcondition	Logout from the system and display Login form.

Admin Requirements

User Account Management - Admins should be able to create, modify, and delete user accounts.

Data Management

➢ Admins should be able to add, update, or delete student and course related records.
➢ They should be able to add, update, or delete staff-related records.

Course Management

➢ Admins should be able to manage courses, including adding new courses, and assigning lecturers.

Use case name	Add, Update, Delete and View student details
Use case ID	UC-001
Actor	Admin
Precondition	Before user go to student section, he/she should login as an Admin
User action	The user opens the student section.
	The user fill student information.
	User can view entered details.
	Users provide student updated information.
	User can view updated details.
	User can delete student details.
Postcondition	N/A

Use case name	Add, Update, Delete and View staff details
Use case ID	UC-002
Actor	Admin
Precondition	Before user go to staff section, he/she should login as an Admin
User action	The user opens the staff information section.
	The user fill staff information.
	User can view entered details.
	Users provide staff updated information.
	User can view updated details.
	User can delete staff details.
Postcondition	N/A

Lecturer Requirements

- ➢ The lecturer should be able to add and modify lecture materials.
- ➢ The lecturer should be able to upload marks for all kinds of exams. (CAs, Mid, Final etc.)
- ➢ They should be able to update their profile except username and password.
- ➢ Lecturer should be able to change course view priority as needed.
- ➢ Lecturer should be able to see student details.
- ➢ Lecturer should be able to see student eligibility.
- ➢ Lecturer should be able to see attendance and medical submissions of students.
- ➢ Lecturer should be able to create and update submit links.
- ➢ Lecturer should be able to see student assignments submitted information.
- ➢ Lecturer should be able to see student marks, grades and GPA related information.

Use case name	Create, Update, and modify lecture materials
Use case ID	UC-001
Actor	Lecturer
Precondition	The user should have login the system as a lecturer
User action	The user can add lecture materials. The user can modify lecture materials. The user can create upload links for practical's and in class activities etc. User can choose to either view or hide materials for students.
Postcondition	N/A

Use case name	Create, Update, and modify Quizes as CA component
Use case ID	UC-002
Actor	Lecturer
Precondition	The user should have login the system as a lecturer
User action	The user create quizzes. The user can modify quizzes. User can choose to either view or hide quizes for students.
Postcondition	N/A

Use case name	Upload marks for all kind of exams
Use case ID	UC-003
Actor	Lecturer
Precondition	The user should have login the system as a lecturer then go to the exam marks section
User action	Lecturer Can upload marks for all kind of exams.
Postcondition	N/A

Use case name	View student details
Use case ID	UC-004
Actor	Lecturer
Precondition	The user should have login the system as a lecturer
User action	Lecturer Can see student details (Name, Registration_no, assignment submitted date course unit wise, department etc)
Postcondition	N/A

Use case name	View attendance and medical submissions of students
Use case ID	UC-005
Actor	Lecturer
Precondition	The user should have login the system as a lecturer
User action	Lecturer Can see attendance of students Lecturer Can see medical submission of students
Postcondition	N/A

Technical Officer (TOs) Requirements

➢ The TO should be able to update their profile except username and password
➢ The TO should be able to add and maintain attendance details of students
➢ The TO should be able to add and maintain medical submission details of students
➢ They should be able to view notices

Use case name	Add, Update, View and Retrieve student attendance related details
Use case ID	UC-001
Actors	Technical Officer (TOs)
Precondition	Before user go to attendance section, he /she should login as a technical officer.
User action	The user opens the attendance information.
	The user fill attendance information
	User can view entered details
	Users provide attendance related update information.
	User can view updated details
	User can retrieve attendance list as printed document
Postcondition	N/A

Student Requirements

The student should be able to update contact details and profile picture of their profile. (as preferences)

> ➢ The student should be able to see attendance details.
> ➢ The student should be able to see his /her grades, CGPA and SGPA.
> ➢ The student should be able to see timetables.
> ➢ Student should be able to change course view priority as needed.
> ➢ The student should be able upload assignments.

Use case name	Update Profile
Use case ID	UC-001
Actor	student
Precondition	Before the user updates the profile, user should login first.
User action	The user opens the **Profile** page. (Preferences)
	The user change details and then click Change Profile.
Postcondition	User logs into the system and performs other tasks.

Use case name	View CA & Final marks, Attendance, CGPA & GPA,
Use case ID	UC-002
Actor	student
Precondition	Before view CA & Final marks, Attendance, SGPA & GPA user should login first.
User action	User can view CA & Final marks, User can view Attendance, and User can view SGPA & GPA.
Post condition	User logs into the system and performs other tasks.

Use case name	Change course view priority as needed and able to upload assignments.
Use case ID	UC-003
Actor	Student
Precondition	Before change course view priority and upload assignments user should login first.
User action	User can change course view User can upload assignment.
Post condition	User logs into the system and performs other tasks.

Dean's Requirements

 ➢ Dean should be able to reset his passwords and manage their profile information.
 ➢ Dean also have privileges to view notices and timetables, view CA and final Exam Marks, view user profiles details and staff attendance in this system.

Use case name	Update profile
Use case ID	UC-001
Actors	Dean
Precondition	Before user update the profile, user should login first.
User action	Reset password User can view entered details User can update phone numbers. User can update e-mails. User can view updated details.
Post condition	N/A

Use case name	View notices and timetables, View CA and Final Marks, View User Profile Details and staff attendance.
Use case ID	UC-002
Actors	Dean
Precondition	Before user login to the system user must enter the username and the password.
User action	User can view notices and time tables. User can view CA and Final marks. User can view profile details. User can view staff attendance.
Post condition	N/A