

# **RICHFIELD GRADUATE INSTITUTE OF TECHNOLOGY (PTY) LTD**

**FACULTY OF INFORMATION TECHNOLOGY**

**PROGRAMMING 512**

**2<sup>ND</sup> SEMESTER ASSIGNMENT**

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Qualification: DIT 3 year Semester: 2 Module Name: Programming 512

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ASSESSMENT CRITERIA	MARK ALLOCATION	EXAMINER MARKS	MODERATOR MARKS
<b>MARKS FOR CONTENT</b>			
<b>QUESTION ONE</b>	<b>100</b>		
<b>TOTAL MARKS</b>	<b>100</b>		
<b>MARKS FOR TECHNICAL ASPECTS</b>			
<b>1. TABLE OF CONTENTS</b>			
<b>2. LAYOUT AND SPELLING</b>			
<b>3. REFERENCE</b>			
<b>TOTAL MARKS</b>			
<b>TOTAL MARKS FOR ASSIGNMENT</b>	<b>100</b>		
<b>Examiner's Comments:</b>			
<b>Moderator's Comments:</b>			
<b>Signature of Examiner:</b>		<b>Signature of Moderator:</b>	

## QUESTIONS

[100 MARKS]

### QUESTION ONE

[100 MARKS]

Objectives: Develop an Institution management system (based on VB.NET platform) linked with Microsoft Access Database as infrastructural support. The primary purpose of this application is to automate students, modules, staff's information and other data resources.

#### The system Functionality

1.1 Create the following database for the following list and add functions to each one of them (40)

- Student Management
  - Adding New Student
  - Edit the Existing Students Details
  - Listing of all Students
- Fees Management
  - Adding fees of the students
  - Listing of all fees paid by students
  - Editing the student fees details
- Employee/Faculty
  - Adding new Employee/Faculty
  - Edit the Employee/Faculty Details
  - Listing of all Faculties/Employees
- Manage Salary
  - Add salary of the Employee/faculties
  - Edit the salary details
  - Listing of all salary paid to employee/faculties
- Manage Courses
  - Adding new courses of college
  - Listing of all courses
  - Editing the details of courses
- Manage System Users
  - Add new System User
  - Listing of Users
  - View Details of Users

1.2 Create login system for admin and users (20)

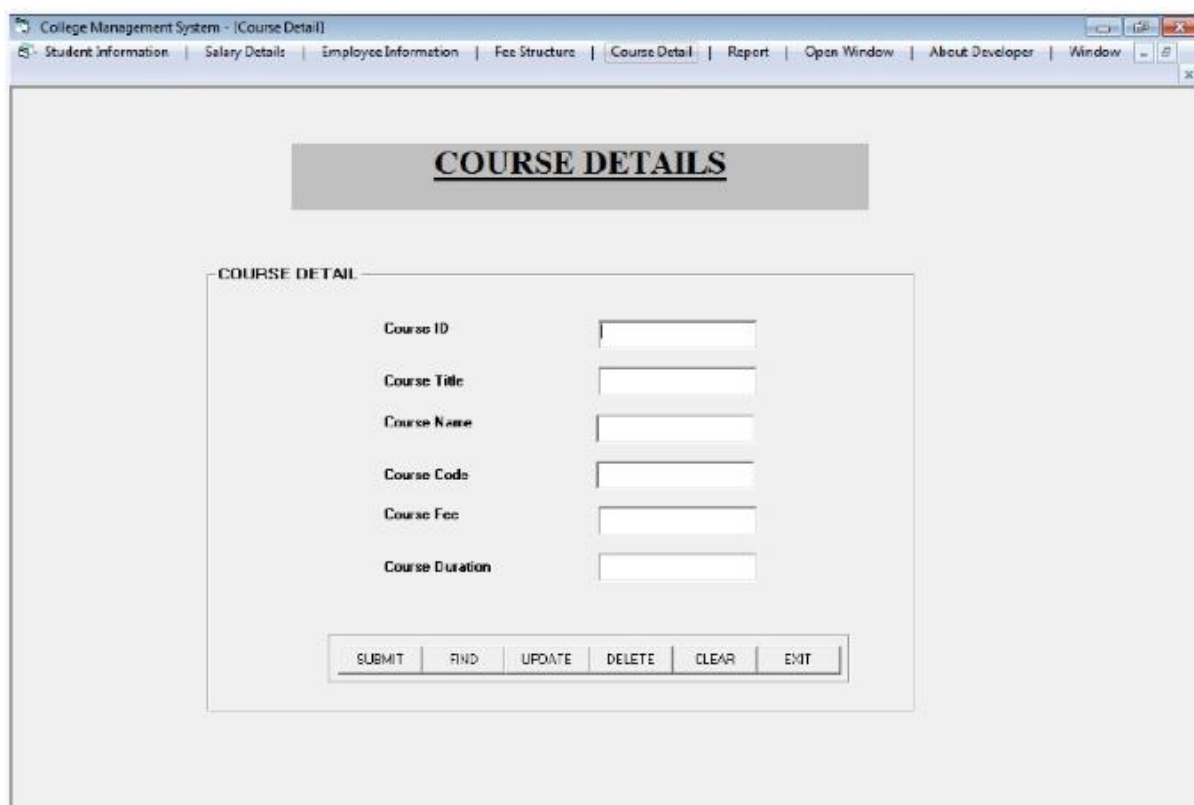
- Login For Admin
- Change Password for Admin
- Edit Profile For Admin

1.3 Connect the database to the project (20)



The login form for the RGIT AUTOMATION SYSTEM. It features a title bar at the top with the text "RGIT AUTOMATION SYSTEM" in a bold, black, serif font. Below the title bar, on the left, is a 3D illustration of a white humanoid figure holding a large red padlock and a set of keys. To the right of the illustration is a login section with two text input fields labeled "Username" and "Password". Below these fields are two buttons: "OK" and "Cancel". The entire form is enclosed in a red border.

Figure 1.1: Login



A screenshot of a web application window titled "College Management System - [Course Detail]". The window has a menu bar with the following items: "Student Information", "Salary Details", "Employee Information", "Fee Structure", "Course Detail", "Report", "Open Window", "About Developer", and "Window". The main content area has a header "COURSE DETAILS" in a bold, black, serif font. Below the header is a form titled "COURSE DETAIL" with the following fields: "Course ID", "Course Title", "Course Name", "Course Code", "Course Fee", and "Course Duration". Each field has a corresponding text input box. At the bottom of the form are six buttons: "SUBMIT", "FIND", "UPDATE", "DELETE", "CLEAR", and "EXIT".

Figure 1.2: Course login

Student Information | Salary Details | **Employee Information** | Fee Structure | Course Detail | Report | Open Window | About Developer | Window

## EMPLOYEE INFORMATION

Employee ID

**Personal Details**

Employee Title

Employee First Name

Employee Last Name

Date of Birth

**Address Details**

Permanent Address

Local Address

**Contact Details**

Mobile Number

Phone Number

Email Id

**Official Information**

Employee Designation

Employee Type

Salary

**Figure 1.3: Employee Information**

Student Information | Salary Details | Employee Information | **Fee Structure** | Course Detail | Report | Open Window | About Developer | Window

## FEES INFORMATION

**FEE STRUCTURE**

Fees Id

Student ID

Payment Type

Fees Date

Fees Month

Fees Year

Fees Amount

**Figure 1.4: Fees Information**

Student Information | **Salary Details** | Employee Information | Fee Structure | Course Detail | Report | Open Window | About Developer | Window

## SALARY INFORMATION

DATE: 5 / 1 / 2009

SALARY ID:

EMPLOYEE ID:

AMOUNT:

MONTH:

IS PAID:

DUE AMOUNT:

Account No	Employee...	Amount	Sal is paid	Month	Year	D_Amount
12	Combo1	1000	Yes	April		1233

Figure 1.5: Salary Information

Student Information | **Salary Details** | Employee Information | Fee Structure | Course Detail | Report | Open Window | About Developer | Window

## STUDENT INFORMATION

Student ID:

**Personal Details**

First Name:

Middle Name:

Last Name:

Date of Birth:

**Address Details**

Local Address:

Permanent Address:

**Contact Details**

Mother Name:

Father's Name:

Blood Group:

**Official Information**

Gender:

Category:

Email Id:

Contact Number:

Figure 1.6: Student Information



Figure 1.7: Loading form

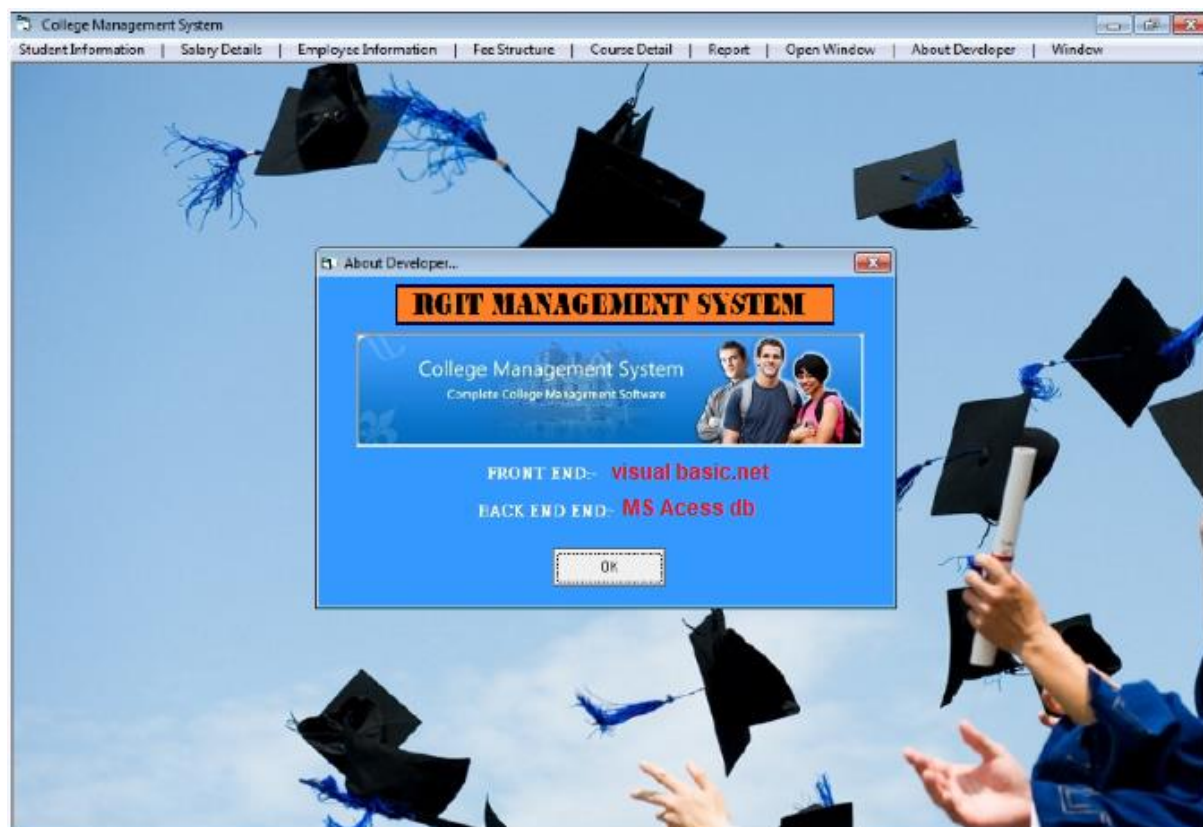


Figure 1.8: About the Developer

#### **Features of Student Module:**

- Admin can add new student
- Admin can see the list of student details
- Only admin can edit and update the record of the student
- Admin will be able to delete the records of the student
- Student will be able to see his details
- Student will be able to update his details

#### **Features of Employee Module:**

- Admin can manage the employee
- Admin can edit/delete the employee
- Admin can see the list of all employee
- Student can see employee

#### **Features of Fees Module:**

- Admin can manage the fees
- Admin can edit/delete the fees
- Admin can see the list of all fees
- Student can see fees

#### **Features of Course Module:**

- Admin can manage the course
- Admin can edit/delete the course
- Admin can see the list of all course
- Student can see course

*Implications:* The RGI Linked Database will be used in combination with medical record audits to provide a comprehensive evaluation of health system performance.

#### *Security measures*

- Put identification, authentication and authorization measures in place.
- Ensure that only authorized personnel can have access to the system.
- Be mindful of how student data is secured and implement a good accuracy.

**TOTAL: 100 MARKS**