A project report

On

**STUDENT INFORMATION SYSTEM**

Submitted in partial fulfillment of the requirement of

Project-(BIT178CO)

Of

Bachelor of Information Technology

**Submitted to**

****

Purbanchal University

Biratnagar, Nepal

**Submitted By**

BIMISH KUMAR DRAVID (314754)

MILAN MANANDHAR (314759)

RAMAN KOJU (314763)

**KANTIPUR CITY COLLEGE**

Putalisadak, Kathmandu

May 12, 2018

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BIMISH KUMAR DRAVID (314754)

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**Project Supervisor**

**PRAKASH GAUTAM**

LECTURER

**KANTIPUR CITY COLLEGE**

Putalisadak, Kathmandu

## TOPIC APPROVAL SHEET

It is here by informed that the topic selected by Bimish Kumar Dravid, Milan Manandhar and Raman Koju of BIT 1st semester for their semester project has been found suitable and as per the credit assigned by Purbanchal University (PU), Biratnagar, Nepal.

The Project Committee has approved the following topic and supervisor for the above mentioned students.

Topic Approved: STUDENT INFORMATION SYSTEM

\_ \_ \_ \_ \_ \_ \_ \_

**Prakash Gautam**

**Lecturer**

\_ \_ \_ \_ \_ \_ \_ \_

**Saroj Pandey**

**Asst. Professor**

**D. HoD, Department of IT**

## CERTIFICATE FROM THE SUPERVISOR

This is to certify that the project entitled **“Student Information System”** submitted by Bimish Kumar Dravid, Milan Manandhar and Raman Koju to the Department of Information Technology, School of Science and Technology at Kantipur City College, Kathmandu, Nepal towards the requirement for **BIT178CO: Project-I** of is an original work carried out by them under my supervision and guidance.

Signature:

**Prakash Gautam, Asst. Professor, IT**

Department of Information Technology

Kantipur City College

(Project Supervisor)

**Place**: Kantipur City College, Putalisadak, Kathmandu.

**Date**: \_ \_ \_ \_ \_ \_

##### Acknowledgement

We would like to express our deepest appreciation to our all the faculty members, providing their valuable time and guidance in elaborating view of studying the project details and getting the right vision for its implementation.

We would like to thank our supervisor, Prakash Gautam for supervising, motivating and being co-operative throughout this project work. Without his guidance and persistent help this project would not have been possible. We are grateful to our lecturer Bikash Neupane for his motivation towards our project.

We also want to thank Mr. Saroj Pandey, our HOD and the other entire faculty member who are directly and indirectly involved with our project. We are also pleased with the support and co-operation of the lab in charge in order to make use of free lab slots.

##### Abstract

This project manages the students’ details within a small school in a systematic manner. It mainly focuses on basic operations such as adding new record, modifying and deleting records. It helps to keep the records safely and saves time. This program is easy to understand to the users very effective

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# Introduction

## 1.1 Background

This project keeps the track of name, id, faculty, address and gender of the students in a systematic manner. In this project, record of students can be added, listed, modified and deleted.

## 1.2 Significance

* It helps to reduce the complexity of student information.
* It can easily be handled by the person who has elementary knowledge.

## 1.3 Objectives

* To keep the records of name, id, faculty, address and gender of students systematically.
* To help save time.
* To enhance the concept of c programming.

## 1.4 Features

* Keeping records of students.
* Password protected.
* Data can only be accessed by authorized staff.

## 1.5 Organization of project

|  |  |
| --- | --- |
| **Chapters** | **Heading** |
| Chapter 1 | Introduction |
| Chapter 2 | Project Specification |
| Chapter 3 | Software design and development |
| Chapter 4 | Testing |
| Chapter 5 | Conclusion |

## Project Specification

## 2.1Tools and Technologies

### 2.1.1Frontend

Frontend of the project is designed in turbo c compiler. The coding is stored in .c file extension.

## 2.2Minimum Software Requirements

Operating System : Windows OS

Developing software : Turbo C++

Language used : C

//Library : Graphics

## 2.3Hardware Requirements

Processor : Pentium type.

Memory : 256 MB RAM.

Monitor : 15 inch Color Monitor.

Keyboard : 105 Keys.

## 

## 2.4Team Structure

|  |  |  |
| --- | --- | --- |
| **Team Members** | **Symbol no.** | **Task Done** |
| **Bimish Kumar Dravid** | **312454** | Documentation and Coding |
| **Milan Manandhar** | **314759** | Documentation and Coding |
| **Raman Koju** | **314763** | Documentation and Coding |

## 2.5 Implementation Plan 2.3.1 Library Function

|  |  |  |
| --- | --- | --- |
| **S.N.** | **Name of Library function** | **Description** |
| 1. | stdio.h | To input output functions like printf, scanf, etc. |
| 2. | stdlib.h | To allocate and free memory |
| 3. | conio.h | Console input output which includes built in function |
| 4. | dos.h | Functions for handling interrupts, producing sound, date and time function etc. |
| 5. | string.h | For string operations |

### 

## 2.6 User-defined Function

|  |  |  |
| --- | --- | --- |
| **S.N.** | **Name of User-defined function** | **Description** |
| 1. | Add | To add student ID |
| 2. | List | To list employee records |
| 3. | Search | To search employee records |
| 4. | Delete | To delete unnecessary records |
| 5. | Main Page | To go menu |
| 6. | About | To know about us |

## 2.7Data Structure

|  |  |
| --- | --- |
| **Structure Name** | **Data Types** |
| Stu | char, int, float |

## 2.8File Structure

Adding, listing, modifying and deleting the record of student is included in "data.txt" file.

# Software Design and Development

## 3.1 Algorithm

Step 1: Start

Step 2: Display program menu

Step 3: Enter the option

3.1 if option == 1  
3.1.1 Enter to Add Record

3.1.2 if (ID! ==Get.ID)  
Print ID exits

Else

Print record successfully added  
Print add new records? (y/n)

3.1.3 while (ch==y/ch==n)

Go to step 3.1.1

Else

Go to step 2

3.2 if option == 2

3.2.1 Enter tolistrecord

3.2.2 if (ID == Get.ID)

Record found

Else

No response

3.2.3 while (ch == y ch==n)

Go to step 3.2.1

Else

Go to step 2

3.3 if option == 3

3.3.1 Enter ID to search records

3.3.2 if(ID == Get.ID)

Display records

Else

No response

3.3.3 while (ch == y)

Go to step 3.3.1

Else

Go to step 2

3.4 if option == 4

3.4.1 Enter ID to modify records

3.4.2 if(ID == Get.ID)

Record found

Else

No response

3.4.3 while (ch == y)

Go to step 3.4.1

Else

Go to step 2

3.5 if option == 5

3.5.1 Enter ID to delete records

3.5.2 if(ID == Get.ID)

Record found

Else

No response

3.5.3 while (ch == y)

Go to step 3.5.1

Else

Go to step 2

3.6 if option == 6

3.6.1 Enter ID to viewabout us

3.6.2 if(ID == Get.ID)

View about us

Go to step 2

3.7 if option == 7

3.7.1 Enter ID to exit records

3.7.2 if(ID == Get.ID)

Exit program

Step 4: Stop.

## 3.3 Flowchart

False

if( option ==2)

if( option ==1)

Enter your choice

Display Menu

Start

1

2

if( option ==3)

3

a

if( option ==4)

a

4

if( option ==5)

5

if( option ==7)

7

if( option ==6)

6

m

Invalid input Try again

m

if(ch == y || ch == n )

Do you like to add more record?

Record Added

Enter employee details

1

2

Dipsplay Employee Record

m

Enter Any Key to go menu

if( ID == Get ID)

Enter employee ID to search

3

Display Employee Record

True

Do you like to search again?

if ( ch == y )

m

Enter employee ID to modify

True

4

if( ID == Get ID)

Enter new employee details

Employee ID is not found

if ( ch == y )

Do you like to search again?

m

Employee ID is successfully deleted

if( ID == Get ID)

Employee ID is not found

if ( ch == y )

Do you like to search again?

m

Enter employee ID to delete

5

6

Display Employee Record

m

Enter Any Key to go menu

Stop

Exiting in 5 seconds

7

## 3.4 Gantt Chart

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.N. | Tasks | Duration | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. | Concept Submission | 1 week |  |  |  |  |  |  |  |  |
| 2. | Requirement gathering | 2 weeks |  |  |  |  |  |  |  |  |
| 3. | Research and Analysis | 2 weeks |  |  |  |  |  |  |  |  |
| 4. | System Design | 2 weeks |  |  |  |  |  |  |  |  |
| 5. | Coding | 4 weeks |  |  |  |  |  |  |  |  |
| 6. | Debugging & Testing | 1 week |  |  |  |  |  |  |  |  |
| 7. | Documentation | 2 weeks |  |  |  |  |  |  |  |  |

|  |  |
| --- | --- |
| **Tasks Completed** |  |

**Total Time:** 8 weeks

# Testing

|  |  |  |  |
| --- | --- | --- | --- |
| **Input** | **Expected Output** | **Actual Output** | **Status** |
| To Add Student Record | Name, Id, Address, Sex | Added | True |
| To List Student Record | Name, Id, Address, Sex, etc. | Listed | True |
| To Search Student Record | Search by Name | Successfully search the record by using Students’ name | True |
| To Delete Student Record | Deleted details | Deleted | True |
| To know about developer | Bimish Kumar Dravid  Milan Manandhar  Raman Koju | Bimish Kumar Dravid  Milan Manandhar  Raman Koju | True |
| Exit | Exits program | Exit | True |

# Conclusion

We gained great experience in designing and implementing the Student Information System by using C programming language and to work on its documentation. From this project, we learned many new things.

This project helped us in getting the basic understanding of basic programming concepts of C language such as function, loop, structure, arrays, file etc.

We have used almost every concepts of C language as possible as we had learned. After completing this project, we are hence in position to explain C language concepts and apply them to the modeling real world system.

##### References

* E. Balagurusamy “Programming in ANSI C”, Tata Mc Graw-Hill Publishing.
* Ram Datta Bhatta “C Programming”, VidyarthiPrakashan (P.) Ltd.