



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

STUDENT ADMISSION PORTAL

A Mini Project Report

Submitted By

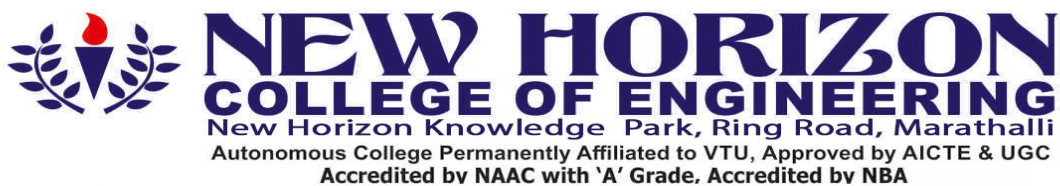
PAVAN KULKARNI

IN PARTIAL FULFILMENT OF THE AWARD OF

BACHELOR IN ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the mini project work titled

STUDENT ADMISSION PORTAL

Submitted in partial fulfillment of the degree of Bachelor of Engineering

To

PAVAN KULKARNI | 1NH19CS409

During Even semester 2019 – 2020

For 19CSE48

SIGNATURE OF REVIEWER

SIGNATURE OF HOD

SEMESTER END EXAMINATION

Name of examiner

Signature with date

PLAGARISM REPORT

STUDENT ADMISSION PORTAL

ORIGINALITY REPORT

6%	%	6%	%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Vaskaran Sarcar. "Interactive Object-Oriented Programming in Java", Springer Science and Business Media LLC, 2020 Publication	3%
2	Vaskaran Sarcar. "Interactive Object Oriented Programming in Java", Springer Science and Business Media LLC, 2016 Publication	1%
3	"Beginning Java Objects", Springer Science and Business Media LLC, 2005 Publication	1%
4	Tony Jenkins, Graham Hardman. "How to Program Using Java", Springer Science and Business Media LLC, 2004 Publication	1%
5	Kann, . "Exceptions in Java", Creating Components Object Oriented Concurrent and Distributed Computing in Java, 2003. Publication	<1%
6	S G Ganesh, Tushar Sharma. "Oracle Certified Professional Java SE 7 Programmer Exams 1Z0-804 and 1Z0-805", Springer Science and Business Media LLC, 2013 Publication	<1%
7	Roger T. Alexander. "Distributing classes with woven concerns", Proceedings of the 4th international conference on Aspect-oriented	<1%

ABSTRACT

Every year, students in thousands queue up for collecting admission / application Forms and then again for submitting the admission / application forms. This leads to Problems in managing the applications, resulting in annoyed parents and students alike. Institute incurs expenditure on printing of admission forms, and in absence of any reliable Forecasting system on how much application it is going to receive it may overspend by Printing excessive application forms or may fall in crisis if there is excess demand of application forms. Chances of form misplacement are very high, because of huge number of Applications. Wastage of institute's resources due to involvement of people / teachers in Form collection.

The goal of Online Admission System is to computerize the admission management System structure, its related operation, and functionality to rectify these weaknesses. Also, The purpose is to provide support to the administration and admission seeking candidates By providing a faster, transparent, and easy way of maintaining records and utilize them for Reference and further proceedings.

Student online admission starts with tab 'Apply Now'. Student collects all required Information and document, check all the check boxes, and proceed for next step. Read the Notes given on next screen. Enter the details in the respective fields and confirm the Details. On confirmation, it generates applicant number. The credentials will be sent on Registered email address.

ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be impossible without the mention of the people who made it possible, whose constant guidance and encouragement crowned our efforts with success.

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CHAPTER 1

INTRODUCTION

A. STUDENT ADMISSION PORTAL

The goal of Online Admission System is to computerize the admission management system structure, its related operation, and functionality to rectify these weaknesses. Also, the purpose is to provide support to the administration and admission seeking candidates by providing a faster, transparent, and easy way of maintaining records and utilize them for reference and further proceedings.

Student online admission starts with tab 'Apply Now'. Student collects all required information and document, check all the check boxes, and proceed for next step. Read the notes given on next screen. Enter the details in the respective fields and confirm the details. On confirmation, it generates applicant number. The credentials will be sent on registered email address.

B. PROBLEM STATEMENT

Every year, students in thousands queue up for collecting admission / application forms and then again for submitting the admission / application forms. This leads to problems in managing the applications, resulting in annoyed parents and students alike.

Institute incurs expenditure on printing of admission forms, and in absence of any reliable forecasting system on how much application it is going to receive it may overspend by printing excessive application forms or may fall in crisis if there is excess demand of application forms.

Chances of form misplacement are very high, because of huge number of applications.

Wastage of institute's resources due to involvement of people / teachers in form collection.

C. EXPECTED OUTCOMES

Software is computer-based and can record plenty of data. We can search, forecast, record any achieved task, etc. within no time. This system helps the student as well as the administrative department of an organization for planning and execution of a task in a methodical manner. They can plan at what time they can undertake the college list, student details display, result, update etc in the organization.

D. REQUIREMENTS

HARDWARE REQUIREMENTS

- Processor: Intel core i3 or above
- RAM: 2GB or more

SOFTWARE REQUIREMENTS

- Operating system: Windows 7/8/10
- Language: java
- Compiler: javac, eclipse

CHAPTER 2

OBJECT-ORIENTED PROGRAM

A. CLASS

A class is like a blueprint or a template for creating objects in java. It defines the state or behavior of the object created. A class can have any number of variables and methods of various types to access to different values.

Each class has a constructor, it can be of type default or parameterized. These constructors are used to initialize objects with default values. A class can also inherit characteristics from other classes.

A class declaration can include these in order:

Access Modifier -> Class name -> Superclass -> Interface ->

Body There are various types of classes such as:

- Nested class
- Anonymous class □

Lambda

expressions **Syntax:**

class Classname

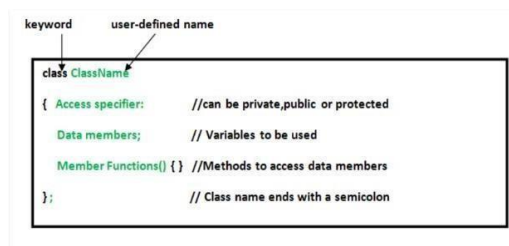


Fig 2.1 (a) Class example

Cars	
<i>data:</i>	
1. name	
2. model	
3. company	
4. date_of_manufacture	
5. engine	
<i>functions:</i>	
1. turn_engine()	
2. brake()	
3. accelerate()	
4. clutch()	
5. change_gears()	
6. blow_horn()	

Fig 2.1 (b) Members of a class

B. OBJECT

An object is a self-contained entity that has a state, behavior and identity.

Object allocates memory for the template class. It defines the behavior of the class. It is a specimen or instance of class used to invoke or execute any of the methods or features of the class for which object is created.

An object contains physical as well as logical entity whereas a class does not. Memory or storage allocation takes place for a class when object is created. The methods and the variables of a class are accessed using objects.

Syntax:

```
Classname objectname;
```

```
Classname reference_variable=new Classname();
```

Objects: Real World Examples

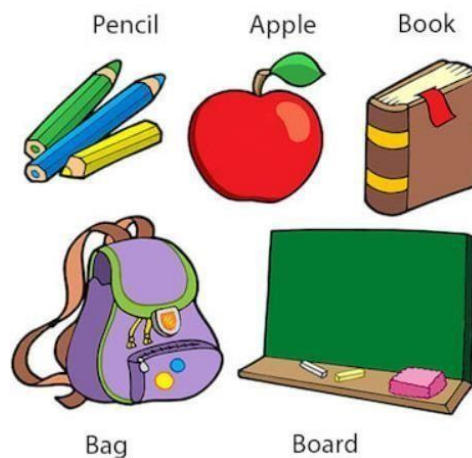


Fig 2.2 (a) Objects example 1

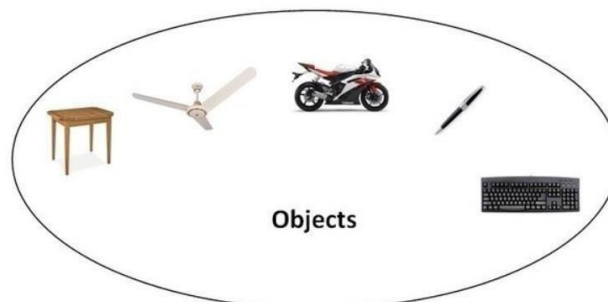


Fig 2.2 (b) Objects example 2

C. INHERITANCE

Inheritance is an oops concept in java that allows us to define a class from an existing class. The keyword 'extends' is used for inheritance.

- Superclass: The parent/base class from which attributes, methods are inherited.
- Subclass: The child/derived class which inherits attributes, methods.

1. SINGLE INHERITANCE

Single inheritance is when a class inherits properties from one class only. All the attributes except private members are inherited or extended by child class from parent class. class A

```
{  
}
```

```
class B extends A
```

```
{  
}
```

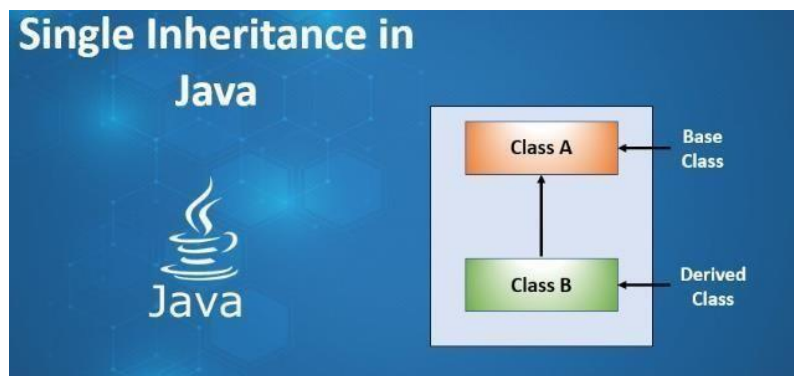


Fig 2.3 (a) Single Inheritance block diagram

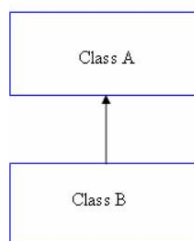


Fig 2.3 (b) Single inheritance

2. MULTILEVEL INHERITANCE

Multilevel inheritance is when a class inherits properties from derived class. This derived class becomes the parent for the new child class. It allows accessing of grandparent class attributes by the child class also.

class A

```
{  
}
```

class B extends A

```
{  
}
```

class C extends B

```
{  
}
```

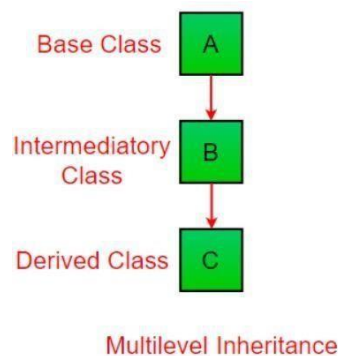


Fig 2.3 (c) Multilevel inheritance block diagram

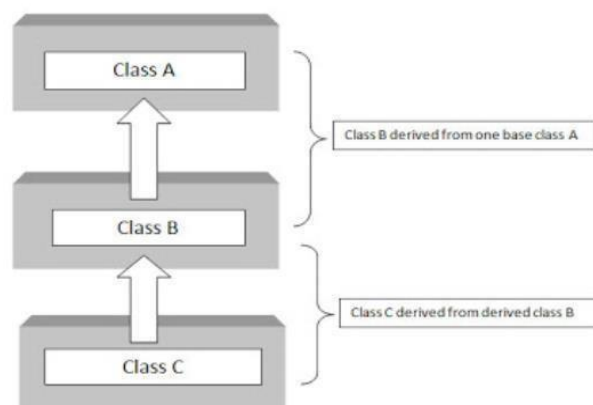


Fig 2.3 (d) Multilevel inheritance diagram and features

3. HIERARCHICAL INHERITANCE

Hierarchical inheritance is when a class is inherited two or more classes. In this type of inheritance all of the super class's sub classes inherit same attributes of the parent class.

class A

```
{
}
```

class B extends A

```
{
}
```

class C extends A

```
{
}
```

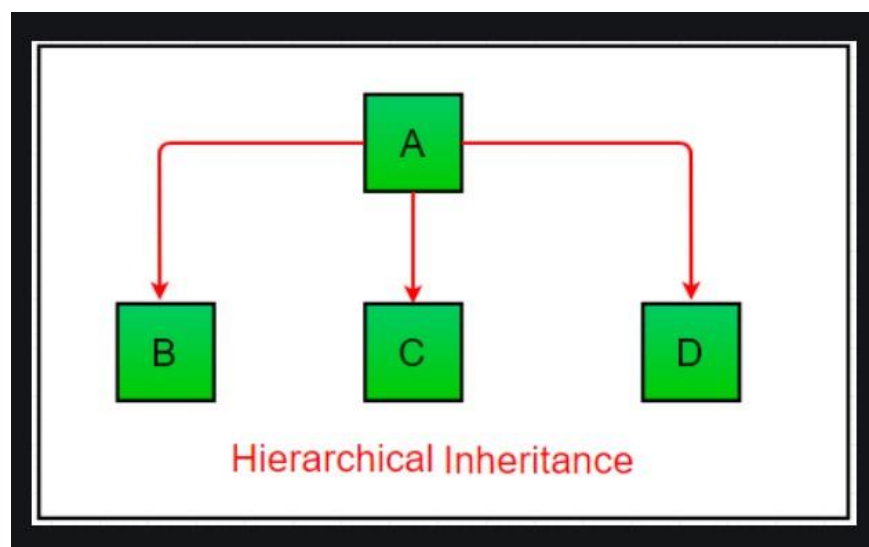


Fig 2.3 (e) Hierarchical inheritance

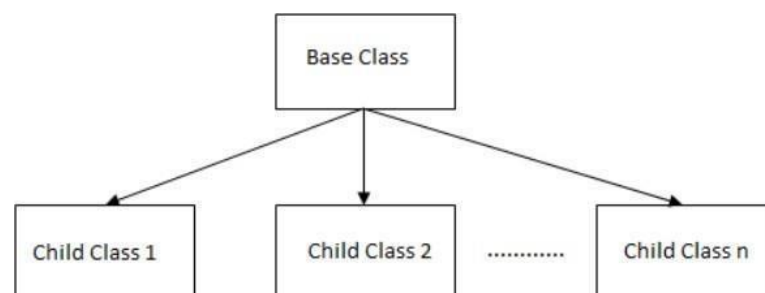


Fig 2.3 (f) Hierarchical inheritance block diagram

D. POLYMORPHISM

Polymorphism is a very important concept in object-oriented programming. It means that the same object, method or operator acts differently in different cases. Types of polymorphism are:

- Run-time polymorphism
- Compile-time polymorphism

Run-time polymorphism is done using method overriding.

Method Overriding: It means that different methods have same syntax and return

```
type. class A{  
  
}  
  
class B extends  
  
A{ public void  
  
display(){  
  
System.out.println("Method1");  
  
}} class C extends A{ public  
  
void display(){  
  
System.out.println("Method2"); }}
```

Compile-time polymorphism is done through method overloading and operator overloading.

Method Overloading: It means that different methods with same name differ in number, type or sequence of arguments passed in them.

```
class A{  
  
public void display(int a){  
  
System.out.println(a);  
  
}} class B{
```

```

public void display(String

s){ System.out.println(s);

}} class C{
public void display(int x, int y){

System.out.println(x+" "+y); }}

```

Operator overloading: '+' operator is used for concatenation as well as addition operator.

```
System.out.println(m+"ways");
```

```
System.out.println(a+b);
```

Final methods: final methods are those methods which cannot be modified by any other class and hence data is protected. The keyword "final" is used as a prefix to the name of the method, example, final visual(){ }

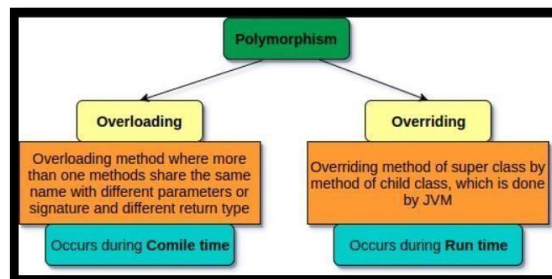


Fig 2.4 (a) Polymorphism types explanation

E. I/O FUNCTIONS IN JAVA

I/O functions in java are used to process the input and give output. It uses concept of Streams to operations fast. We can also perform file handling in java using these streams.

- System.out

- System.in
- System.err
- OutputStream □ InputStream Example:

```
Scanner s=new
```

```
Scanner(System.in);
```

```
System.out.println("Hello");
```

```
System.err(0);
```

F. PACKAGES IN JAVA

Packages in java is to encapsulate a group of classes, sub-packages and interfaces. It prevents naming conflicts and also provides controlled access and are known as data encapsulation.

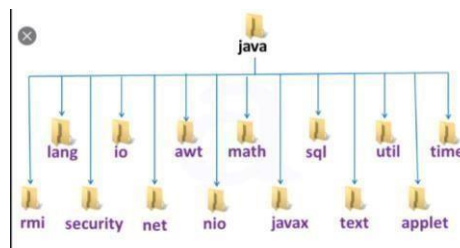


Fig 2.6 (a) Packages example

G. EXCEPTION HANDLING

An exception is the error that occurs during the successful execution of a program. These errors need to be handled and this process is known as exception handling. There are two types of exceptions: checked and unchecked.

Checked exception: These are the exceptions that arrive at the time of compilation, checked by compiler and needs to be handled by the user.

Unchecked exception: These are the errors that occur during execution process and are ignored by compiler because they occur due to logical errors, programming bugs or improper uses of APIs. These errors are known as runtime exceptions.

All the exceptions in java are a subclass of java.lang.Exception class.

Different parts in Exception handling are try, catch, throw, throws, throwable and finally. Every try block should have a catch or multiple catch statements. Finally is used to execute any statement that needs to be executed after catching exception and throw, throws and throwable are for throwing the error occurred.

Example:

```
try{  
    //protected code  
}  
catch(ExceptonType e){  
    //Exception caught  
}
```

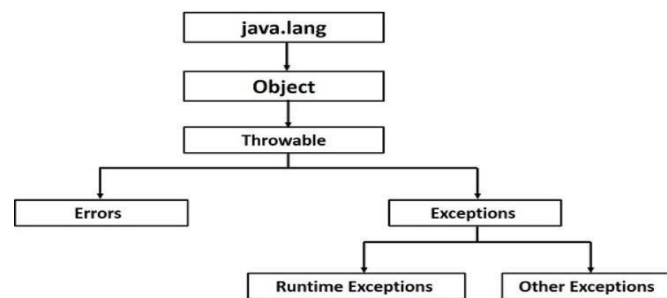


Fig 2.7 (a) Exception handling hierarchy

CHAPTER 3

DESIGN

A. ALGORITHM

Step 1: START

Step 2: Admin portal

Step 3: If credentials are valid: -

- 1.1 Search
- 1.2 Update
- 1.3 display student details

Step 4: STUDENT PORTAL

- 4.1 Register
 - 4.1.1 Enter Personal details
- 4.2 If Login.
 - 4.2.1 Display Personal Details
 - 4.2.2 Pay Fees
 - 4.2.3 Check admission Status
 - 4.2.4 Update Personal Details

STEP 5: STOP

CHAPTER 4

IMPLEMENTATION

PARTIAL CODE

A. ADMIN LOGIN

```
public void run()
{
    try
    {
        admin=new AdminInfo();
        AdminLogin frame = new AdminLogin(); frame.setVisible(true);

    }catch (Exception e)
    {
        e.printStackTrace();
    }
}
;
```

B. MODULE 2

```
btnPutChoice.addActionListener(new ActionListener())
{ public void actionPerformed(ActionEvent e2) {
try { output.reset();
    }
catch (SocketException e1)
{
    JOptionPane.showMessageDialog(null,"Server Down");
return;
}
```

```

        catch (IOException e) {

            e.printStackTrace();
        }

        if(textPane.getText().isEmpty())
    {
        lblPleaseEnterThe.setVisible(true); Timer t=new {
        Timer(2000,new

        ActionListener()

        actionPerformed(ActionEvent e)

        lblPleaseEnterThe.setVisible(false);

        }

        });
        t.start(); return;

    }

    text1=textpane.getText();

    p1.Setvisivle(true);      textPane.setText(null);
    textPane.SetVisible(false);
    btnPutChoice.setvisible(false);

    lblCollegeNae.setVisible(false);

    } };; add (btnPutchoice);
    if(!flag) { p1.setVisible(true);
    textPane.setVisible(false);
    btnPutChoice.setVisible(false);

    }}

```

A. MODULE 3

```
public void student_list()
{
    int rows = model.getRowCount(); for(int i
    = rows - 1; i >=0; i--)
    {
        model.removeRow(i);
    }
    Iterator<StudentInfo> i=ServerCollection.students.iterator(); while(i.hasNext())
    {
        student=i.next();
        model.addRow(new
Object[]{student.ID,student.name,student.address,student.mob,student.do
b,student.marks,student.result});
    }
}
```

B. MODULE 4

```
public void run()
{
    try
    {
        Student=new StudentInfo();
        StudentLogin frame = new StudentLogin(); frame.setVisible(true);
    }catch (Exception e)
    {
        e.printStackTrace();
    }
}
});
}
/**
```

C. MODULE 5

```

public void run()
{
    try
    {
        studentregistration=new StudentregistrationInfo();
        StudentregistrationLogin frame = new StudentregistrationLogin();
        frame.setVisible(true);
    }catch (Exception e)
    {
        e.printStackTrace();
    }
}
});
}
.

```

D. MODULE 6

```

public void run()
{
    try
    {
        checkresult=new CheckResultInfo(); Checkresult frame =
        new Checkresult(); frame.setVisible(true);
    }catch (Exception e)
    {
        e.printStackTrace();
    }
}
});
}

/**
 * Create the frame.

```

CHAPTER 5

RESULT

ADMIN LOGIN SYSTEM

Admin Login

- X

Username

Password

Login

ADMIN DASHBOARD

Admin Dashboard

Search

Update

Delete

FirstName	LastName	Email-id	Dept	EngYear	UID	AdmissionYear	PhoneNo
Pavan	Kulkarni	pavan@gmail.c...	CS	FE	1	2019	1234567890
Nitish	Naik	Nitish@gmail.c...	CS	FE	2	2019	9876543210
Kumar	K	Kumar@123	CS	FE	3	2019	123456789

STUDENT LOGIN

Student Login

Username


Password

Login

Register

STUDENT PROFILE

Welcome Bob!
- X

Profile	Fee Report	Update Details
	First Name : Bob Last Name : Adu Email-ID : bob@gmail.com Department : CS Admission Year : 1998 Engineering Year : FE Unique ID : 1111 Phone Number : 1234567890	Admission Status : Admitted!

FEE REPORT

Welcome Bob!				
Profile		Fee Report		Update Details
		CS	IT	ENTC
01	Admission Fee	Rs. 1,000/-	Rs. 500/-	Rs. 2,000/-
02	Tution Fee	Rs. 6,000/-	Rs. 3,000/-	Rs. 4,000/-
03	University Development Fee	Rs. 2,200/-	Rs. 2,200/-	Rs. 2,200/-
04	Identity Card	Rs. 23/-	Rs. 23/-	Rs. 23/-
05	Admission Form	Rs. 10/-	Rs. 10/-	Rs. 10/-
06	Medical Fee	Rs. 50/-	Rs. 50/-	Rs. 50/-
07	Athletic Fee	Rs. 21/-	Rs. 21/-	Rs. 21/-
08	Institute Fee	Rs. 7/-	Rs. 7/-	Rs. 7/-
09	College Magazine	Rs. 125/-	Rs. 125/-	Rs. 125/-
	TOTAL	Rs. 9436/-	Rs. 5936/-	Rs. 8436/-
Paid				

STUDENT UPDATE

Welcome Bob!

- X

Profile	Fee Report	Update Details
---------	------------	----------------

Enter the details to Update or leave blank.

FirstName

LastName

E-mail ID

Username

Phone No

Password

Update Details

STUDENT REGISTRATION

Register

First Name

Last Name

Username

Password

E-mail ID

Department

☐ CS ☐ IT ☐ ENTC

Admission Year

Phone No

Engineering Year

☐ FE ☐ SE ☐ TE ☐ BE

Unique ID

REGISTER

CHAPTER 6

CONCLUSION

This mini-project will serve the needful purposes required to maintain records in Student admission portal. This helps the officials to maintain details of various Students thus, making it easier to keep a record of all the needful services to be done on them timely. These data can be read and updated anytime. It records the college list, cut off college, display student list, display college list etc.

CHAPTER 7

REFERENCE

Java: The Complete Reference, SE 11, Eleventh Edition, Herbert Schildt (December 2018), McGraw-Hill.

This book explains all the concepts of java in detail, like, data types, variables, arrays, operators, classes, objects, methods, inheritance, interfaces, packages, swing, exception handling, multithreading, I/O classes, networking, servlets, etc. and is a very helpful guide to the students.

[1] www.geeksforgeeks.org

[2] www.javatpoint.com

[3] <https://stackoverflow.com>

[4] <https://codeforwin.org>

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