**Project Code**

**Student info Basis on a Course**

**Department:**

public interface Department {

public void makeSchedule();

public void enrolledStudent();

public void gradeStudent();

}

**Administration:**

public interface Administration {

public void admitFaculty();

public void admitStudent();

public void manageAdministration();

}

**Faculty:**

public class Faculty implements Department {

public String FacultyName = "Mr. Asif";

public String FacultyAddress = "Dhaka";

public void TakeExam(){

System.out.println("Exam will be taken by Faculty");

}

@Override

public void makeSchedule() {

System.out.println("Class are Schedule");

}

@Override

public void enrolledStudent() {

System.out.println("2 student are enrolled by Faculty");

}

@Override

public void gradeStudent() {

System.out.println("Students Grade will be evalulated by Faculty");

}

public void PrintFaculty(){

System.out.println("Faculty Name: "+FacultyName);

System.out.println("Faculty Address: "+FacultyAddress);

enrolledStudent();

gradeStudent();

}

}

**Course:**

public class Course extends Faculty implements Administration,Department{

public String CourseName = "Object Oriented Programming";

public String courseId;

Course(String courseId) {

this.courseId = courseId;

}

public void AttendStudent(){

int total = 3;

System.out.println("Total Student in this Course: "+total);

}

public void QuizExam(){

System.out.println("\*There will be three Quiz Exam");

}

public void TakeExam(){

System.out.println("\*There will be one Mid exam & one Final exam");

}

public void Assgnmnt(){

System.out.println("\*Assignment will be in every class");

}

public void Prstrtn(){

System.out.println("\*Presentation will be taken on Project");

}

public void Labperformed(){

System.out.println("\*Lab Test will be taken. Lab Task must be Submitted");

}

public void Facilities(){

System.out.println("\*Lab Class will be free for enrolled Student");

}

public void admitFaculty(){

System.out.println("Faculty Will be Appointed for the course by Administration");

}

public void admitStudent(){

System.out.println("Student will be cleared accounts by Administration");

}

public void manageAdministration(){

System.out.println("Administration is in Operation");

}

public void PrintCourse(){

System.out.println("Course Name: "+CourseName);

System.out.println("Course Id: "+courseId);

AttendStudent();

admitStudent();

System.out.println("Course Rules: ");

QuizExam();

Assgnmnt();

Prstrtn();

TakeExam();

Labperformed();

Facilities();

admitFaculty();

}

}

**Student:**

public class Student extends Course{

public int id ;

Student(int id, String courseId){

super(courseId);

this.id = id;

}

public void QuizExam(){

System.out.println("You quiz is done. You have passed the quiz.");

}

public void Assgnmnt(){

System.out.println("Assignment is Submitted");

}

public void Prstrtn(){

System.out.println("Presentation is Submitted");

}

public void TakeExam(){

int mid\_mark\_1 = 22, final\_mark\_1 = 32;

int sum\_1 = mid\_mark\_1 + final\_mark\_1;

int mid\_mark\_2 = 20, final\_mark\_2 = 35;

int sum\_2 = mid\_mark\_2 + final\_mark\_2;

int mid\_mark\_3 = 21, final\_mark\_3 = 30;

int sum\_3 = mid\_mark\_3 + final\_mark\_3;

if(id == 1){

System.out.println("Exam is done");

System.out.println("Your written Exam Mark : "+sum\_1+" out of 65");

}

if(id == 2){

System.out.println("Exam is done");

System.out.println("Your written Exam Mark : "+sum\_2+" out of 65");

}

if(id == 3){

System.out.println("Exam is done");

System.out.println("Your written Exam Mark : "+sum\_3+" out of 65");

}

}

public void Labperformed(){

System.out.println("You have submitted your lab task.");

}

}

**Student Details:**

public class StudentDetails extends Student{

StudentDetails(int id, String courseId) {

super(id ,courseId);

getDetails(id);

}

int id\_1 = 1;

String name\_1 = "Rabbi", cgpa\_1 = "3.6";

int id\_2 = 2;

String name\_2 = "Rocco", cgpa\_2 = "3.7";

int id\_3 = 3;

String name\_3 = "Rowby", cgpa\_3 = "3.8";

public void printDetails(String name,int id, String cgpa){

System.out.println("Student Name: "+name);

System.out.println("Student Id: "+id);

System.out.println("Student CGPA: "+cgpa);

}

public void getDetails(int id){

if (id == 1) {

printDetails( name\_1,id\_1, cgpa\_1);

}

else if (id == 2) {

printDetails(name\_2,id\_2, cgpa\_2);

}

else if (id == 3) {

printDetails(name\_3,id\_3, cgpa\_3);

}

}

}

**Main:**

import java.util.\*;

public class Main {

public static void main(String[] args) {

Scanner Sc = new Scanner(System.in);

try{

System.out.print("Enter Student Id: ");

int id = Sc.nextInt();

System.out.print("Enter course Id: ");

String courseId = Sc.next();

if(id == 1 || id == 2 || id == 3){

Student S = new Student(id,courseId);

System.out.println("Student details: ");

StudentDetails Sd =new StudentDetails(id,courseId);

Course C = new Course(courseId);

System.out.println("Course Details: ");

C.PrintCourse();

Faculty F = new Faculty();

System.out.println("Faculty Details: ");

F.PrintFaculty();

try{

int exit = 0;

do {

System.out.println("which section You want to Enter ? ");

System.out.println("1:Quiz \t2:Assignment \t3:Main Exam \n4:Presentation \t5:Lab Work \t6:Result \t7:Exit");

int want = Sc.nextInt();

if(want == 1){

System.out.println("Do you want to attend the Quiz ? Enter (y/n)");

String Quizresponse = Sc.next();

if(Quizresponse.equals("y"))

S.QuizExam();

else if(Quizresponse.equals("n"))

System.out.println("You Skipped the Quiz.");

else

System.out.println("Wrong Input.");

}

else if(want == 2){

System.out.println("Do You want to submit the Assignment ? Enter (y/n)");

String Assgnmntresponse = Sc.next();

if(Assgnmntresponse.equals("y"))

S.Assgnmnt();

else if(Assgnmntresponse.equals("n"))

System.out.println("You Skipped the Assignment.");

else

System.out.println("Wrong Input.");

}

else if(want == 3){

System.out.println("Do you want to attend the Exam ? Enter (y/n)");

String examresponse = Sc.next();

if(examresponse.equals("y"))

S.TakeExam();

else if(examresponse.equals("n"))

System.out.println("You Skipped the Exam.");

else

System.out.println("Wrong Input.");

}

else if(want == 4){

System.out.println("Do you want to attend the Presentation ? Enter (y/n)");

String prstrtnresponse = Sc.next();

if(prstrtnresponse.equals("y"))

S.Prstrtn();

else if(prstrtnresponse.equals("n"))

System.out.println("You Skipped the Presentation.");

else

System.out.println("Wrong Input.");

}

else if(want == 5){

System.out.println("Do you want to submit Lab Work ? Enter (y/n)");

String Labresponse = Sc.next();

if(Labresponse.equals("y"))

S.Labperformed();

else if(Labresponse.equals("n"))

System.out.println("You Skipped the Lab Work.");

else

System.out.println("Wrong Input.");

}

else if(want == 6){

System.out.println("Your Course Result is in process.");

}

else if(want == 7){

exit = 1;

}

else

System.out.println("Wrong Input");

}while(exit == 0);

}

catch(Exception e){

System.out.println("Exception: "+e);

System.out.println("Try Again. Thank You..");

}

}

else

System.out.println("You are not enrolled in this Course");

}

catch(Exception e){

System.out.println("Exception: "+e);

System.out.println("Try Again. Thank You..");

}

}

}