## Software Engineering Department
**Sir Syed University of Engineering & Technology**

# Project Proposal of Object-Oriented Programming

## Title:
School Management System

## Group Members:
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## Section: A

## Teacher: Miss Zainab Zakir

# Project Objective:

This Project is made using OOP and consist of 3 interface classes which is inherited by a java class which is implemented by the main class. First interface class is the Student class, 2$^{nd}$ is the teacher class and the 3$^{rd}$ is the fees submit class. Al these three interface classes are inherited by the java class named as "School" which is implemented by An Abstract or main class.

# Project Feature:

Inheritance, Abstraction, Interface, Encapsulation, and polymorphism

# Tools used for Project:

Java Language and NetBeans

# Reference link:

https://youtu.be/4Z1NliZEn58

# Code :

```java
/*
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 * and open the template in the editor.
 */
package schoolmanagementsystem;
import java.util.Scanner;
/**
 *
 * @author Abdul Moiz Chishti
 */
public class SchoolManagementSystem {
    public static void main (String args[]){
        String name,cl;
        Scanner sc =new Scanner (System.in);
        School obj =new School();

        int ch=0;

        while(ch<=3){
            System.out.println("Press The following according to your choice: \n1: Student Module
\n2:Teacher Module \n3:Fees Submission \n4:Exit");

            System.out.print("\nEnter Your Choice : ");
            ch=sc.nextInt();
```

```java
if(ch==1){

    System.out.println("\n\n\t\t --------->STUDENT MODULE<--------\n\n");
    System.out.print("Enter Student Name : ");
    String studentName[]=new String[10];
    String rollNum[]= {"2021-1A-001","2021-1A-002"};
    for(int i=0; i< studentName.length; i++){
        studentName[i]= sc.nextLine();
        studentName[i]= sc.nextLine();
        break;
    }

    System.out.println("The roll number of " + studentName[0]+ " = "+rollNum[0]);

    System.out.print("Enter Father Name : ");
    String fname=sc.nextLine();

    System.out.print("Enter Student's Gender : ");
    String gender=sc.nextLine();

    System.out.print("Enter Student's age : ");
    String age=sc.nextLine();

    System.out.print("Enter Student's address : ");
    String add=sc.nextLine();
//      add=sc.nextLine();

    System.out.print("Enter Student CNIC/B-Form number : ");
    String nic=sc.nextLine();

    System.out.print("Enter Contact Number : ");
    String con=sc.nextLine();

    System.out.print("Enter Father's profession : ");
    String fo=sc.nextLine();

    System.out.print("Enter Student Previuos Class : ");
    String pc=sc.nextLine();

    System.out.print("Enter Student Prevoius Percentage : ");
    String pp=sc.nextLine();

    System.out.print("Enter the name of Previous School : ");
```

```java
            String ps=sc.nextLine();
//              ps=sc.nextLine();

            obj.student(fname, gender, age, add, con, nic, fo, pc, pp, ps);
            obj.student();
        }



        else if(ch==2){

            System.out.println("\n\n\t\t --------->TEACHER MODULE<--------\n\n");

            System.out.print("Enter Teacher Name : ");
            String tname=sc.nextLine();
            sc.nextLine();

            System.out.print("Enter Teacher Experience : ");
            String texp=sc.nextLine();

            System.out.print("Enter Teacher's preferred class : ");
            String prcl=sc.nextLine();

            System.out.print("Enter Expected Salary : ");
            String sal=sc.nextLine();

            obj.teacher(tname, texp, prcl, sal);
            obj.teacher();
        }



        else if(ch==3){

            System.out.println("\n\n\t\t --------->FEES SUBMIT MODULE<--------\n\n");
            System.out.println("Choose Method Of Payment: \n1:Cash \n2:Online Payment");
            System.out.print("\nEnter your Choice : ");
            int choice=sc.nextInt();
            switch(choice){

                case 1:
                    System.out.println("\n\n\t\t --------->CASH PAYMENT<--------\n\n");
                    System.out.print("Enter student Name: ");
                    name=sc.nextLine();
```

```java
                name=sc.nextLine();

                System.out.print("Enter Student Class:");
                 cl=sc.nextLine();



                obj.feesubmit(name,cl);
                obj.feesubmit();
            break;

            case 2:
                System.out.println("\n\n\t\t --------->ONLINE PAYMENT<---------\n\n");
                System.out.print("Enter student Name: ");
                name=sc.nextLine();name=sc.nextLine();

                System.out.print("Enter Student Class:");
                cl=sc.nextLine();
                obj.onlinepayment();
            break;

            default:
                System.out.println("none");




        }
      }
     }
    }
}
/*
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 */
package schoolmanagementsystem;
import java.util.Scanner;
/**
 *
 * @author Abdul Moiz Chishti
 */

public class School implements Student,Teacher,Feesubmit {
 Scanner sc =new Scanner (System.in);
```

```java
String fname,gender,nic,fo,ps,add,con,pc,age,pp;
    public void student( String fname,String gender,String age,String add,String con, String nic,String
fo,String pc,String pp,String ps){


        this.fname=fname;
        this.gender=gender;
        this.age=age;
        this.add=add;
        this.con=con;
        this.nic=nic;
        this.fo=fo;
        this.pc=pc;
        this.pp=pp;
        this.ps=ps;

    }


    @Override
    public void student(){


System.out.println("\n**************************************************\n");

        System.out.println("Student's Father name : "+fname);
        System.out.println("Student's Gender : "+gender);
        System.out.println("Student's Age : "+age);
        System.out.println("Student's Address : "+add);
        System.out.println("NIC/B-form Number : "+nic);
        System.out.println("Contact Number : "+con);
        System.out.println("Father occupation : "+fo);
        System.out.println("Student's previous Class : "+pc);
        System.out.println("Student's previous %  : "+pp);
        System.out.println("Student's Previous School: "+ps);
        System.out.println("\n****************************************\n");
  }

    String tname,sal,texp,prcl;
    public void teacher(String tname,String texp,String prcl,String sal){
        this.tname=tname;
```

```java
        this.texp=texp;
        this.prcl=prcl;
        this.sal=sal;

    }

    @Override
    public void teacher(){

System.out.println("\n****************************************************\n");
        System.out.println("Teacher Name : "+tname);
        System.out.println("Teacher Experience : "+texp);
        System.out.println("Teacher Preffered Class : "+prcl);
        System.out.println("Salary : "+sal);
        System.out.println("\n****************************************\n");
    }

    String name,cl;
        public void feesubmit(String name,String cl){
            this.name=name;
            this.cl=cl;

}
    @Override
    public void feesubmit(){
        System.out.println("\n****************************************\n");
        System.out.println("Your Reciept has Been generated which u Have to Deposit in Meezan
Bank.\n\n");
        System.out.println("Student name "+name+ "\n class= "+cl);
        System.out.println("\nTution Fees = 2340 Rs\n");
        System.out.println("Library Fees = 70 Rs\n");
        System.out.println("Transport Fees = 1600 Rs\n");
        System.out.println("Total Amount = 4010 /- Rs");
        System.out.println("\n****************************************\n");
    }

 private int bankaccount;
public void onlinepayment(){

    System.out.println("Enter Bank Account");
    bankaccount=sc.nextInt();
    int b = bankaccount%1000;
    System.out.println("*****************************");
    System.out.println("\nRs 4010/- Has been Deducted from account No. = "+"*****"+b+"\n");
    System.out.println("****************************************************");
```

```java
}




}
/*
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 */
package schoolmanagementsystem;

/**
 *
 * @author Abdul Moiz Chishti
 */
public interface Feesubmit{


    public void feesubmit();

}
/*
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 * and open the template in the editor.
 */
package schoolmanagementsystem;

/**
 *
 * @author Abdul Moiz Chishti
 */
public interface Student {

    public void student();

}
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package schoolmanagementsystem;

/**
```
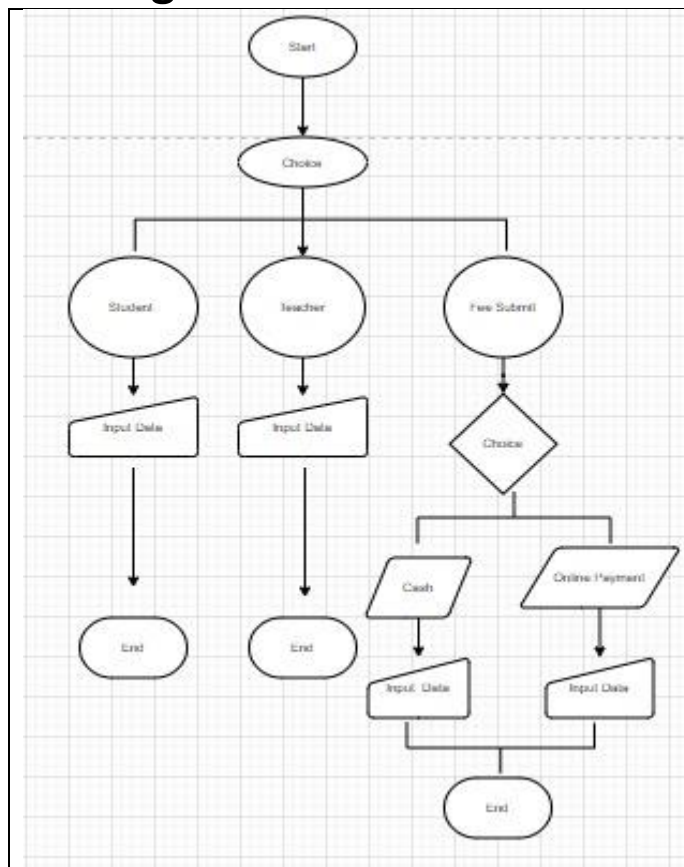
```
 *
 * @author Abdul Moiz Chishti
 */
public interface Teacher {

    public void teacher();
}
```
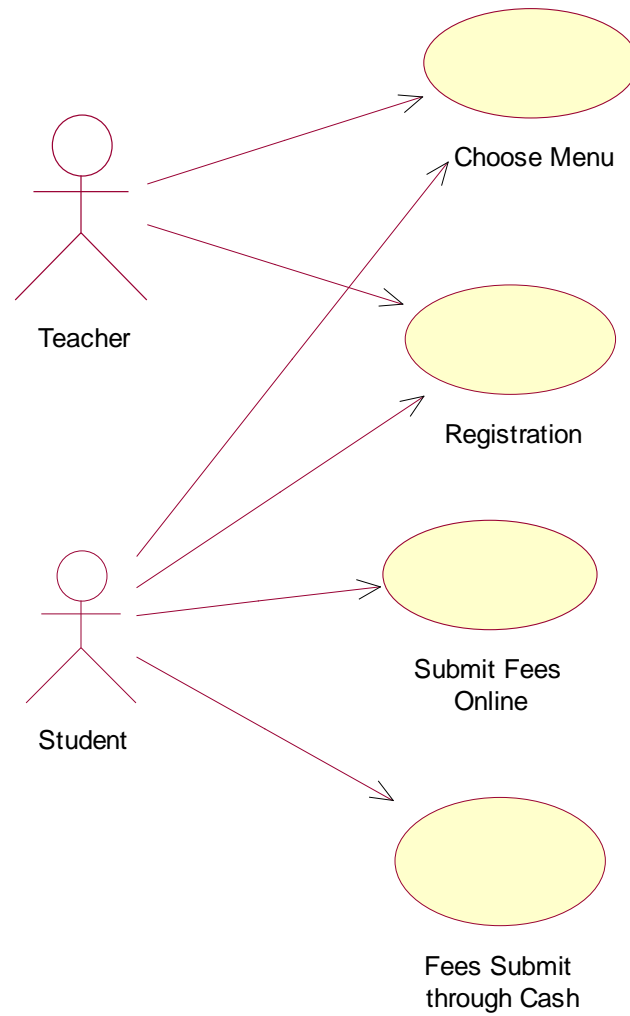
# Project Design:

# Use case Diagram:



# Various Screenshot:

```
Press The following according to your choice:
1: Student Module
2:Teacher Module
3:Fees Submission
4:Exit

Enter Your Choice : 1



          ---------->STUDENT MODULE<---------



Enter Student Name : Abdul Moiz Chishti
The roll number of Abdul Moiz Chishti = 2021-1A-001
Enter Father Name : Haroon Chishti
Enter Student's Gender : Male
Enter Student's age : 18
Enter Student's address : Karachi
Enter Student CNIC/B-Form number : 42101-***********-*
Enter Contact Number : 0316-*******
Enter Father's profession : Engineer
Enter Student Previuos Class : 12
Enter Student Prevoius Percentage : 76%
Enter the name of Previous School : Bahria Foundation College


********************************************************

Student's Father name : Haroon Chishti
Student's Gender : Male
Student's Age : 18
Student's Address : Karachi
NIC/B-form Number : 42101-***********-*
Contact Number : 0316-*******
Father occupation : Engineer
Student's previous Class : 12
Student's previous %  : 76%
Student's Previous School: Bahria Foundation College
```

```
                ---------->TEACHER MODULE<---------


  Enter Teacher Name : XYZ
  Enter Teacher Experience : 3
  Enter Teacher's preferred class : 14
  Enter Expected Salary : 80,000


  ***********************************************************

  Teacher Name :
  Teacher Experience : 3
  Teacher Preffered Class : 14
  Salary : 80,000

  ********************************************

                ---------->FEES SUBMIT MODULE<---------


  Choose Method Of Payment:
  1:Cash
  2:Online Payment

  Enter your Choice : 2


                ---------->ONLINE PAYMENT<---------


  Enter student Name: Abdul Moiz chishti
  Enter Student Class:12
  Enter Bank Account
  123456789
  *****************************

  Rs 4010/- Has been Deducted from account No. = ******789

  *******************************************************
```

# Project Implementation/ Marketing:

We can implement this project in Different Schools and this project can be marketed in various Schools for their management system.