

Report Analysis

**A project report submitted in partial fulfillment of the requirements
for the degree of Bachelor in Science (Computer Science)**

By

- 1. Ashish Panigrahi(11582)**
- 2. Mahesh H. Kendre(11562)**
- 3. Dhiraj Hingude(11566)**

S. P. College, Pune.

Project Guide

Prof. Mrs. Shalaka Gujar

Savitribai Phule Pune University,
Pune,

2018-19

ACKNOWLEDGMENT

We have great pleasure in presenting this chat project entitled “**Report Analysis** ”. We thankfully acknowledge the help that we have obtained from teachers of **COMPUTER SCIENCE DEPARTMENT** for their support and co-operation right from the stage the project was conceived. The journey of this project from conception to completion was possible due to **Prof. Mrs. Shalaka Gujar** for giving us valuable information about the implementation of the project. A special thanks to **Prof. Mrs. Madhuri Deshpande** Madam(Head of B.Sc.(comp.sci.)Department) for this help and providing us good laboratory facility. Last but not least, we would like to express our sincere gratitude to those who have helped us directly or indirectly in our project

INDEX

Sno	Titel	Page No.
1	Intoduction	4
2	Existing System	5
3	Proposed System	6
4	Scope of The System	7
5	Feasibility Study	8
6	E-R diagrams along with constraints	9
7	Table Specification	10
8	Class Diagram	12
9	Use Case Diagram	13
10	Use Case Scenario	13
11	Activity Diagram	14
12	State Diagram	15
13	Input/Output Screens	16
14	Test Case	25
15	Limitations and Future Enhancements of the System	27
16	References	27

Report Anylises

INTRODUCTION :

Now a days college departments and depertment staff usually have to deal with large amount of students and data related to their results. This project is developed for Computer Science Department in which we are going to store the results of students in database so that analysis and operations on results can be done easily,accurately and efficiently. The system will read the pdf file which contains results of students in Computer Science department, provided by Pune University to College.

Existing System:

In the existing system, whenever university declares result of any course of any semester, it sends a PDF file containing results of all the students of that particular college. After receiving the PDF file, the staff of that college enters the student details and their respective marks in an excel file. In this process minimum two staff member and two computer machines are required one staff member analyzes and dictates the data from the PDF file and the other staff member is supposed to enter the data in the excel file. One staff member will have details of all the students who have appeared for examination, the staff member searches for the roll number one by one from PDF file and the staff dictates marks corresponding to that roll number to other staff, the other staff enters the roll number and corresponding marks in excel file. For each student the first staff member will dictate the roll number and marks and other staff member writes roll number and marks in excel file. This mechanism of dictating and writing is prone to erroneous data. After the data is entered in the excel file, for calculating total marks and for performing other operations on data like “calculating average percentage of all students” or “To do statistical analysis”, the staff member has to enter the formulae manually. This is a very tedious job. At the same time staff members are supposed to be extremely careful while entering data and check the entered entries twice, because a minor mistake in this process may cause a very big problem in future. This process takes a lot of time, generally around two to three weeks. Also it takes lot of human energy and as the data is stored in excel file, for each semester a new excel file is created and data redundancy can occur. Even if we can manipulate data in excel file using formulae, the data will be more robust, secure and less redundant if it would be in database. There is a need to reduce the time required in this process as the staff is required to send this analysis on data to Head of Department as soon as possible. Thus, we are going to develop a system which will reduce the procedural time as well as human resources and the work will be done with a little human intervene.

Proposed System: -

In the proposed system the software will automatically read the contents of the PDF file and will store the data in an excel file, the data will be stored in such a format that it can be directly entered into database. In this system user will provide PDF file, a file containing student details and a file containing subject details. The file containing student details will have Student's seat number, Permanent Registration Number(PRN) and Student's name or user can also enter the student details manually. The file containing subject details will have Subject name and Subject code or user can also enter the subject details manually. Once the files are given by the staff member the system will create an excel file and will store marks from PDF file to the excel file, for each seat number from student file corresponding marks will be entered in excel file. Once the excel file is created the data will be stored in the database through the excel file, after that any authorized teacher or department staff will have the access to the result details of students in the database. As the result is stored in database it will be much secured than excel file. The system will provide various ways to get details of students for e.g. if an authorized user wants information about a particular student he/she will get that by entering student's name, seat no, PRN number, etc. The system will also be capable of distinguishing students based on their performances like First class, second class, fail class, Fail ATKT from their marks so for class level analysis a user will be able to get the details in that form also. Suppose a user want get details for a query like "How many students passed in a particular subject?" or "In which subject most of the students failed?" the system will be capable to deal with these type of questions also. The main advantage of automating this whole manual process is time reduction and accuracy. The work for which manual process was taking generally around two to three weeks the system will do it in much smaller amount of time with much greater accuracy.

Scope of The System: -

The proposed system will store the data from the PDF file into an excel file from which it will store the result details of students in the database. This will be a standalone system and only for teachers and not for students. This system will not have any connection with the university or any other department of other college or same college. Only authorized staff/teachers will have the access to the database and the system. There will be only one admin or super user login who can create user id's or disable user id's for another teacher. The admin will have complete access to the system. This system will not be connected to internet and is going to be developed in java language.

Feasibility Study: -

o Technical Feasibility:

The system is Technically feasible because the hardware and software tools to design, develop and run the system are available and minimum requirements to run the system are as follows:

Minimum requirements are:

- Intel Pentium Processor
- 2 Gb RAM
- 1 Gb Hard Disk
- Linux Operating System
- PostGreSQL

o Operational Feasibility:

The system is Operationally feasible because it will be a GUI based system and will be simple and easy to use in addition to this help option will also be there for any help. In existing system, the time and probability of occurring an error while entering data in database is very high while in proposed system it is very less so the chances of refusing to use the system by any user is very less.

o Economic Feasibility:

The system is Economically feasible because it does not require any expensive technology or expensive hardware resource and as far as benefits are concerned it gives benefits in terms of reduced time (which is very high in present system) and reduction of human intervention. In addition to this the system is going to be developed in java language which is free source, so in terms of development also it is economically feasible.

E-R diagrams along with table specifications and constraints: -

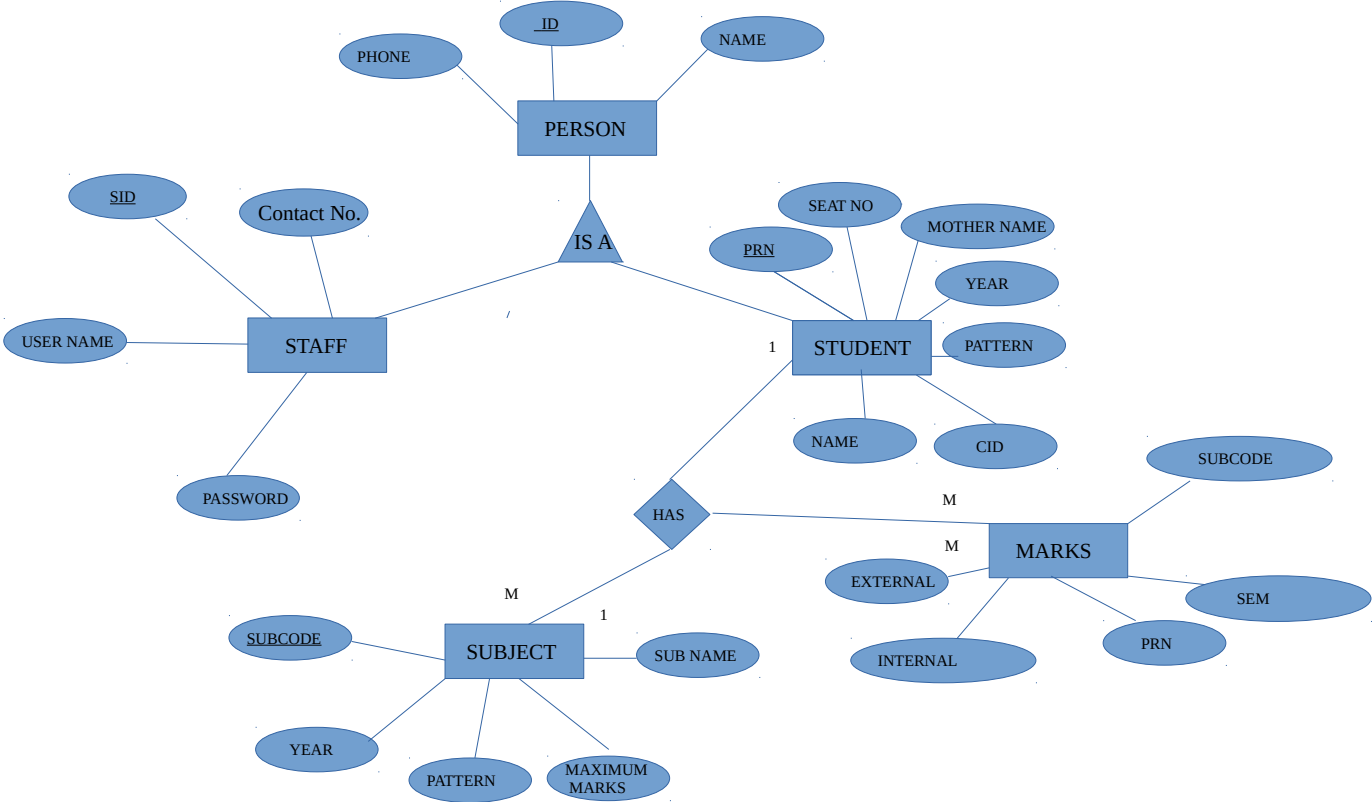


TABLE SPECIFICATION

Student-Subject related as One-Many

Subject-Marks related as One-Many

Student-Marks related as One-Many

Table Name:Person

Sno.	Colum Name	Data Type	Description
1	Id	Int	Primary key
2	Name	Varchar(30)	Not Null
3	Phone No.	Varchar(10)	

Table Name:Staff

Sno.	Colum Name	Data Type	Description
1	SId	Int	Foregin key
2	Name	Varchar(30)	Not Null
3	Phone No.	Varchar(10)	
4	Username	Varchar(20)	Unique Not Null
5	Password	Varchar(30)	Not null

Table Name:Student

Sno.	Colum Name	Data Type	Description
1	PRN	Varchar(10)	Primary key
2	FName	Varchar(30)	Not Null
3	Mname	Varchar(30)	
4	LName	Varchar(30)	
5	MotherName	Varchar(30)	
6	Semister	Char(1)	Not Null
7	Year	Varchar(10)	Not Null
8	Seat No.	Varchar(10)	NotNull
9	Type	Varchar(10)	Not Null
10	Gendre	Varchar(2)	Not Null

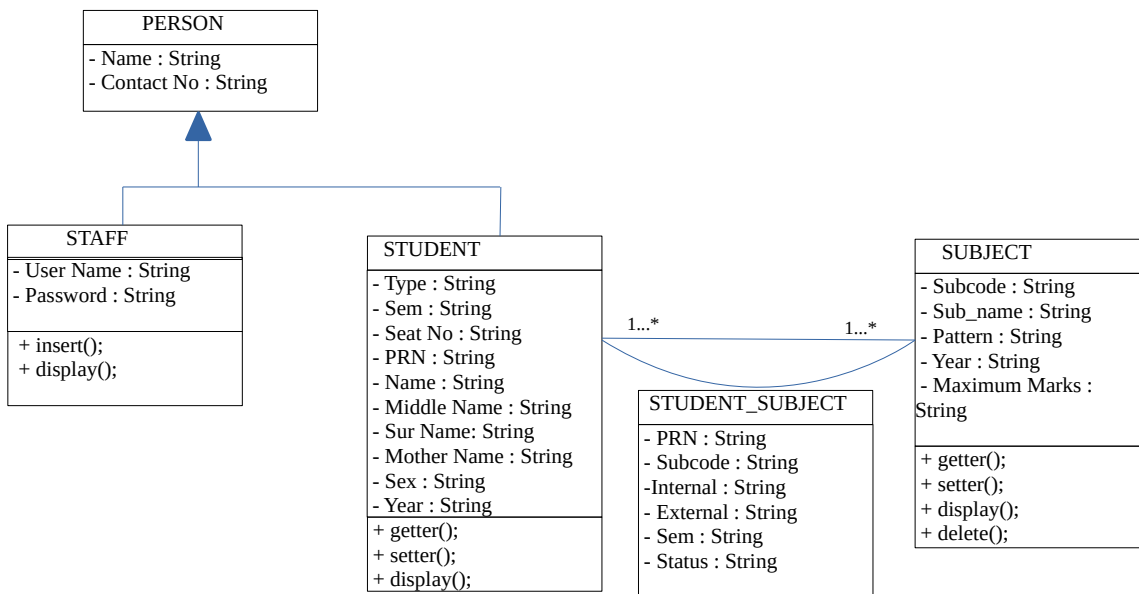
Table Name:Subject

Sno.	Colum Name	Data Type	Description
1	Subject_code	Varchar(10)	Primary key
2	Subject_name	Varchar(30)	Not Null
3	Pattern	Varchar(10)	
4	Semister	Varchar(10)	
5	Maxmum_Marks	Int	Not Null

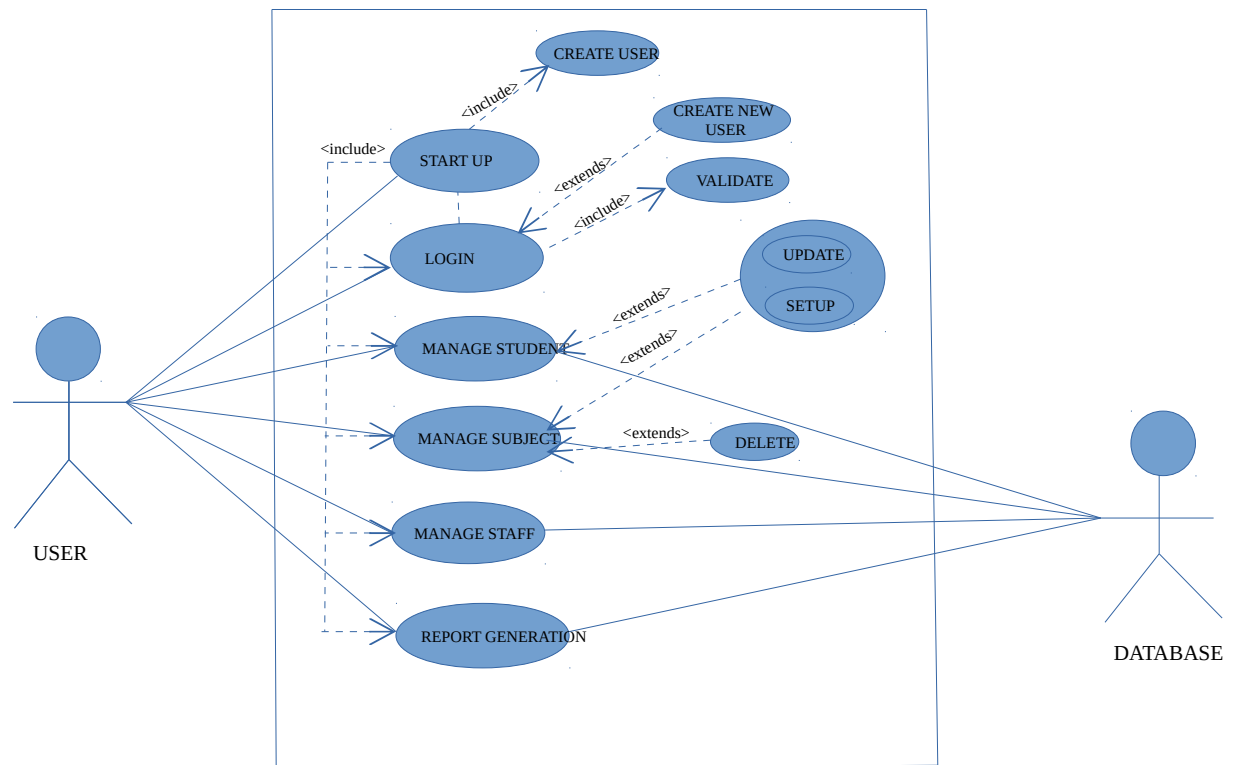
Table Name:Stu_sub(Marks)

Sno.	Colum Name	Data Type	Description
1	Subject_code	Varchar(10)	Foreign key
2	PRN	Varchar(10)	Foregin key
3	Internal	Varchar(10)	Not null
4	Externaal	Varchar(10)	Not null
5	Semister	Varchar(10)	Not Null
6	Status	int	Not Null

Class Diagram: -



USE CASE DIAGRAM:-



USECASE SCENARIO

1 Usecase Description: This usecase describes the working of the system. It describes how the User will assign marks and maintain the records of student's.

2 Actors: Staff, System.

3 Preconditions: After Staff registration Staff get User id and password.

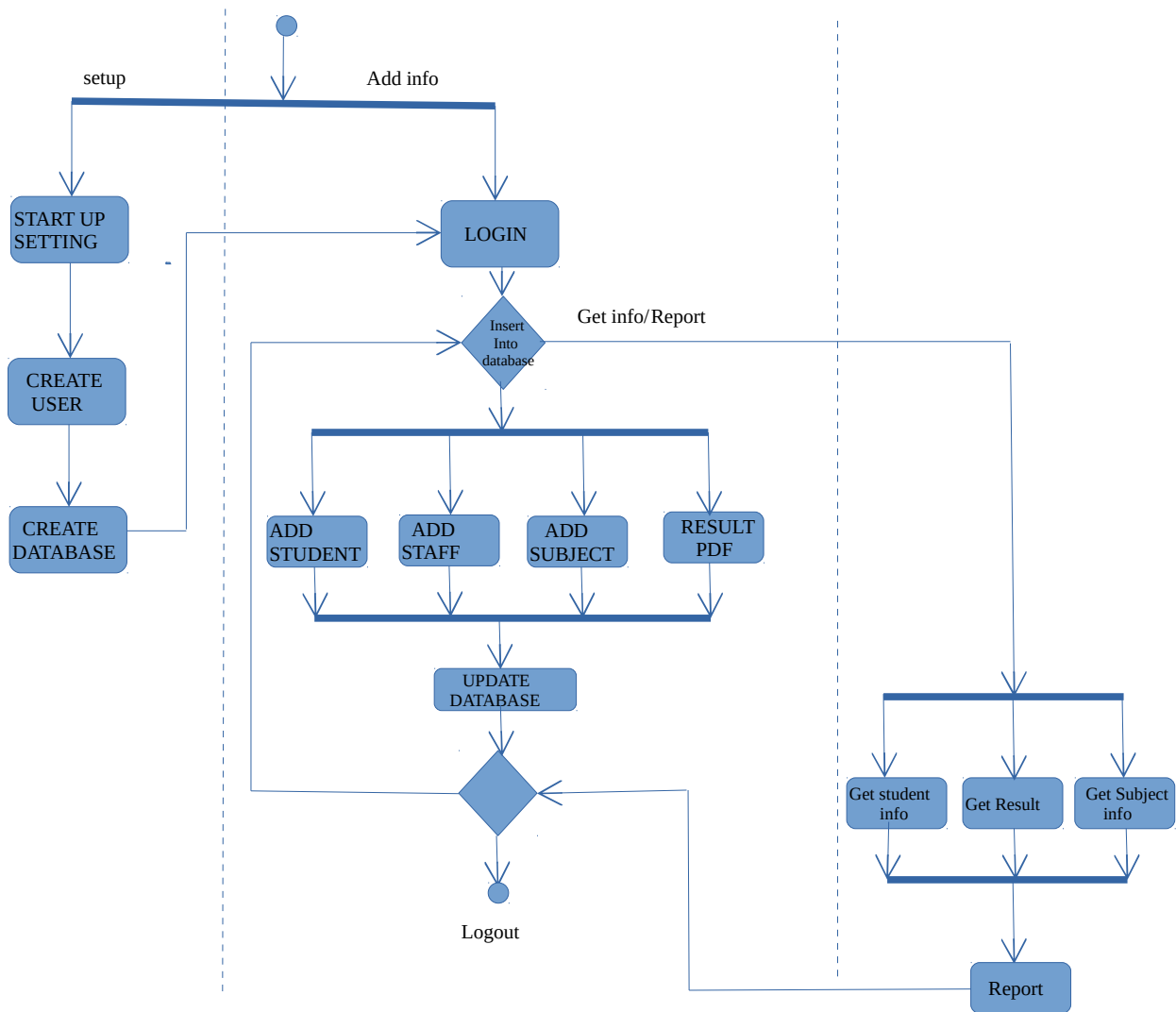
4 Postconditions: Updated students Information .

5 Basic flow of system after registration:

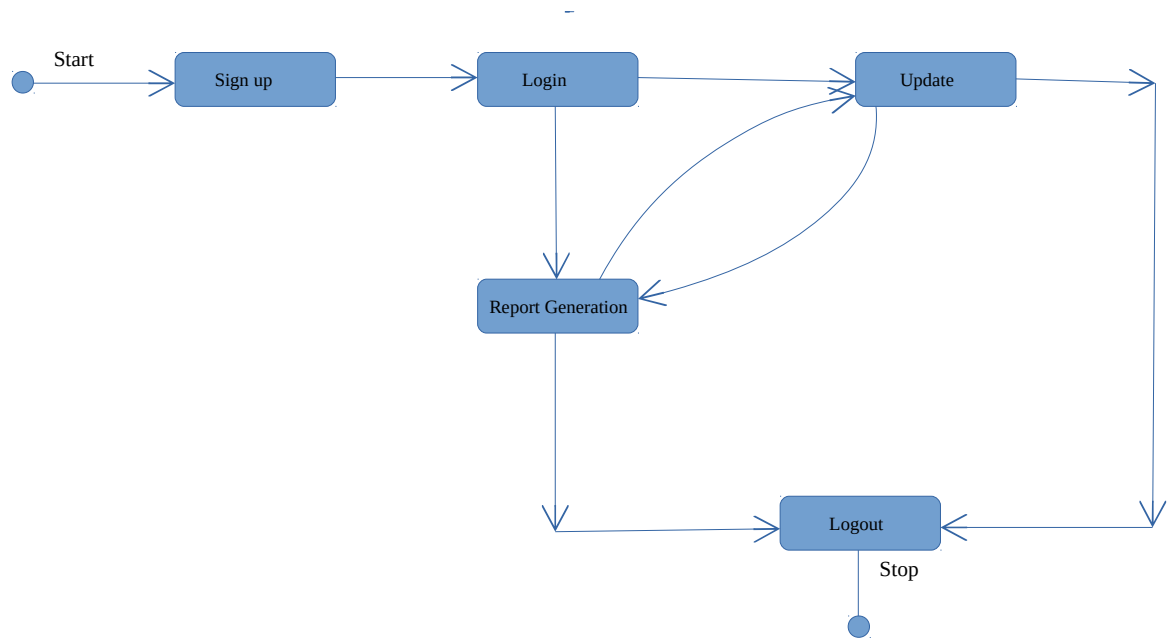
- a. Staff should login.
- b.Add Subject.
- c. Add Student.
- d.Assign marks for respective semester.
- e. Gets the updated student record.
- f. Report generation.

6 Alternative flow: If Staff enters invalid username or password, there will be an error.

Activity Diagram: -

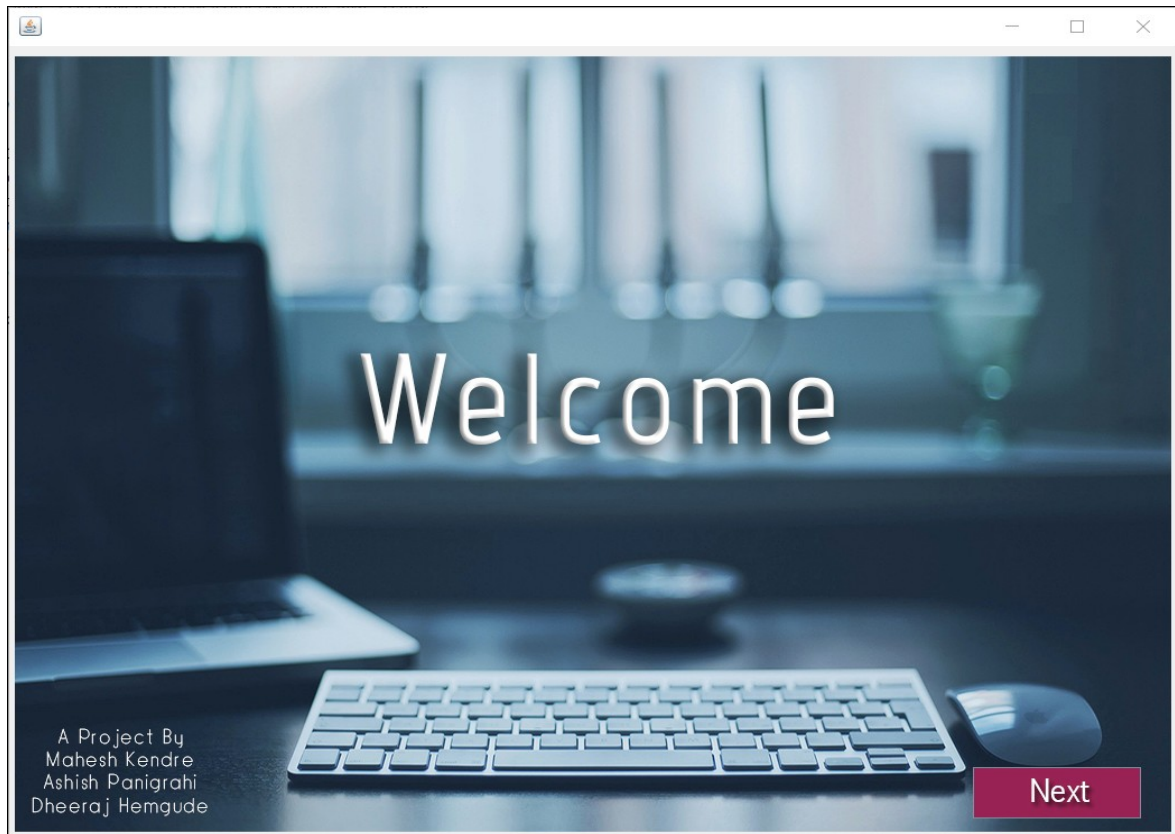


State Diagram: -

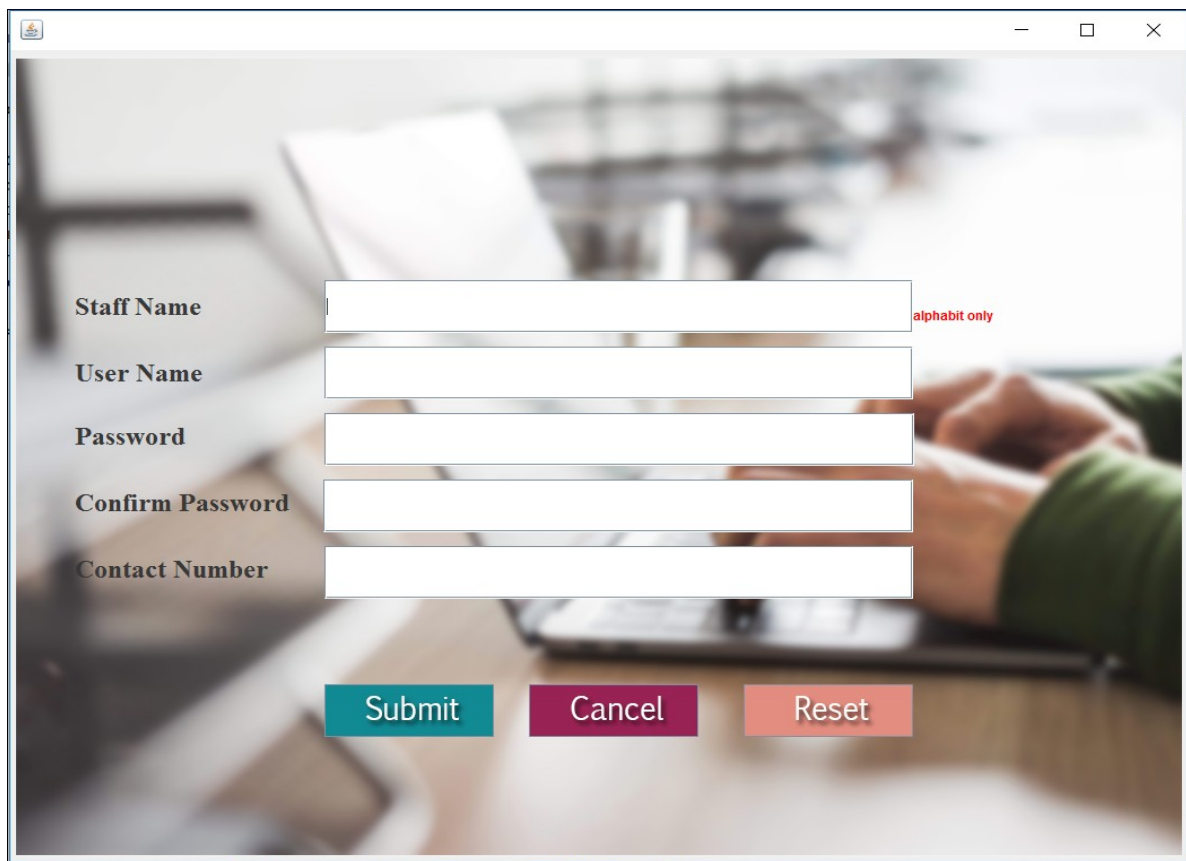


Input/Output Screens :-

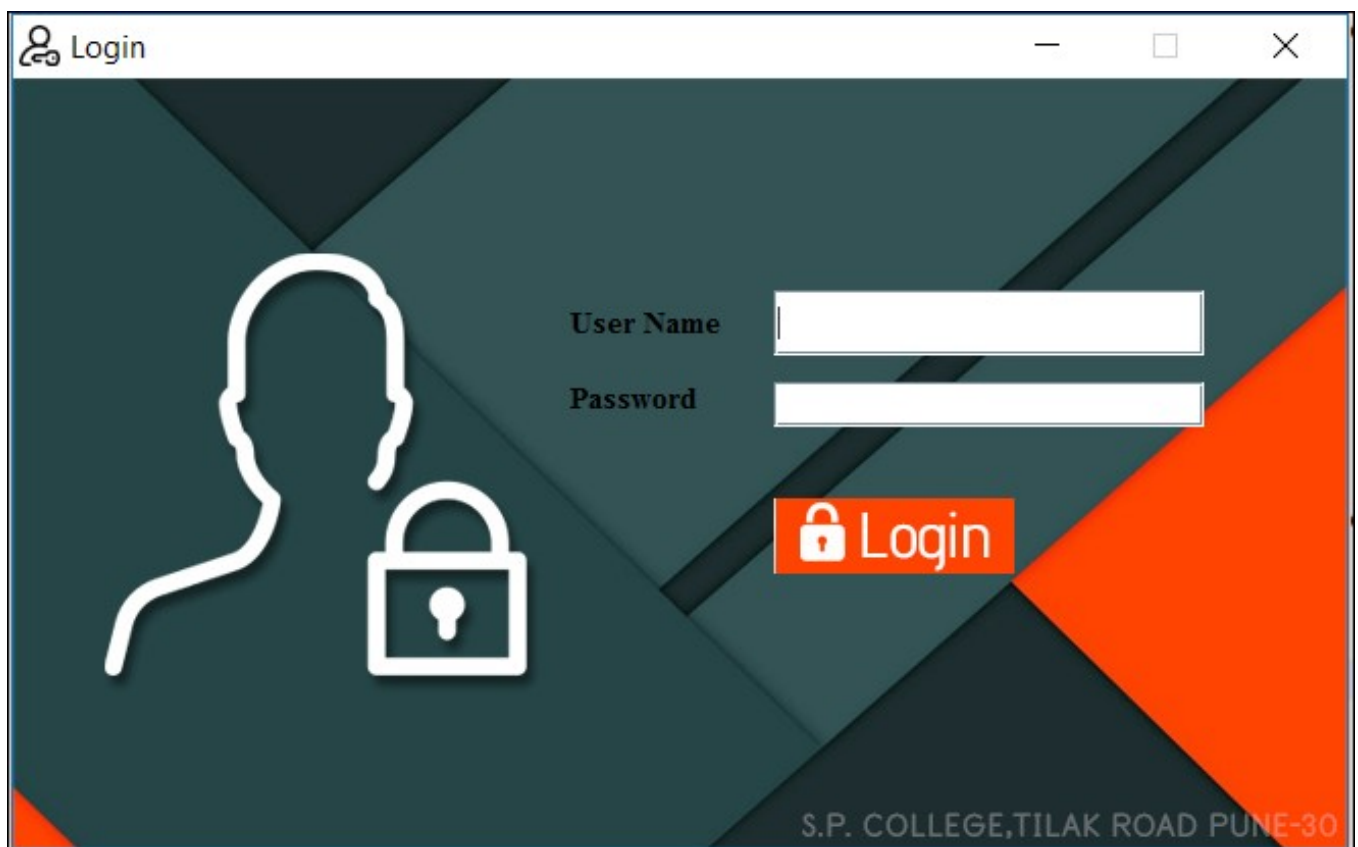
Welcome Screen :-



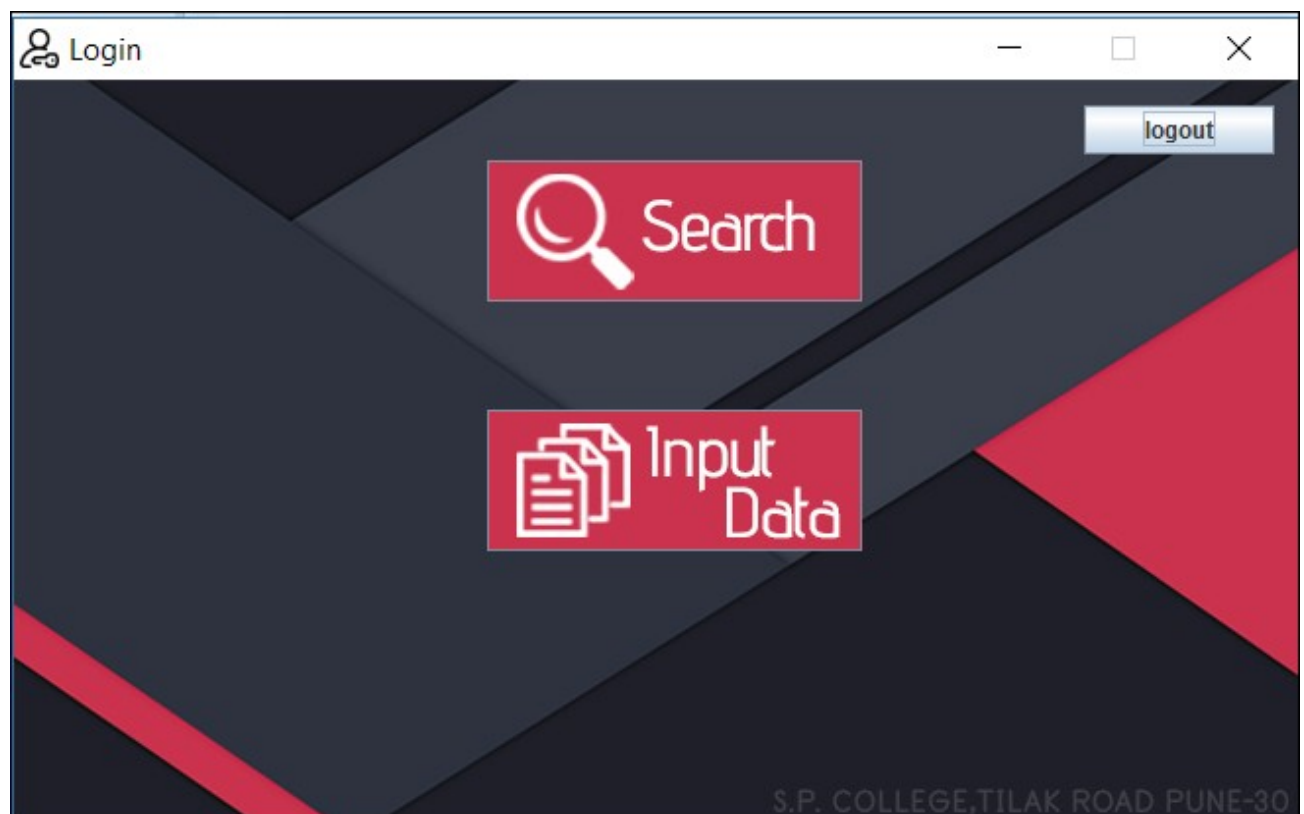
Create User:-

A screenshot of a software application window titled "Create User". The background is a blurred image of a person's hands typing on a laptop. The form contains five input fields with labels: "Staff Name", "User Name", "Password", "Confirm Password", and "Contact Number". A red text label "alphabit only" is positioned to the right of the "Staff Name" input field. At the bottom of the form, there are three buttons: "Submit" (teal), "Cancel" (red), and "Reset" (orange). The window has a standard Windows-style title bar with minimize, maximize, and close buttons.

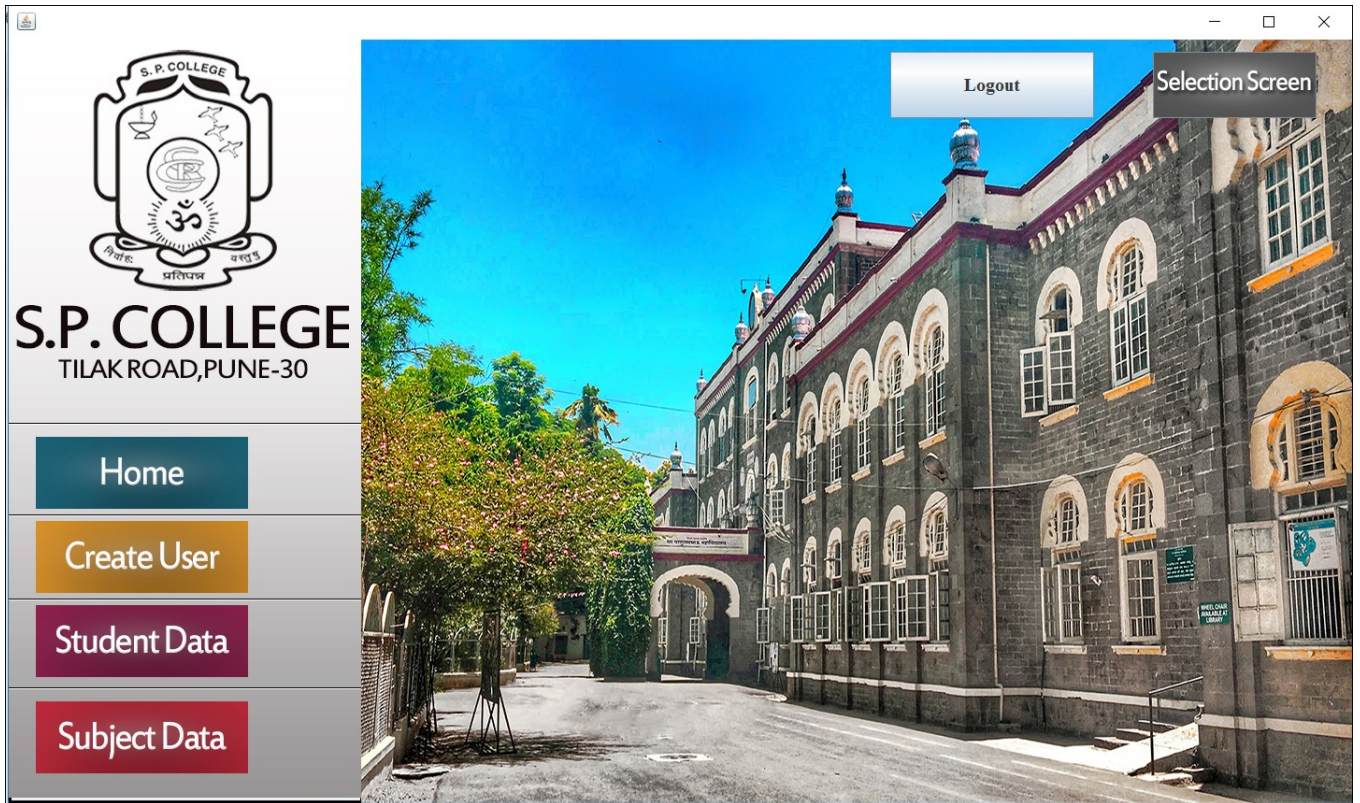
Login Screen :-



Selection Screen :-



HomeScreen :-



Create User :-

The screenshot shows the "Create User" form. On the left, there is a sidebar with the college's logo and name, "S.P. COLLEGE TILAK ROAD, PUNE-30". Below the logo, there are four buttons: "Home" (blue), "Create User" (orange), "Student Data" (purple), and "Subject Data" (red). The main area of the screen displays a form with the following fields: "Staff Name", "User Name", "Password", "Confirm Password", and "Contact No". Each field has a corresponding input box. At the bottom of the form, there are three buttons: "Submit" (purple), "Cancel" (light blue), and "Reset" (red).

Student Data :-



Student Individual Data Entry :-

S.P. COLLEGE
TILAK ROAD, PUNE-30

Home
Create User
Student Data
Subject Data

Year/Sem
Seat No
PRN
First Name
Middle Name
Last Name
Mother Name
Gender
Pattern
Type

Back
Submit
Cancel
Reset

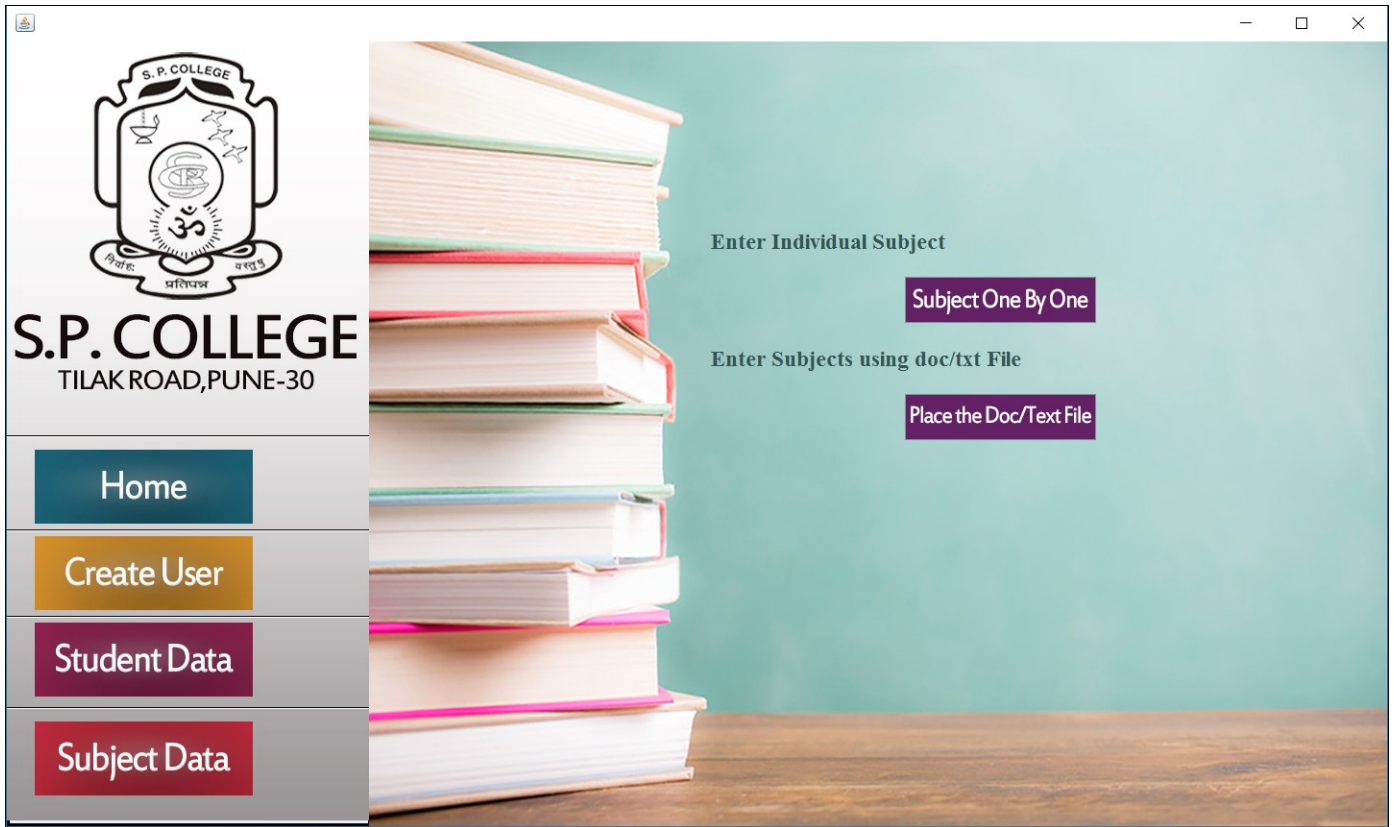
Place PDF File :-

S.P. COLLEGE
TILAK ROAD, PUNE-30

Home
Create User
Student Data
Subject Data

Back
Open File
Submit

Subject Data :-



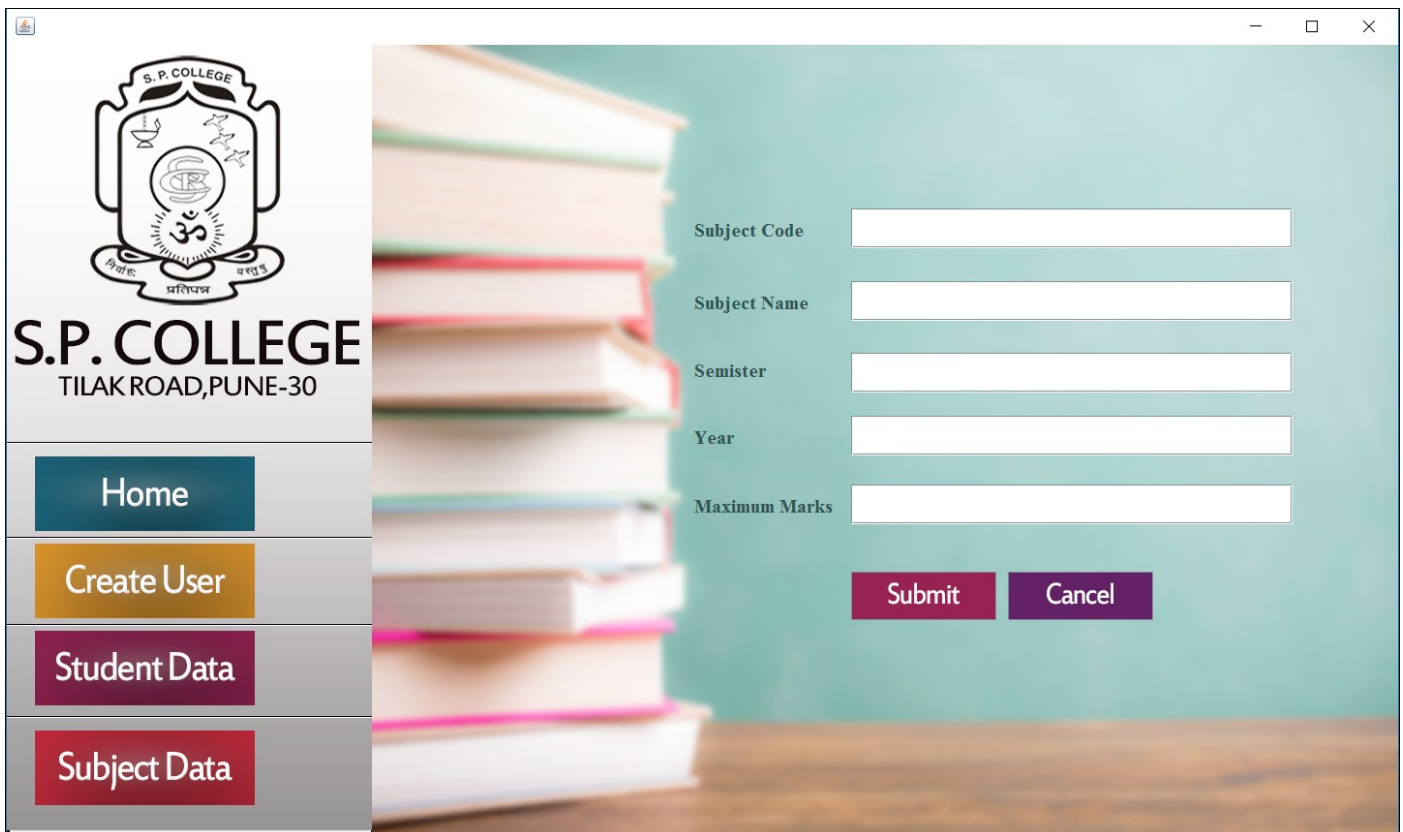
S.P. COLLEGE
TILAK ROAD, PUNE-30

Home
Create User
Student Data
Subject Data

Enter Individual Subject
Subject One By One

Enter Subjects using doc/txt File
Place the Doc/Text File

Enter Subjects Individually :-



S.P. COLLEGE
TILAK ROAD, PUNE-30

Home
Create User
Student Data
Subject Data

Subject Code

Subject Name

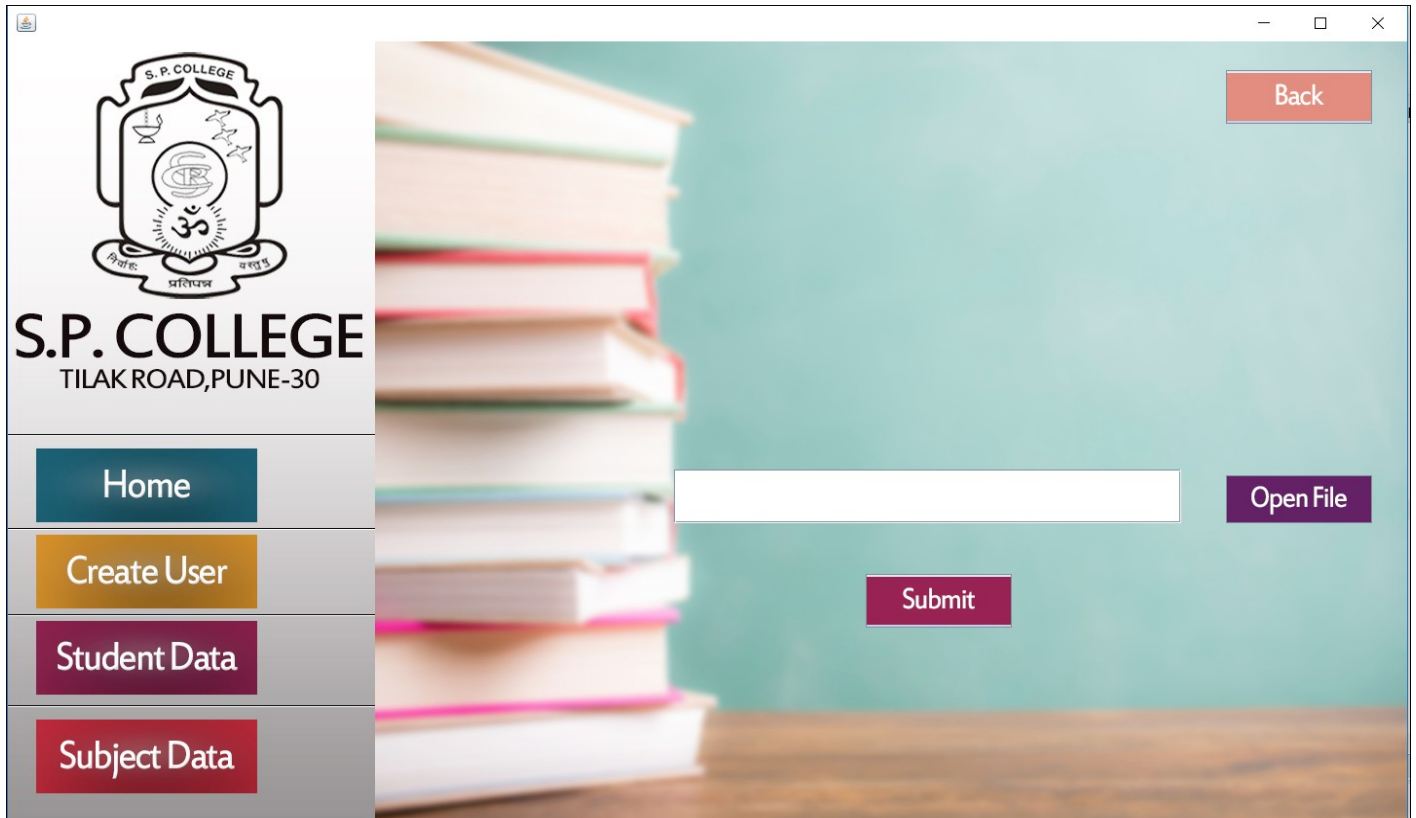
Semester

Year

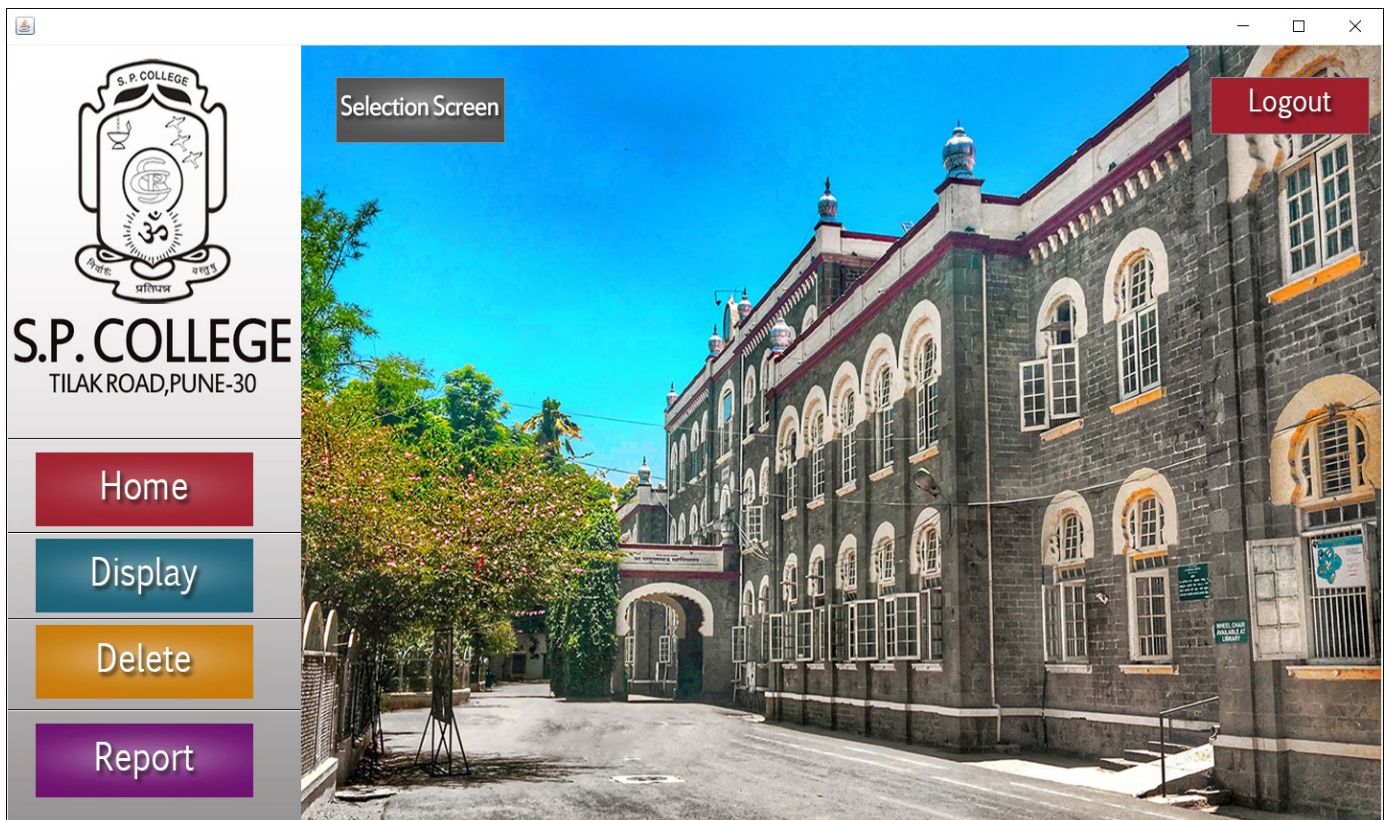
Maximum Marks

Submit Cancel


Place Subject's File :-



Home Screen For Report Genertion :-



Display Data :-



S.P. COLLEGE
TILAK ROAD,PUNE-30

Home

Display

Delete

Report


Subject Information

Show Subject

Student Information

Show Student

Update Student Data :-



S.P. COLLEGE
TILAK ROAD,PUNE-30

Home

Display

Delete

Report

year	sem	seat_no	prn	stu_name	middle_name	sur_name	mother_name	sex	type
3	4	00262	1101300191	NIKITA	RAVINDRA	SHINDE	SHAKUNTALA	F	R
3	4	00253	1101400207	MADHUKAR	GABHALE	MADHURI	SUNANDA	F	R
3	4	00244	1101400363	APURV	ANIL	JAGTAP	MEENA	M	R
3	4	00257	1101400370	DATTATRAY	WAIKAR	NIKITA	SANGITA	F	R
3	4	00236	1101400379	PRIYANKA	SATISH	DUMBRE	VIJAYA	F	R
3	4	00232	1101400408	PRATIKSHA	RAJENDRA	BHADAKWAD	SUJATA	F	R
3	4	00255	1101400419	MANOHAR	LOMTE	MEGHA	KAMAL	F	R
3	4	00266	1101400535	GANGADHAR	SAUNDADE	VIDYA	SANGITA	F	R
3	4	00229	1101400541	MANIKRAO	SHIRKE	AKSHAY	PRAMILA	M	R
3	4	00252	1101400739	SHUBHAM	ATUL	KULKARNI	SULBHA	M	R
3	4	00240	1101500192	SHRIYA	RAJSHEKHAR	GURAV	VIJAYALAXMI	F	R
3	4	00264	1101500194	GARGI	CHANDRASHEK	SUDAME	SUVARNA	F	R
3	4	00243	1101500198	ADITYA	VIJAY	JAGTAP	MANGAL	M	R
3	4	00263	1101500235	ROHIT	VISHWAS	SOMAN	SUREKHA	M	R
3	4	00260	1101500237	SOUMITRA	GIRISH	PUNEKAR	YASHASHREE	M	R
3	4	00235	1101500240	SHASHANK	PURUSHOTTAM	DESHPANDE	KALPANA	M	R
3	4	00268	1101500247	MAYUR	RAJU	YERWA	ANNAPURNA	M	R
3	4	00230	1101500248	RAMESHWAR	SOLAPURE	AKSHAY	SANGITA	M	R
3	4	00265	1101600164	ANKITA	SHASHIKANT	THAKUR	JAYASHREE	F	R
3	4	00258	1101600167	PRASAD	SHIVKUMAR	PARDESHI	ARTI	M	R
3	4	00259	1101600168	DIPAK	RAJARAM	PASALKAR	SANGEETA	M	R
3	3	00225	1101600169	ADITYA	PRADEEP	THAKARE	ARCHANA	M	F
3	4	00246	1101600170	SUMIT	NAVANATH	KAKADE	SAVITA	M	R
3	4	00248	1101600172	KUNAL	KISAN	KUDALE	SANGITA	M	R
3	4	00267	1101600176	DOUBT	DRASHTANT	SAHAI	GUARDO	M	R

RECORD DELETION

Enter PRN Number


SUBMIT REFRESH

RECORD UPDATION

Enter PRN Number

SUBMIT

Report For SyBcs :-



S.P. COLLEGE
TILAK ROAD, PUNE-30

Home

Display

Delete

Report

SYBCS

Description	Total	Male	Female
Total students	74	38	36
Total number of distinction students	5	1	4
Total number of First Class students	10	4	6
Total number of second Class students	9	5	4
Total number of pass Class students	0	0	0
Total number of Fail Class students	2	2	0
Total number of ATKT students	50	28	22
Total number of Passed students	24	10	14

info	cs1	cs2	M1	M2	E1	E2	English
Total students appear...	74	74	74	74	74	74	74
MAXIMUM MARKS SCO...	38	36	44	49	39	40	41
MINIMUM MARKS SCO...	8	5	4	5	4	3	22
Total students passed ...	57	56	53	47	47	48	74
Total students failed in ...	17	18	21	27	27	26	0
Passing Percentage of ...	77.0	75.0	71.0	63.0	63.0	64.0	100.0
students between 50% ...	23	22	0	1	17	27	23
students above 60% of ...	51	15	0	1	11	13	60

info	cs1	cs2	cs lab 1	cs lab 2	M1	M2	maths prac	E1	E2	electronics prac	English
Total students ...	10	10	10	0	9	9	9	9	10	10	10
MAXIMUM MAR...	22	30	49	0	28	28	70	27	25	70	29
MINIMUM MAR...	5	7	16	0	7	5	47	4	1	11	22
Total students ...	6	7	2	0	3	6	9	6	3	6	9
Total students ...	4	3	8	0	6	3	0	3	7	4	1
Passing Perce...	60.0	70.0	20.0	0.0	33.0	66.0	100.0	66.0	30.0	60.0	90.0
students betw...	0	1	0	0	2	2	2	1	1	1	7
students abov...	0	1	0	0	0	0	3	0	0	2	0

Next

Report For TyBcs :-

S.P. COLLEGE
TILAK ROAD, PUNE-30

TY BCS			
Description	Total	Male	Female
Total students	67	35	32
Total number of distinction students	10	3	7
Total number of First Class students	20	10	10
Total number of second Class students	13	7	6
Total number of pass Class students	0	0	0
Total number of Fail Class students	1	1	0
Total number of ATKT students	23	15	8
Total number of Passed students	44	20	24

info	syspro	Tcs	CN	IP	Java	OOSE
Total students appeared fo...	67	67	67	67	67	67
MAXIMUM MARKS SCORE...	46	44	41	44	36	40
MINIMUM MARKS SCORE...	4	2	5	4	11	9
Total students passed exa...	57	54	61	57	66	65
Total students failed in exa...	10	13	6	10	1	2
Passing Percentage of sub...	85.0	80.0	91.0	85.0	98.0	97.0
students between 50% an...	20	32	36	28	43	23
students above 60% of ma...	27	31	26	30	14	39

info	OS	Compiler	CN	IP	Java	CG	Cs lab 1	Cs lab 2	Cslab 3
Total students ap...	40	40	40	40	40	40	40	40	40
MAXIMUM MARKS ...	33	38	30	29	38	35	90	90	93
MINIMUM MARKS ...	8	7	6	6	20	16	30	42	45
Total students pa...	35	33	33	35	40	37	31	36	39
Total students fail...	5	7	5	5	0	3	9	4	1
Passing Percenta...	87.0	82.0	82.0	87.0	100.0	92.0	77.0	90.0	97.0
students between...	10	9	0	13	17	10	9	0	0
students above 6...	2	1	0	0	6	6	5	36	39

Home

Display

Delete

Report

TEST CASES

Test case id	Test cases	Pri-ori-ty	Precondition	Input Test data	Steps to be executed	Expected result	Actual result	Pass /fail
1]	Test if user is able to login suceesfully	A	User must be registered already	correct username, number	1.Enter username , number 2.Click login	User must successfully login	User logins successfully	PASS
2]	Test if unregistered user is not able to Login to System	A		Incorrect username	1.Enter incorrect name 2.Click login	Prompt message must be displayed to login again	Prompt message is displayed to login again	PASS
3]	Test with valid username and empty number such that Login must get failed	A	User must be registered already	Valid username and empty number	1.Enter valid user-name in user id	Prompt message must be displayed to enter login again	Prompt message is displayed to enter login again	PASS
4]	Test whether the number entered is ten-digits	A		The number entered is less or more than ten-digits	1. Enter Name and number 2.Enter less or more than ten-digit number 3.Click on login	Prompt message must be displayed to type ten-digit number	Prompt message Is displayed to type ten-digit number	PASS

5]	Test if user register for System successfully	A		Name, ph- no, username, password	1.Enter all the asked information. 2.Enter submit	User must successfully register for System	User successfully registers for System	PASS
6]	Test if the password entered is in bullets or asterisks	B		Some Password	1.Enter the password field with some characters 2.Enter submit.	The password field should display the characters in bullet or asterisks i.e not visible on screen	The password is in bullets	PASS
7]	Test if all the fields of events,jobs and schemes are filled	B	User must be Logged in or registered for System already	One of the field of any one form should be kept Empty	1.Keep one of the field of any one form empty 2.Click submit	Prompt message should be display to fill the required field	Prompt message is displayed to fill required field	PASS
8]	Test if atleast one of the event in event form is selected	B	User must be Logged in or registered for System already	Checkbox of all events should be kept unselected	1.Fill all information of user 2.Leave all events unselected 3.Enter submit	Prompt message should be display to select atleast one event	Prompt message is displayed to select atleast one event	PASS
9]	Test if the user logout successfully	D	User must be Logged in Already	User must login First	1.Click logout after registration	User must logout successfully	User logouts successfully	PASS

Limitations and Future Enhancements of the System :-

Limitations :-

- It is only for TyBcs and SyBcs results and not for FyBcs.
- It only recognizes Pune University Result's pdf Format.
- Application will only accept pdf file of 2013 pattern of Pune University.
- The application only recognizes a particular pdf Format.

Future Enhancements :-

- In later versions it will be enough flexible to accept results of FyBcs as well.
- In next versions application will be able store data in Different databases like mysql,oracle,etc.

References :-

- Mentor *Shalaka Gujar*.
- Websites :-
 - “www.google.com”
 - ”www.stackoverflow.com”
 - ”www.w3schools.com”
 - ”www.geeksforgeeks.org”
 - ”www.eclipses.org”