Student Interest System

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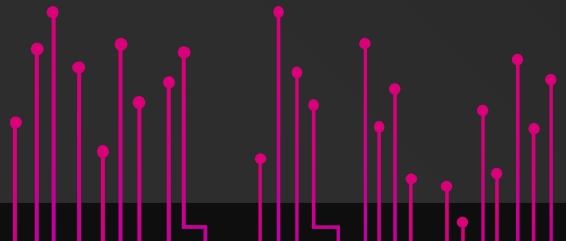
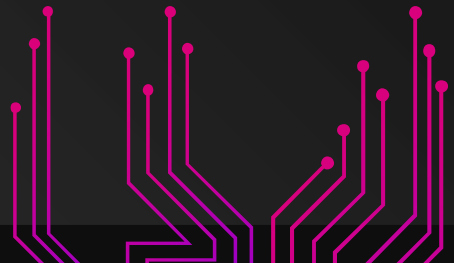
01
Introduction

Welcome to the unveiling of the Student Interests System, a groundbreaking web project meticulously crafted to redefine the management of student information and interests. Developed with precision using C#, HTML, and Bootstrap, this system goes beyond the ordinary, offering a sophisticated yet user-friendly interface..





02

OBJECTIVES

User-Friendly System

Develop a user-friendly system for efficient management of student information and interests

CRUD Operations and User Management

Implement screens for essential CRUD operations on student entities and create a user management system with roles and permissions

Comprehensive Dashboard

Design a comprehensive dashboard with widgets and visualizations to showcase key statistics and insights.

Mandatory Student Addition Screen

Develop a user-friendly system for efficient management of student information and interests

User Activity Logging

Record and log user activities to maintain accountability and monitor system usage.

Dynamic Interest Dropdown

Include a dynamic dropdown for entering student interests, allowing users to add new interests on-the-fly.

Redirection and Navigation

Ensure seamless redirection to the Students List View after successful actions, providing a smooth user experience.

Paginated List View

Implement screens for essential CRUD operations on student entities and create a user management system with roles and permissions.

Creativity and Flexibility

Encourage individual creativity in UI/UX design, providing flexibility in choosing frontend, backend, and database technologies.

Data Visualization

Use dummy data to visually represent statistics on the dashboard, providing an informative and engaging user interface

Documentation and Presentation

Emphasize the importance of proper documentation, including naming conventions and folder structure. Require PowerPoint presentations for effective project showcasing

03
TOOLS AND PLATFORMS

Tools and Platforms

Backend Development

C# MVC (Model-View-Controller) was utilized for robust backend development, ensuring a scalable and organized architecture

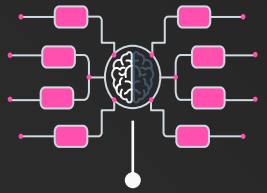
Frontend Technologies

HTML, CSS, and JavaScript were employed to craft an intuitive and responsive user interface for an enhanced user experience.

Database Management

MySQL database was chosen to securely store and manage student data

Tools and Platforms



Cross-Browser Compatibility

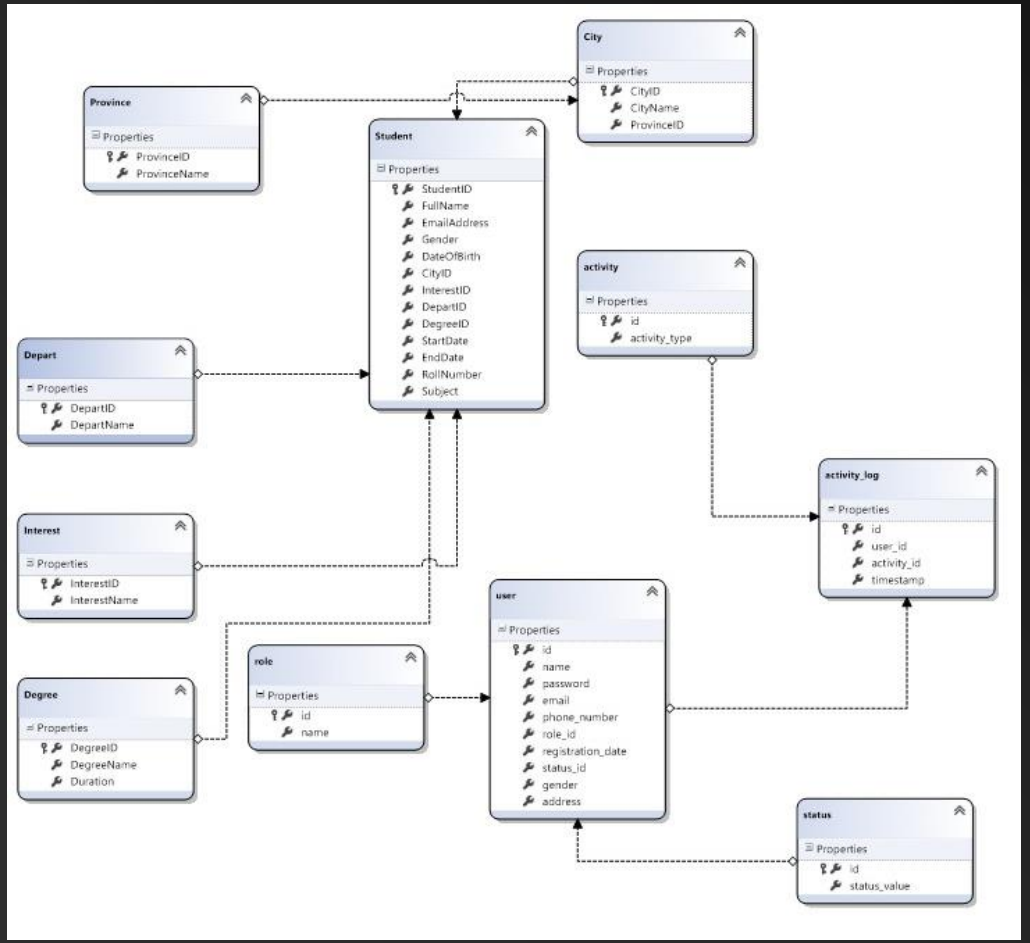
•The website is designed to be accessible through a variety of web browsers, ensuring a broad user reach.

Server Environment

•The entire website operates seamlessly on the XAMPP server, ensuring a reliable and integrated development environment.

04

Entity Relationship Diagram


City
Properties
CityID
CityName
ProvinceID
Province
Properties
ProvinceID
ProvinceName
Student
Properties
StudentID
FullName
EmailAddress
Gender
DateOfBirth
CityID
InterestID
DepartID
DegreeID
StartDate
EndDate
RollNumber
Subject
activity
Properties
id
activity_type
Depart
Properties
DepartID
DepartName
activity_log
Properties
id
user_id
activity_id
timestamp
Interest
Properties
InterestID
InterestName
user
Properties
id
name
password
email
phone_number
role_id
registration_date
status_id
gender
address
role
Properties
id
name
Degree
Properties
DegreeID
DegreeName
Duration
status
Properties
id
status_value

05

Database DESIGN

Proposed Database Tables

STUDENT

ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
StudentID	NUMBER	4	PRIMARY KEY
EmailAddress	NUMBER	8	
Gender	VARCHAR2	20	
DateOfBirth	VARCHAR2	13	UNIQUE
CityID	VARCHAR2	20	UNIQUE
InterestID	NUMBER	8	UNIQUE
DepartmentID	NUMBER	20	UNIQUE
DegreeID	NUMBER	13	UNIQUE
StartDate	VARCHAR2	20	
EndDate	VARCHAR2	20	
RollNumber	NUMBER	13	NOT NULL
Subject	VARCHAR2	13	

DEPARTMENT

ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
DepartmentID	NUMBER	4	PRIMARY KEY
DepartmentName	VARCHAR2	8	Not Null
HeadOFDepartment	VARCHAR2	20	
OfficeLocation	VARCHAR2	13	

DEGREE

ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
DegreeID	NUMBER	4	PRIMARY KEY
DegreeName	VARCHAR2	8	Not Null
Duration	NUMBER	20	
Level	VARCHAR2	13	
TotalCredits	NUMBER	8	Not Null
Description	NUMBER	20	

INTEREST

ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
InterestID	NUMBER	4	PRIMARY KEY
InterestName	VARCHAR2	20	Not Null

CITY

ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
CityID	NUMBER	4	PRIMARY KEY
CityName	VARCHAR2	8	Not Null
ProvinceID	VARCHAR2	20	Foreign KEY

PROVINCE

ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
ProvinceID	NUMBER	4	PRIMARY KEY
ProvinceName	VARCHAR2	8	Not Null

USER

ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
id	NUMBER	4	PRIMARY KEY
name	VARCHAR2	20	Not Null
password	NUMBER	13	Not Null
email	VARCHAR2	8	
phone_number	NUMBER	8	
role_ID	NUMBER	20	UNIQUE
registration_date	VARCHAR2	13	UNIQUE
status_id	NUMBER	20	UNIQUE
gender	VARCHAR2	8	
address	VARCHAR2	20	UNIQUE

ROLE

ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
RoleID	NUMBER	4	PRIMARY KEY
RoleName	VARCHAR2	8	Not Null

STATUS

ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
id	NUMBER	4	PRIMARY KEY
Status_value	VARCHAR2	8	Not Null

ACTIVITY LOG

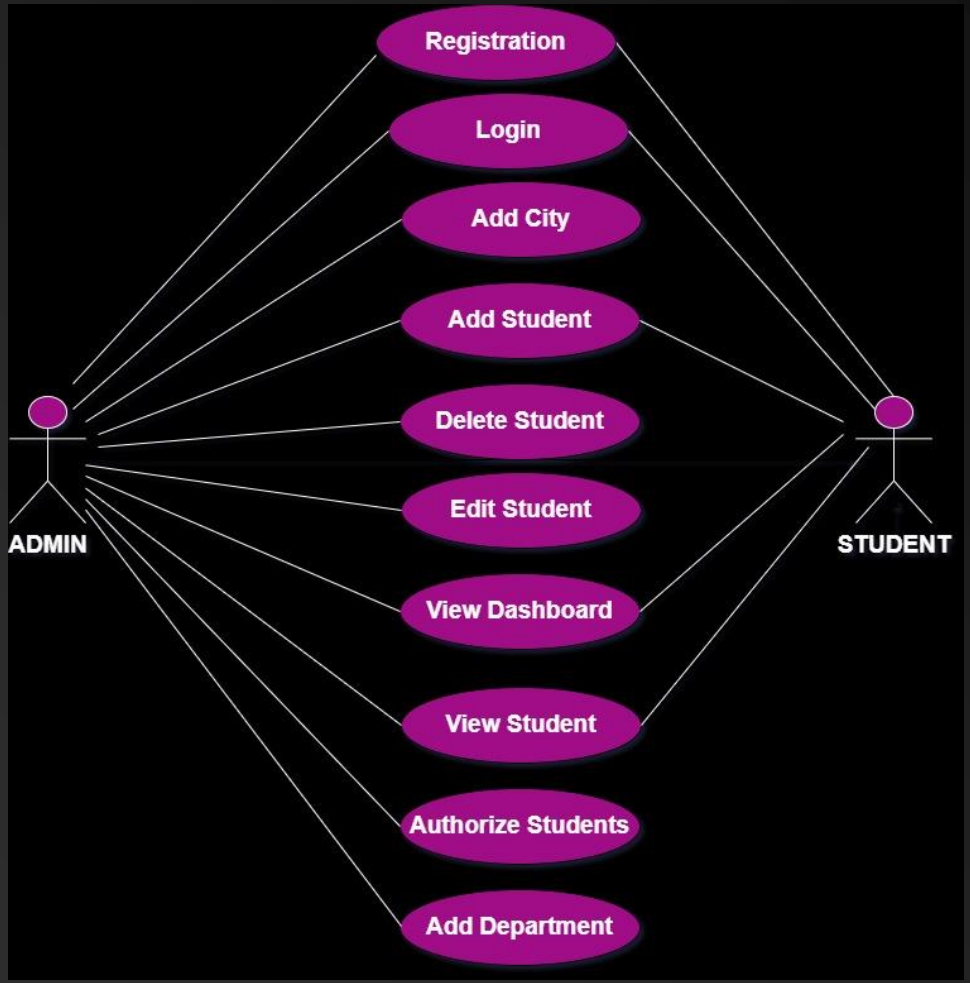
ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
id	NUMBER	4	PRIMARY KEY
User_id	VARCHAR2	8	Not Null
activity_id	NUMBER	8	FOREIGN KEY
timestamp	NUMBER	8	

ACTIVITY

ATTRIBUTES	DATA TYPE	SIZE	CONSTRAINTS
id	NUMBER	4	PRIMARY KEY
activity_type	VARCHAR2	8	Not Null

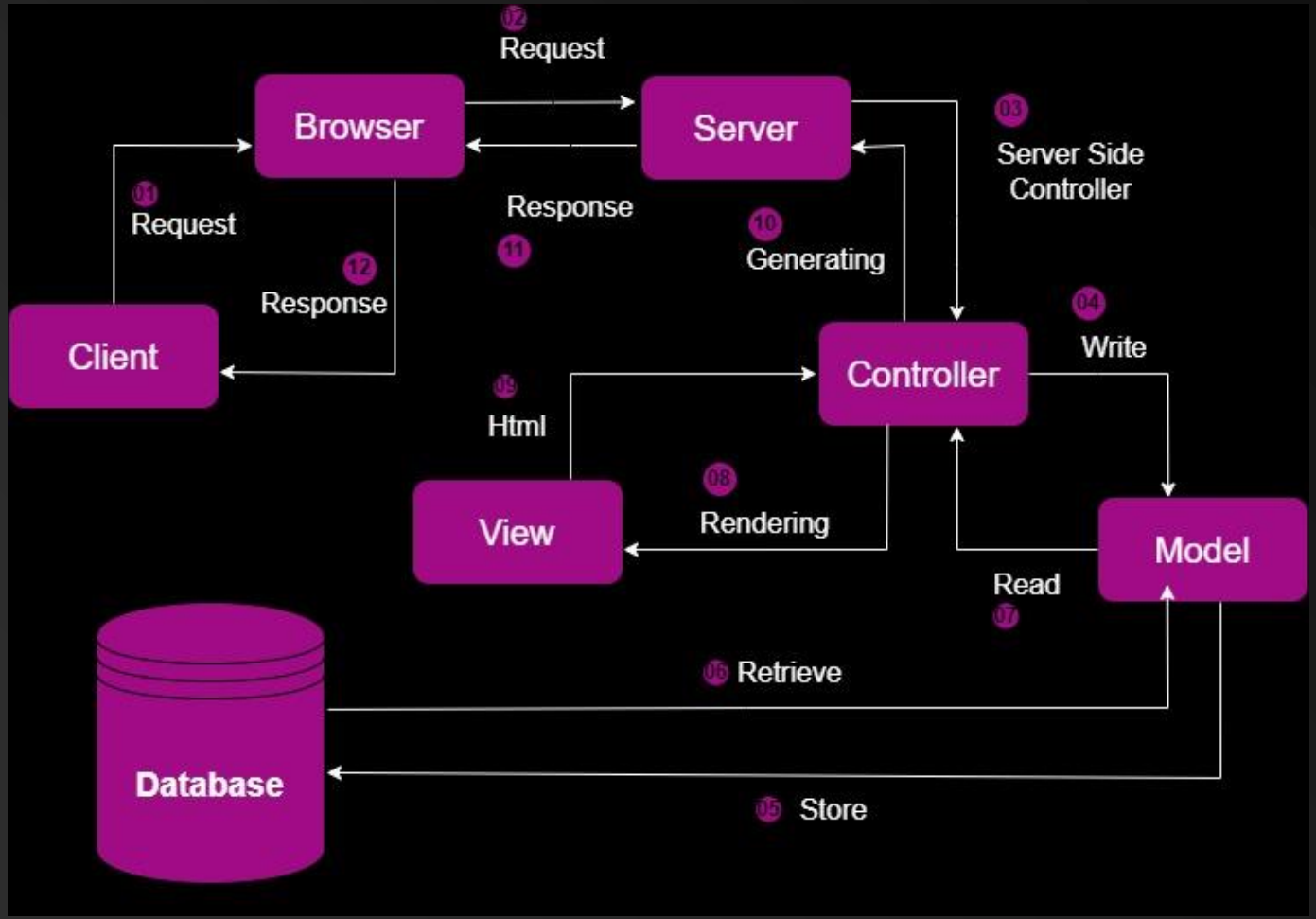
06

USECASE DIAGRAM


Registration
Login
Add City
Add Student
Delete Student
Edit Student
View Dashboard
View Student
Authorize Students
Add Department
ADMIN
STUDENT

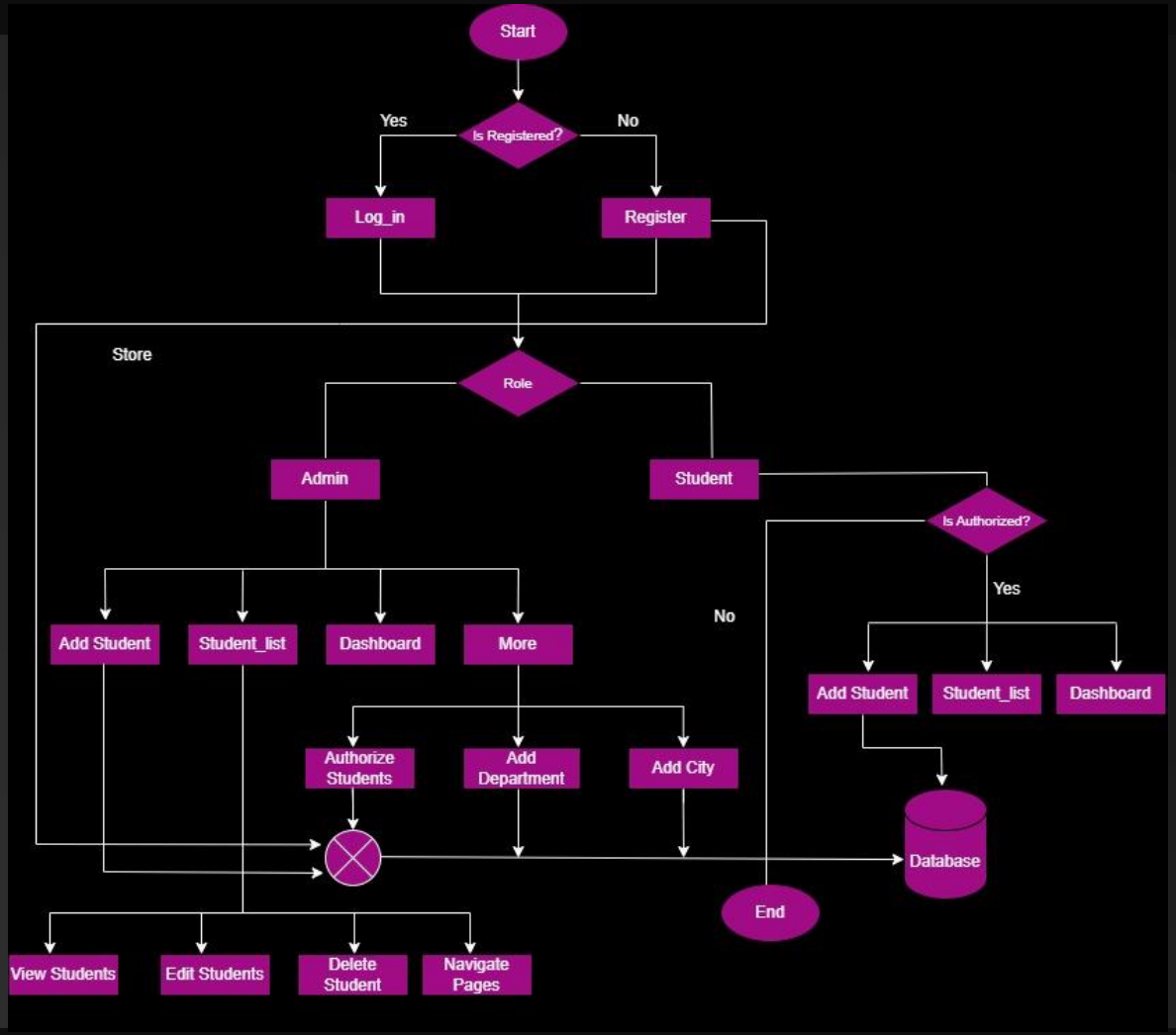
07

DATA FLOW DIAGRAM


02
Request
Browser
Server
03
Server Side
Controller
01
Request
Response
11
10
Generating
12
Response
Client
04
Write
Controller
09
Html
08
View
Rendering
Model
Read
07
06
Retrieve
Database
05
Store

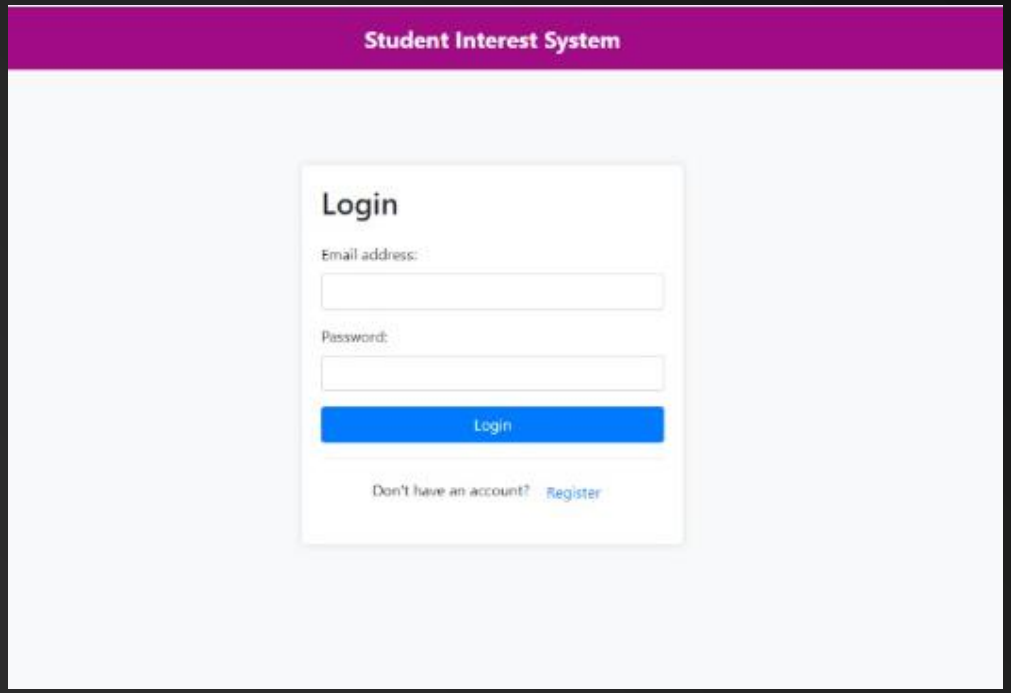
08

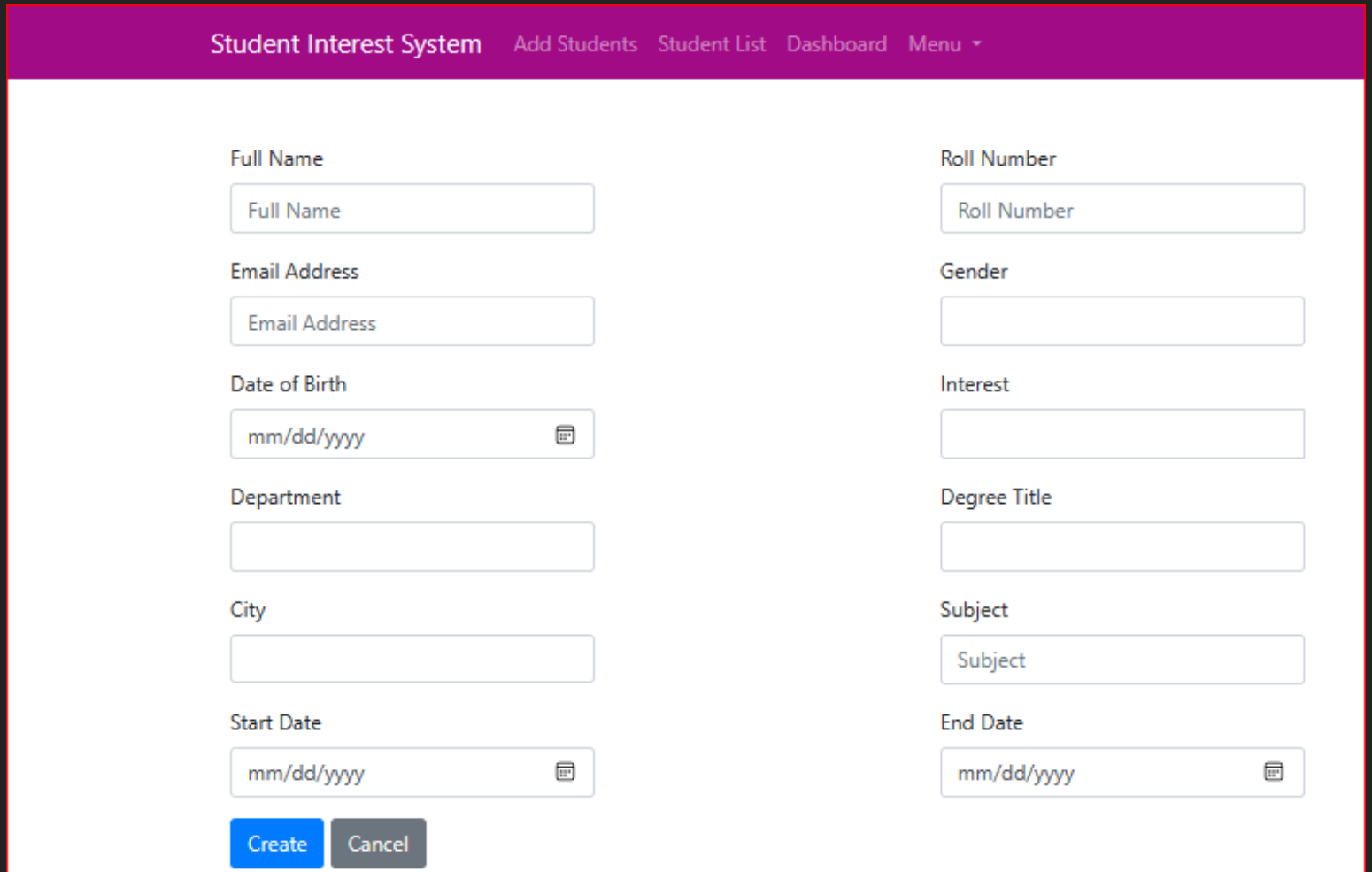
Application FLOW


Start
Is Registered?
Yes
No
Log_in
Register
Store
Role
Admin
Student
Is Authorized?
Yes
No
Add Student
Student_list
Dashboard
More
Add Student
Student_list
Dashboard
Authorize Students
Add Department
Add City
Database
End
View Students
Edit Students
Delete Student
Navigate Pages

9

SCREENSHOTS


Student Interest System
Login
Email address:
Password:
Login
Don't have an account? Register


Student Interest System
Add Students
Student List
Dashboard
Menu
Full Name
Full Name
Roll Number
Roll Number
Email Address
Email Address
Gender
Date of Birth
mm/dd/yyyy
Interest
Department
Degree Title
City
Subject
Subject
Start Date
mm/dd/yyyy
End Date
mm/dd/yyyy
Create
Cancel

Full Name

Full Name

Email Address

Email Address

Date of Birth

mm/dd/yyyy

Department

City

Start Date

mm/dd/yyyy

Create Cancel

Roll Number

Roll Number

Gender

Interest

Select an interest

Enter custom interest

Select an interest
Programming
Data Science
Electronics
Marketing
Psychology
test1
test12
test123
test3
test4
test5
ali
ok
df
DF
DF
df
test11

Full Name

Full Name

Email Address

Email Address

Date of Birth

mm/dd/yyyy

December 2023

Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Clear Today

Create Cancel

Roll Number

Roll Number

Gender

Interest

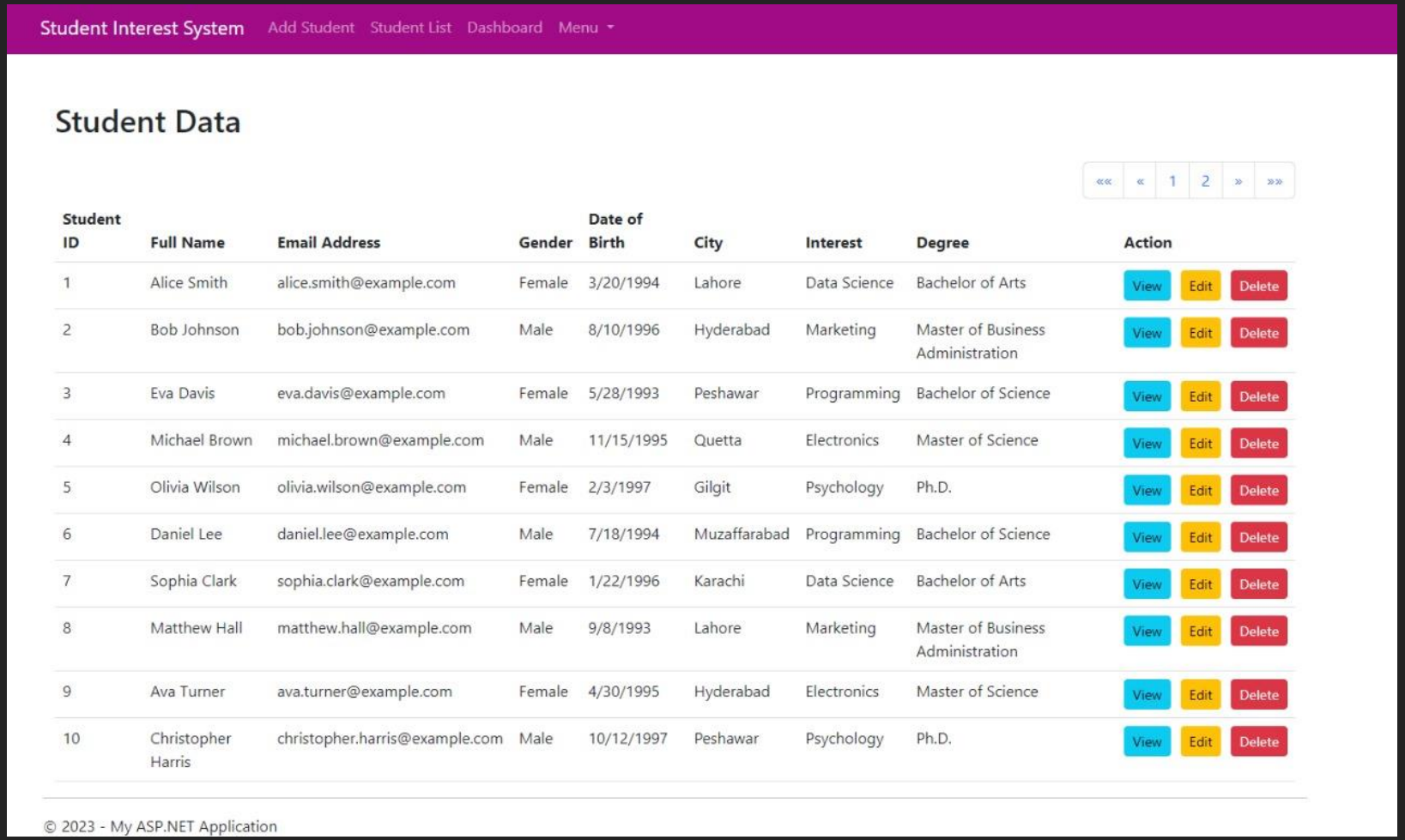
Degree Title

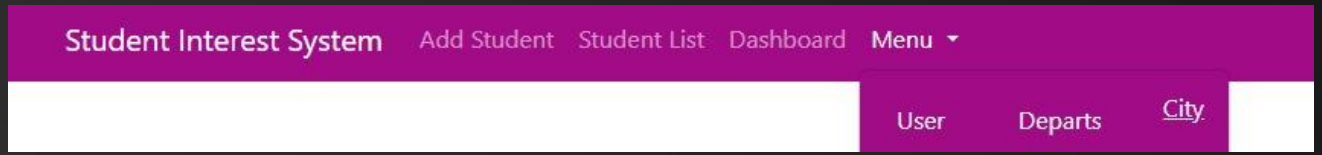
Subject

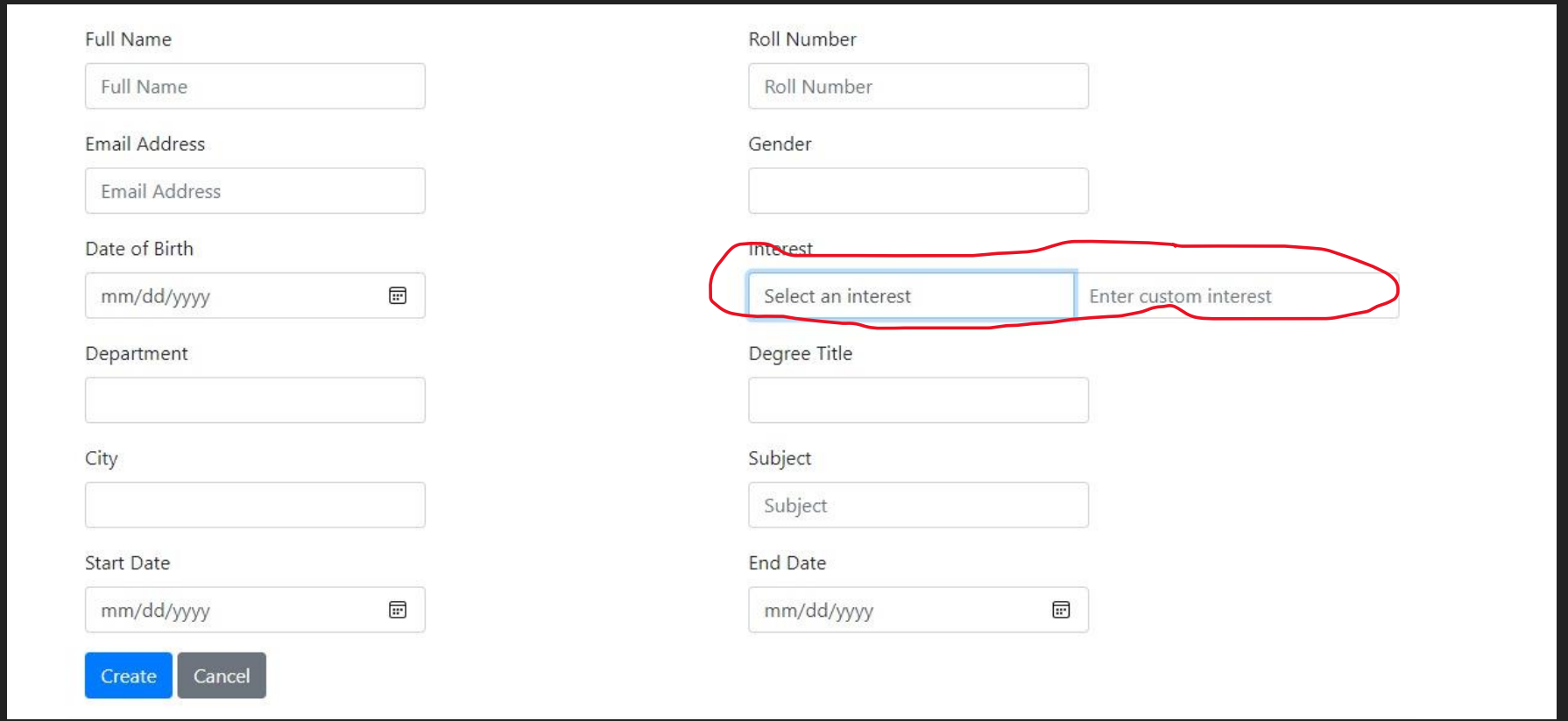
Subject

End Date

mm/dd/yyyy


Student Interest System
Add Student
Student List
Dashboard
Menu
Student Data
«« « 1 2 » »»
Student ID
Full Name
Email Address
Gender
Date of Birth
City
Interest
Degree
Action
1 Alice Smith alice.smith@example.com Female 3/20/1994 Lahore Data Science Bachelor of Arts View Edit Delete
2 Bob Johnson bob.johnson@example.com Male 8/10/1996 Hyderabad Marketing Master of Business Administration View Edit Delete
3 Eva Davis eva.davis@example.com Female 5/28/1993 Peshawar Programming Bachelor of Science View Edit Delete
4 Michael Brown michael.brown@example.com Male 11/15/1995 Quetta Electronics Master of Science View Edit Delete
5 Olivia Wilson olivia.wilson@example.com Female 2/3/1997 Gilgit Psychology Ph.D. View Edit Delete
6 Daniel Lee daniel.lee@example.com Male 7/18/1994 Muzaffarabad Programming Bachelor of Science View Edit Delete
7 Sophia Clark sophia.clark@example.com Female 1/22/1996 Karachi Data Science Bachelor of Arts View Edit Delete
8 Matthew Hall matthew.hall@example.com Male 9/8/1993 Lahore Marketing Master of Business Administration View Edit Delete
9 Ava Turner ava.turner@example.com Female 4/30/1995 Hyderabad Electronics Master of Science View Edit Delete
10 Christopher Harris christopher.harris@example.com Male 10/12/1997 Peshawar Psychology Ph.D. View Edit Delete
© 2023 - My ASP.NET Application


Student Interest System
Add Student
Student List
Dashboard
Menu
User
Departs
City


Full Name
Full Name
Email Address
Email Address
Date of Birth
mm/dd/yyyy
Department
City
Start Date
mm/dd/yyyy
Create
Cancel
Roll Number
Roll Number
Gender
Interest
Select an interest
Enter custom interest
Degree Title
Subject
Subject
End Date
mm/dd/yyyy

Student Status

Study Status	Count
Studying	8
Recently enrolled	1
About to graduate	3
Graduated	0

Most Active Hours

Hour	Count
9 AM	20
10 AM	15

Least Active Hours

Hour	Count
1 PM	5
2 PM	8

Dead Hours

Hour	Count
3 AM	0
4 AM	0

Student Interest System Add Student Student List Dashboard Menu

Department Name:

Head of Department:

Office Location:

Add Department

Department ID	Department Name	Head of Department	Office Location
1	Computer Science	ali	v
2	Electrical Engineering	ahemd	v
3	Mechanical Engineering	k	v
4	Business Administration	k	k
5	Psychology	k	k
6	computer scince	hun	kdf

City and Provinces

Add City

City Name

Province

Sindh

Add City

Add Province

Province Name

Add Province

City List

City ID	City Name	Province Name	Action
12	Karachi	Sindh	Delete
13	Lahore	Punjab	Delete
14	Hyderabad	Sindh	Delete
15	Peshawar	Khyber Pakhtunkhwa	Delete
16	Quetta	Balochistan	Delete
17	Gilgit	Gilgit-Baltistan	Delete
18	Muzaffarabad	Azad Jammu and Kashmir	Delete

z

Province List

Province ID	Province Name	Action
2	Sindh	Delete
3	Punjab	Delete
4	Sindh	Delete
5	Khyber Pakhtunkhwa	Delete
6	Balochistan	Delete
7	Gilgit-Baltistan	Delete

Top 5 Interests

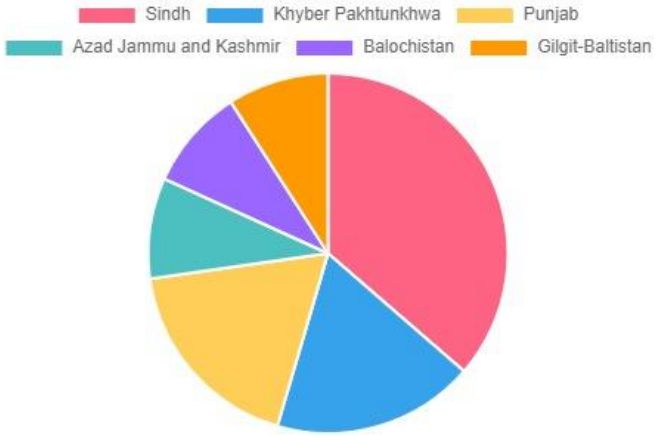
- Programming
- Psychology
- Marketing
- Electronics
- Data Science

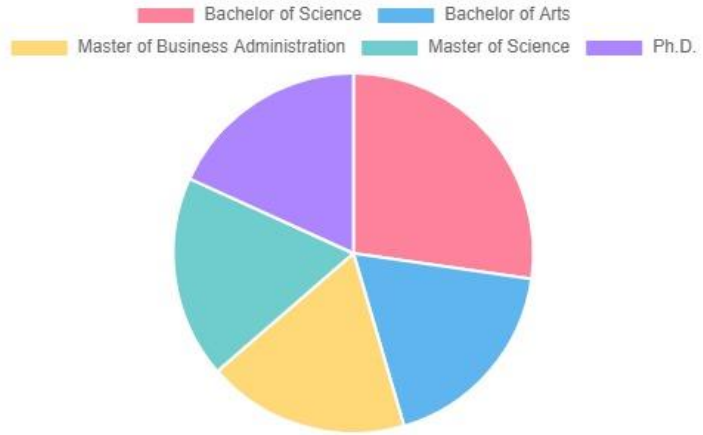
Bottom 5 Interests

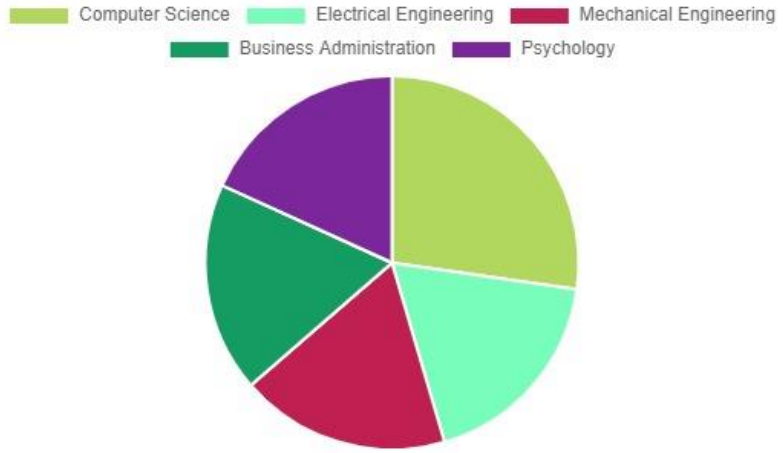
- Psychology
- Marketing
- Electronics
- Data Science
- Programming

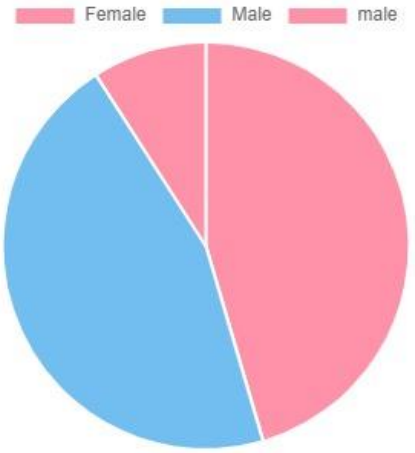
Total Interests

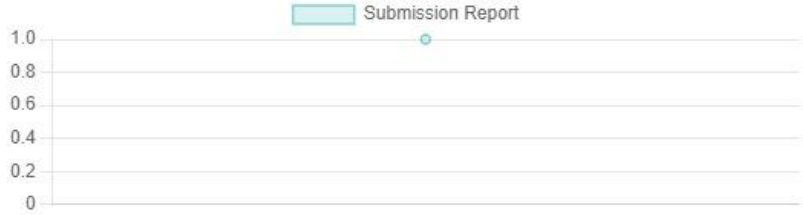
19

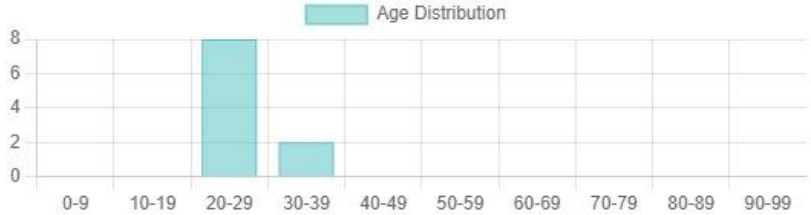





Computer Science
Electrical Engineering
Mechanical Engineering
Business Administration
Psychology


Female
Male
male

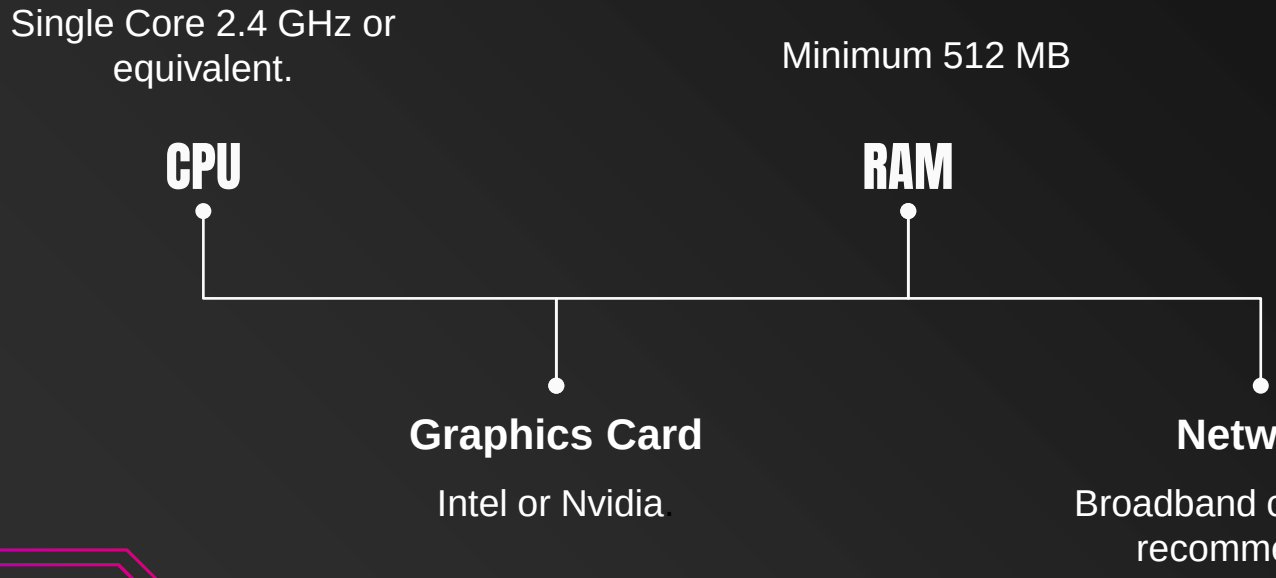

Submission Report
1.0
0.8
0.6
0.4
0.2
0


Age Distribution
8
6
4
2
0
0-9
10-19
20-29
30-39
40-49
50-59
60-69
70-79
80-89
90-99

10

HARDWARE AND SOFTWARE REQUIREMENTS

Hardware Requirements



Hardware Requirements

Hard Drive

Minimum 5 Gigabytes of available space

Processor

Pentium or equivalent

Operating System

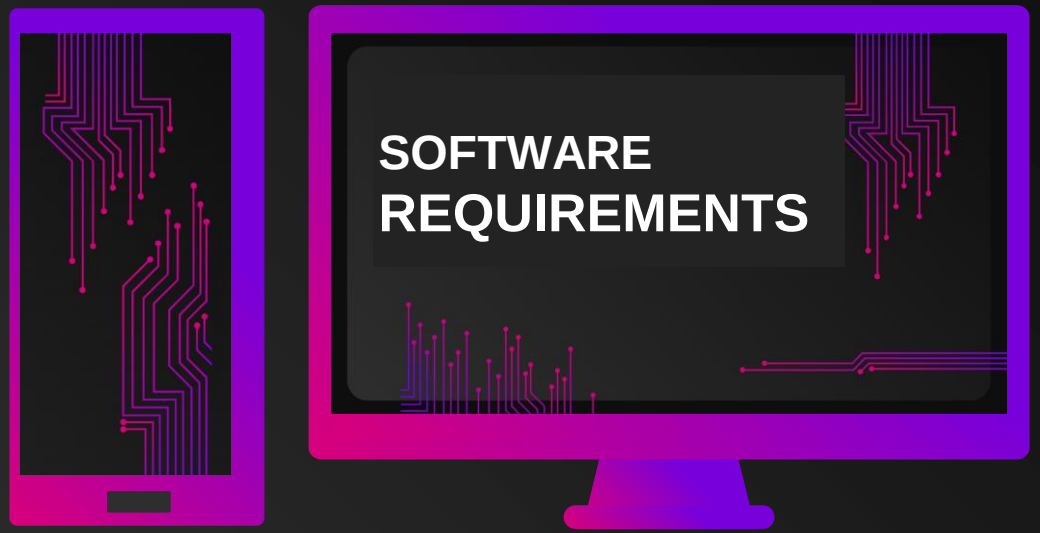
Windows (XP, Vista, 7, 8, 10), Mac OS, Linux, Unix.

Internet Connection

Internet connection with good speed.

Web Browsers

Most recent version of Google Chrome, Firefox, Internet Explorer, or Safari.



11

CONCLUSION

11

CONCLUSION

In summary, this Student Interests System stands as a testament to effective student data management and insightful analytics. Leveraging C# MVC, HTML, CSS, and JavaScript, the project delivers a user-friendly interface, dynamic dropdowns, paginated views, and a comprehensive dashboard. This initiative represents a harmonious blend of functionality and aesthetics, ensuring an efficient and engaging platform for both administrators and users.

Thanks!

Do you have any questions?

bcsf20m039@pucit.edu.pk
03174836661