

VYSYA COLLEGE OF ARTS AND SCIENCE

(AFFILIATED TO PERIYAR UNIVERSITY)

SALEM - 636103

A MINI PROJECT

On

DYNAMIC SEATING ALLOCATION SYSTEM

BACHELOR OF COMPUTER APPLICATIONS

In

DEPARTMENT OF COMPUTER SCIENCE

BY

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[C21UG131CAP041]

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BATCH 2021-24

CONTENTS

- SYNOPSIS
- EXISTING SYSTEM
- PROPOSED SYSTEM
- **MODULES**
- **DESCRIPTION**
- 06 FRONTEND & BACKEND
- DATA FLOW DIAGRAM
- 08 OUTPUT
- **CONCLUSION**
- FUTURE ENHANCEMENT

SYNOPSIS

The Dynamic Seating Allocation System is a tool to help college administrators organize where students sit in classrooms during examination times. By automating this task, it saves time for administrators and ensures students are seated optimally. It's designed with user-friendly interfaces to make it easy to us. It's made to be really easy to use, with simple screens and buttons that anyone can understand.

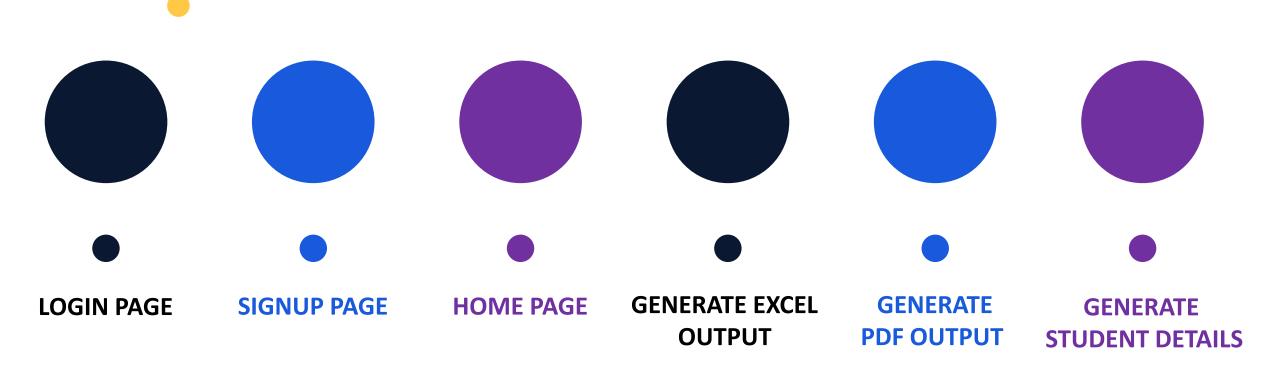
EXISTING SYSTEM

Currently, our college uses Excel along with VBA macros for seating arrangements. This means we enter student info, room details, and seating preferences into Excel sheets. Then, VBA macros help automate some parts of the seating process. Operating and maintaining the existing system requires a certain level of technical expertise, particularly in VBA programming.

PROPOSED SYSTEM

The proposed system is a modern software made for colleges to manage seating arrangements. It's easy to use and meant to improve how colleges handle seating. Instead of the old way, this new system is much simpler and with extra features. It includes a simple interface where you can enter information easily. Plus, it creates seating plans in PDF format, so you can view and share them easily.

MODULES



LOGIN PAGE

- Administrators need to enter their username and password in the designated fields provided on the screen. Once they've filled in their details, they can click the "Sign in" button.
- ➤ If administrators make a mistake and enter the wrong username or password, the system will show them an error message to let them know and ask them to try again with the correct details.

SIGNUP PAGE

- ➤ It provides a user-friendly interface where individuals can input their desired username and password.
- ➤ Valid user credentials are securely stored in a text file for future authentication. Once the registration process is successfully completed, users receive confirmation through a custom information dialog.

HOME PAGE

- ➤ It offers a user-friendly interface where administrators can define various parameters related to each exam room, such as room number, capacity, and seating arrangement.
- Administrators can input details such as the room number and the maximum capacity of students allowed in each room.
- Additionally, they can specify the layout of the seating arrangement, including the number of rows and columns in the room.

GENERATE EXCEL OUTPUT

This module takes the allocated seats data and organizes it into an Excel file format (.xlsx), making it easy to manage and distribute

The process begins by gathering the allocated seating information from the system's Excel Sheet

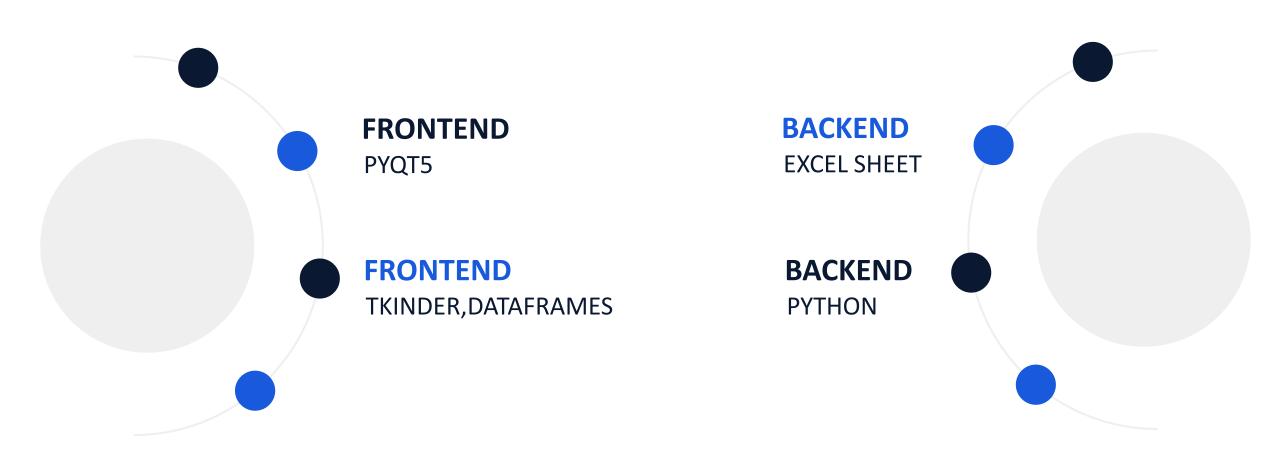
GENERATE PDF OUTPUT

- ➤ This module transforms the allocated seating data into PDF documents, which are easy to distribute and view across different devices.
- Each seat is labeled with the student's unique identifier or registration number to indicate their allocated position.
- The PDF output may include other relevant details such as the room number, exam date, and supervisor instructions.

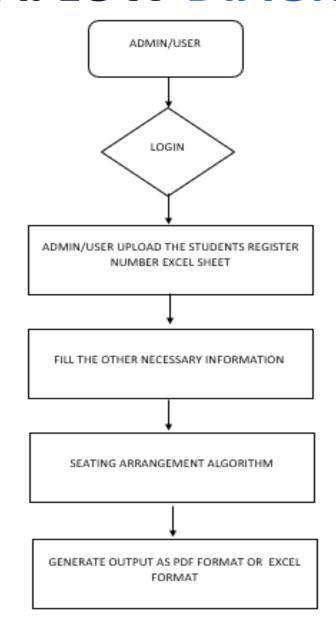
GENERATE STUDENT DETAILS

- This module generates comprehensive reports detailing the distribution of students across various departments and rooms. It provides a breakdown of the number of students from each department assigned to each room, spanning from Room 1 to Room N.
- Additionally, the module includes the total count of students allocated to each room, offering administrators a clear overview of student occupancy.

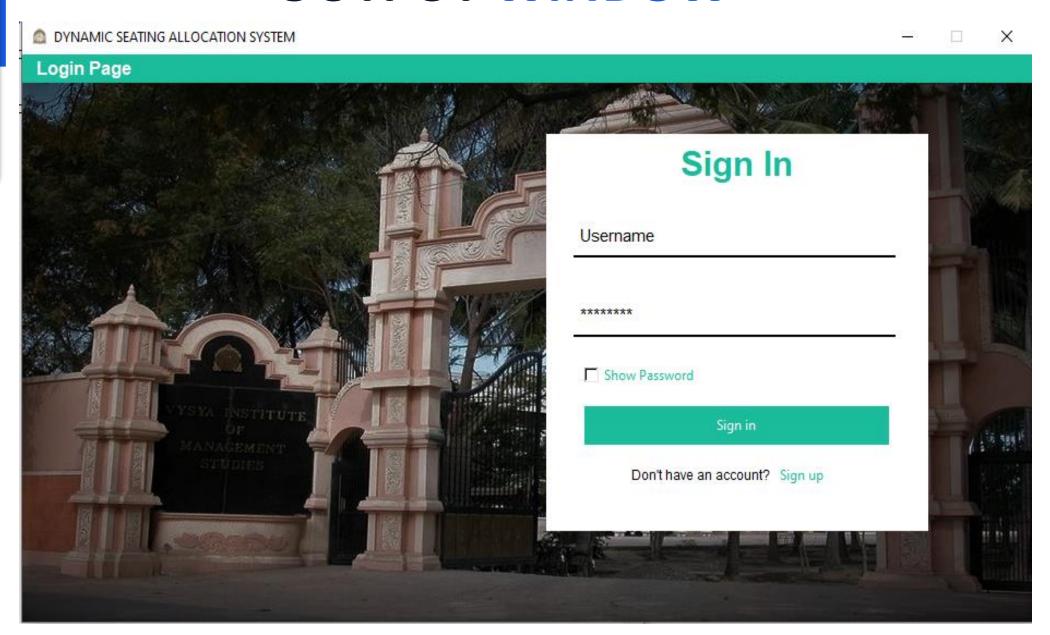
FRONTEND & BACKEND



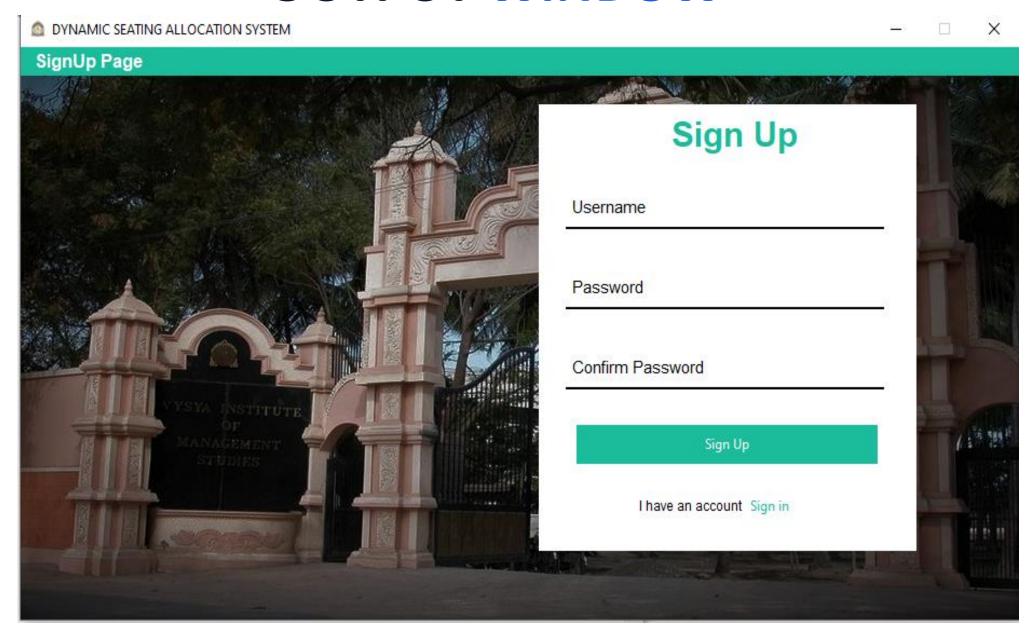
DATAFLOW DIAGRAM



LOGIN PAGE



SIGNUP PAGE



HOME PAGE

	Classroom Generator	
Select Excel file:		
	Browse	
Name of the College:		
Vysya College of arts and science		
Students per Class:		
Rows:		
Columns:		
Date of Examination:		
3/23/2024		
Name of Examination:		
Periyar University Examination		
Session:		
FN		
Generate Excel Output	Generate PDF Output	Generate Student Details

EXCEL OUTPUT ROOM 1

	В	C	D	E	F	G	Н		J	K	L
		VY	SYA COLLEGE OF ART	S AND SCIENCE							
Date: Friday, March 1, 2024	ate: Friday, March 1, 2024 Session: FN										
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8				
C21UG131CAP001	C21UG131BB128	C21UG131CAP002	C21UG131BB127	C21UG131CAP003	C21UG131BB126	C21UG131CAP004	C21UG131BB125				
C21UG131CAP005	C21UG131BB124	C21UG131CAP006	C21UG131BB123	C21UG131CAP007	C21UG131BB122	C21UG131CAP008	C21UG131BB121				
C21UG131CAP009			C21UG131BB119	C21UG131CAP011	C21UG131BB118	C21UG131CAP012	C21UG131BB117				
C21UG131CAP013	C21UG131BB116	C21UG131CAP014	C21UG131BB115	C21UG131CAP015	C21UG131BB114	C21UG131CAP016	C21UG131BB113				
C21UG131CAP017	C21UG131BB112	C21UG131CAP018	C21UG131BB111	C21UG131CAP019	C21UG131BB110	C21UG131CAP020	C21UG131BB109				
Hall Supervisor Signature							Principal Signature				
	Column 1 C21UG131CAP001 C21UG131CAP005 C21UG131CAP009 C21UG131CAP013 C21UG131CAP017	Column 1 Column 2 C21UG131CAP001 C21UG131BB128 C21UG131CAP005 C21UG131BB124 C21UG131CAP009 C21UG131BB120 C21UG131CAP013 C21UG131BB116 C21UG131CAP017 C21UG131BB112	Column 1 Column 2 Column 3 C21UG131CAP001 C21UG131BB128 C21UG131CAP002 C21UG131CAP009 C21UG131BB120 C21UG131CAP010 C21UG131CAP013 C21UG131BB116 C21UG131CAP014 C21UG131CAP017 C21UG131BB112 C21UG131CAP018	Periyar University E Oate: Friday, March 1, 2024 Column 1 C21UG131CAP001 C21UG131BB128 C21UG131CAP005 C21UG131BB124 C21UG131CAP006 C21UG131BB120 C21UG131CAP009 C21UG131BB120 C21UG131CAP010 C21UG131BB110 C21UG131CAP013 C21UG131CAP013 C21UG131CAP014 C21UG131BB115 C21UG131CAP017 C21UG131BB111 C21UG131CAP018 C21UG131BB111	Column 1 Column 2 Column 3 Column 4 Column 5 C21UG131CAP001 C21UG131BB128 C21UG131CAP002 C21UG131BB127 C21UG131CAP003 C21UG131CAP005 C21UG131BB124 C21UG131CAP006 C21UG131BB123 C21UG131CAP007 C21UG131CAP009 C21UG131BB120 C21UG131CAP010 C21UG131BB119 C21UG131CAP011 C21UG131CAP013 C21UG131BB116 C21UG131CAP014 C21UG131BB115 C21UG131CAP015 C21UG131CAP017 C21UG131BB112 C21UG131CAP018 C21UG131BB111 C21UG131CAP019	Periyar University Examination Oate: Friday, March 1, 2024 Column 1 Column 2 Column 3 Column 4 Column 5 Column 6 C21UG131CAP001 C21UG131BB128 C21UG131CAP002 C21UG131BB127 C21UG131CAP003 C21UG131BB126 C21UG131CAP005 C21UG131BB124 C21UG131CAP006 C21UG131BB123 C21UG131CAP007 C21UG131BB122 C21UG131CAP009 C21UG131BB120 C21UG131CAP010 C21UG131BB119 C21UG131CAP011 C21UG131BB118 C21UG131CAP013 C21UG131BB116 C21UG131CAP014 C21UG131BB115 C21UG131CAP015 C21UG131BB114 C21UG131CAP017 C21UG131BB112 C21UG131CAP018 C21UG131BB111 C21UG131CAP019 C21UG131BB110	Periyar University Examination Oate: Friday, March 1, 2024 Column 1 Column 2 Column 3 Column 4 Column 5 Column 6 Column 7 C21UG131CAP001 C21UG131BB128 C21UG131CAP002 C21UG131BB127 C21UG131CAP003 C21UG131BB126 C21UG131CAP004 C21UG131CAP005 C21UG131BB124 C21UG131CAP006 C21UG131BB123 C21UG131CAP007 C21UG131BB122 C21UG131CAP008 C21UG131CAP009 C21UG131BB120 C21UG131CAP010 C21UG131BB119 C21UG131CAP011 C21UG131BB118 C21UG131CAP012 C21UG131CAP013 C21UG131BB116 C21UG131CAP014 C21UG131BB115 C21UG131CAP015 C21UG131BB114 C21UG131CAP016 C21UG131CAP017 C21UG131BB112 C21UG131CAP018 C21UG131BB111 C21UG131CAP019 C21UG131BB110 C21UG131CAP020	Periyar University Examination Session: FN Column 1			

EXCEL OUTPUT ROOM 2

А	В	С	D	E	F	G	Н	1	J	K	L
		VYS	SYA COLLEGE OF AR	TS AND SCIENCE							
		EX	AM HALL SEATING	ARRANGEMENT							
			Periyar University	Examination							
Date: Friday, March 1, 2024	1						Session: FN				
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8				
C21UG131CAP021	C21UG131BB108	C21UG131CAP022	C21UG131BB107	C21UG131CAP023	C21UG131BB106	C21UG131CAP024	C21UG131BB105				
C21UG131CAP025	C21UG131BB104	C21UG131CAP026	C21UG131BB103	C21UG131CAP027	C21UG131BB102	C21UG131CAP028	C21UG131BB101				
C21UG131CAP029	C21UG131BB100	C21UG131CAP030	C21UG131BB099	C21UG131CAP031	C21UG131BB098	C21UG131CAP032	C21UG131BB097				
C21UG131CAP033	C21UG131BB096	C21UG131CAP034	C21UG131BB095	C21UG131CAP035	C21UG131BB094	C21UG131CAP036	C21UG131BB093				
C21UG131CAP037	C21UG131BB092	C21UG131CAP038	C21UG131BB091	C21UG131CAP039	C21UG131BB090	C21UG131CAP040	C21UG131BB089				
Hall Supervisor Signature							Principal Signature				



OUTPUT WINDOW

VYSYA COLLEGE OF ARTS AND SCIENCE

EXAM HALL SEATING ARRANGEMENT

Periyar University Examination

ROOM 1

Date: Thursday, March 21, 2024 Session: FN

	Column 1		Column 2		Column 3	Column 4			Column 5		Column 6		Column 7		Column 8
1	C21UG131CAP002	6	C21UG131BB126	11	C21UG131CAP007	16	C21UG131BB121	21	C21UG131CAP012	26	C21UG131BB116	31	C21UG131CAP017	36	C21UG131BB111
2	C21UG131BB128	7	C21UG131CAP005	12	C21UG131BB123	17	C21UG131CAP010	22	C21UG131BB118	27	C21UG131CAP015	32	C21UG131BB113	37	C21UG131CAP020
3	C21UG131CAP003	8	C21UG131BB125	13	C21UG131CAP008	18	C21UG131BB120	23	C21UG131CAP013	28	C21UG131BB115	33	C21UG131CAP018	38	C21UG131BB110
4	C21UG131BB127	9	C21UG131CAP006	14	C21UG131BB122	19	C21UG131CAP011	24	C21UG131BB117	29	C21UG131CAP016	34	C21UG131BB112	39	C21UG131CAP021
5	C21UG131CAP004	10	C21UG131BB124	15	C21UG131CAP009	20	C21UG131BB119	25	C21UG131CAP014	30	C21UG131BB114	35	C21UG131CAP019	40	C21UG131BB109

Hall Supervisor Signature Principal Signature



OUTPUT WINDOW

VYSYA COLLEGE OF ARTS AND SCIENCE

EXAM HALL SEATING ARRANGEMENT

Periyar University Examination

ROOM 2

Column 5

Column 4

Date: Thursday, March 21, 2024

Column 2

Column 3

Column 1

Column 6

Session: FN

Column 8

Column 7

1	C21UG131CAP022	6	C21UG131BB106	11	C21UG131CAP027	16	C21UG131BB101	21	C21UG131CAP032	26	C21UG131BB096	31	C21UG131CAP037	36	C21UG131BB091
2	C21UG131BB108	7	C21UG131CAP025	12	C21UG131BB103	17	C21UG131CAP030	22	C21UG131BB098	27	C21UG131CAP035	32	C21UG131BB093	37	C21UG131CAP040
3	C21UG131CAP023	8	C21UG131BB105	13	C21UG131CAP028	18	C21UG131BB100	23	C21UG131CAP033	28	C21UG131BB095	33	C21UG131CAP038	38	C21UG131BB090
4	C21UG131BB107	9	C21UG131CAP026	14	C21UG131BB102	19	C21UG131CAP031	24	C21UG131BB097	29	C21UG131CAP036	34	C21UG131BB092	39	C21UG131CAP041
5	C21UG131CAP024	10	C21UG131BB104	15	C21UG131CAP029	20	C21UG131BB099	25	C21UG131CAP034	30	C21UG131BB094	35	C21UG131CAP039	40	C21UG131BB089

Hall Supervisor Signature Principal Signature

CONCLUSION

The DYNAMIC SEATING ALLOCATION SYSTEM project was a journey of understanding, planning, and implementation to meet the needs of college administrators effectively. Through meticulous analysis, thoughtful design, and thorough testing, we ensured that the system met its objectives of simplifying exam hall management.

FUTURE ENHANCEMENT

- For future improvements, we can make the DYNAMIC SEATING ALLOCATION SYSTEM better in a few ways. One idea is exploring features such as dynamic seating allocation algorithms to optimize space utilization and accommodate varying exam schedules efficiently
- Moreover, integrating a notification system to alert students about their allocated seats and exam details in real-time could enhance user experience and reduce administrative workload

I Thank You I