Bus seat allocation Web App

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Seat no	379
Project ID	19
Problem Statement	Bus Seat Allocation for Day Scholars in College

Bus Seating Management App Overview

1. Purpose:

This document outlines the app for bus seating management for day scholar students. It details the system's purpose, features, user interfaces, and operational constraints.

2. Scope of the Project:

The app facilitates bus registration, seat booking, attendance tracking, and communication about bus routes and timings.
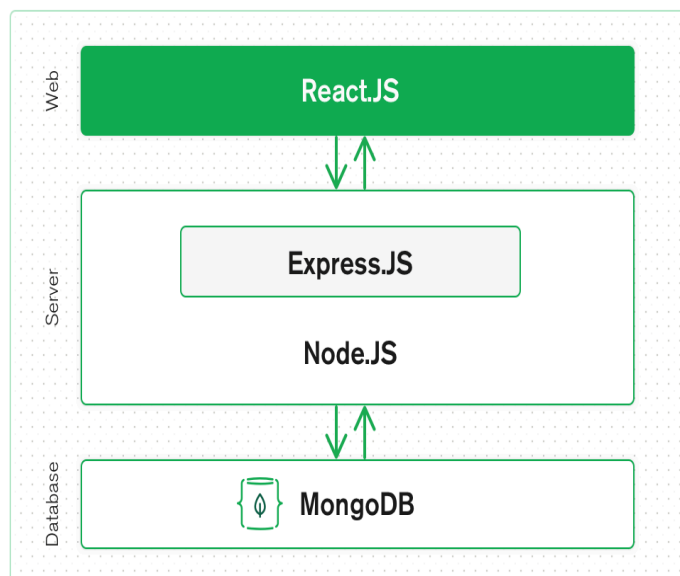
3. Features:

- **Registration & Login**: Students create accounts or log in.
- **Bus Seating Application**: Students submit personal and seating preferences.
- **Application Status**: View seat allocation and attendance records.
- **Bus Route Information**: Notifications about bus routes via email/SMS.
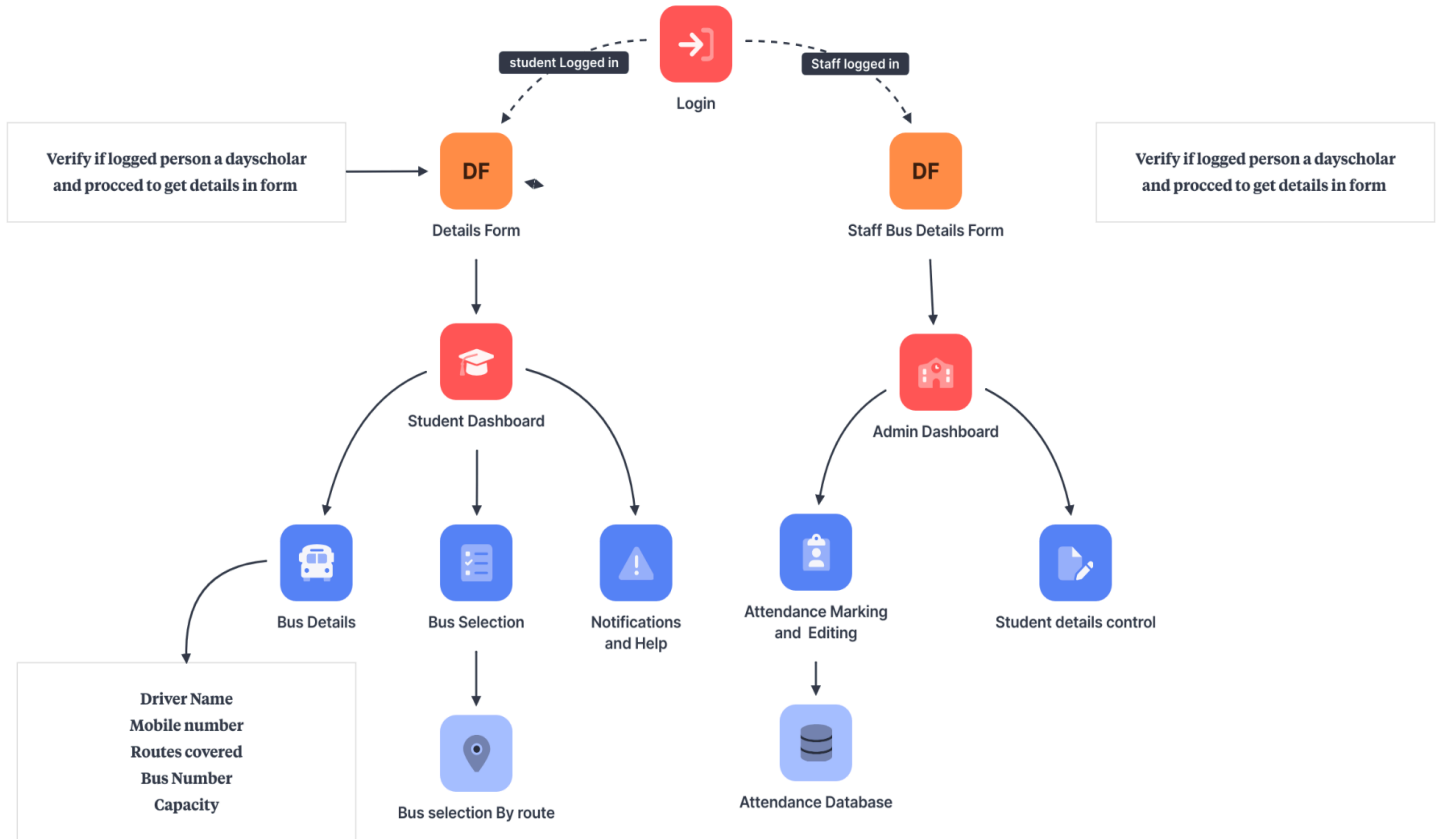
- **Admin Access**: Admins control seat allocation, attendance records, and bus details.
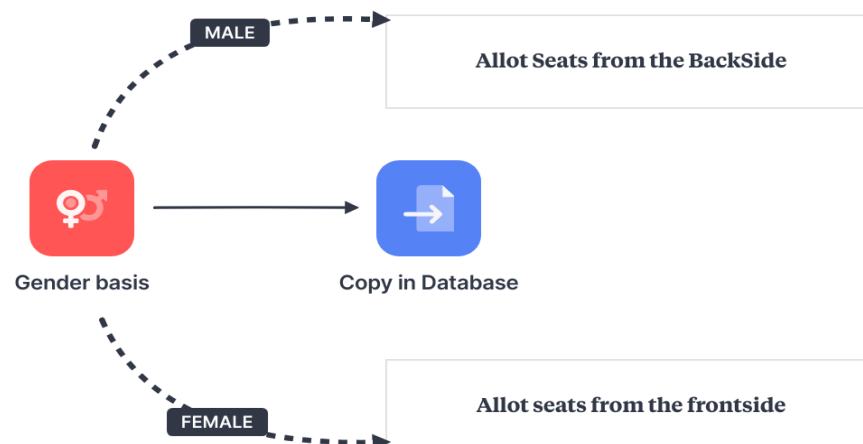
STACK : (MERN STACK)

Layer	Technology
Front End	React
Backend	Node.js, Express
Database	MongoDB

WORKFLOW DETAILED VISUAL MAP

Login

student Logged in

Staff logged in

Verify if logged person a dayscholar and procced to get details in form

DF
Details Form

DF
Staff Bus Details Form

Verify if logged person a dayscholar and procced to get details in form

Student Dashboard

Admin Dashboard

Bus Details

Bus Selection

Notifications and Help

Attendance Marking and Editing

Student details control

Driver Name
Mobile number
Routes covered
Bus Number
Capacity

Bus selection By route

Attendance Database

Seat allocation :

MALE

Allot Seats from the BackSide

Gender basis

Copy in Database

FEMALE

Allot seats from the frontside

FRONTEND PROTOTYPE

Bus seat Allocator

Search and choose the bus by your designated stop and landmark for better allotment

Your Dropping Point - Athani   🚌   🛋 3 Buses Available

List of Buses Passing through Your dropping Point

BUS NO - 5	Route	Bit - Elur - Bharathi nagar - varpalla - Athani - Anthiyur
BUS NO - 6	Route	Bit - Elur - varpalla - Athani - Anthiyur
BUS NO - 21	Route	Bit - Elur - Bahngala pudur - varpalla - Athani - Anthiyur

Seats Available   **Bus Number**

23   5

Stop Name *

Enter your stop name

Passenger Name*

Enter your name

Allocate Seat

Terms and Conditions   Cancellation Policy

Prasath
prasath@bitsathy.ac.in

🔍 Search for bus, students, etc...

📊 Dashboard

ANALYTICS
📊 Attendance

DETAILS LOG
👤 Admin
👥 students

OTHERS
📄 Reports

🌙 Dark Mode

⚙ Settings
↩ Log Out

Recent Sales

#	Student Id	Student Name	Bus No	Status
01	7376222ag133	Lohit R	2	Present
02	7376222al133	Boikshih o	25	Present
03	7376222am133	Jenny	11	Absent
04	7376221cs133	Robert	7	Present
04	7376222it133	Jacob	29	Absent

← Previous   1 2 3 ... 8 9 10   Next →

Filter 🔽

Calendar   April 2023 ⌄

Mo	Tu	We	Th	Fri	Sa	Su
29	30	31	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	1	2
3	4	5	6	7	8	9

BACKEND DATA-STRUCT

Table Name	Fields
Buses	Bus Number, Route, Seats
Students	Student Name, ID, Location, Contact Information
Bus Allocations	Bus Number, Student ID, Seat Number
Admins	Admin ID, Password