

Creation of an Application for school Management

INDRODUCTION

Overview :

A CRM (Customer Relationship Management) application for a school or college is a software solution designed to help educational institutions manage interactions with current and potential students, as well as other stakeholders such as parents, alumni, and donors. The purpose of this application is to streamline communication, improve the overall student experience, and help institutions make data-driven decisions.

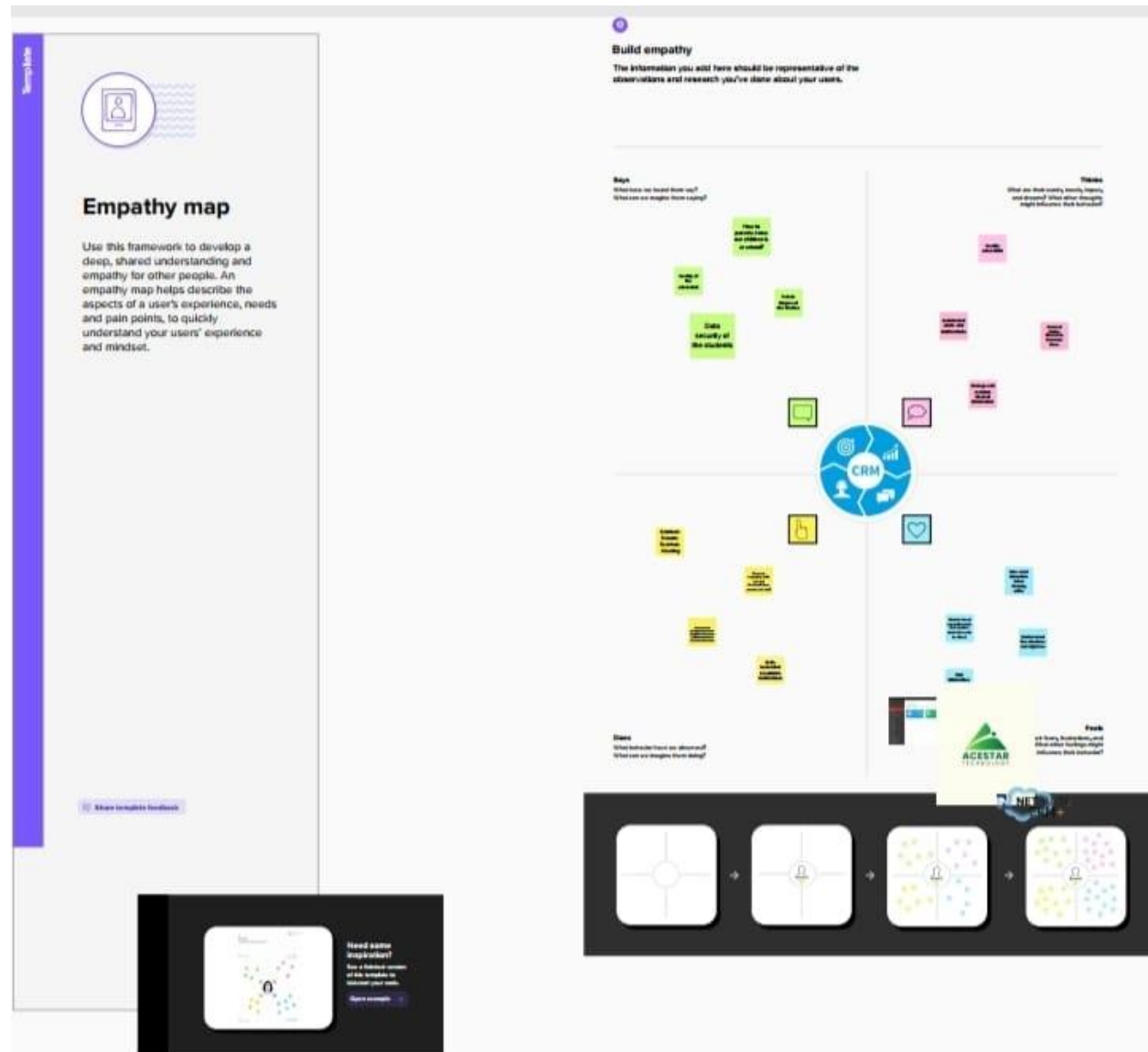
Some of the key features of a CRM application for schools and colleges may include student information management, admissions management, event management, fundraising management, and alumni relations management. By using a CRM application, educational institutions can track student progress, automate communications, and provide personalized experiences for students and other stakeholders.

Purpose

- ❖ The purpose of creating an application for school management is to provide an efficient and organized system for managing various administrative and academic tasks in a school setting. This application can streamline many processes such as attendance tracking, grading, scheduling, student information management, communication between teachers, students, and parents, and much more.
- ❖ By using a school management application, schools can reduce manual paperwork, enhance communication, and save time and effort. It can also provide real-time updates to parents and students about attendance, grades, and other school-related information.
- ❖ Moreover, such an application can help school administrators to manage resources effectively, such as tracking inventory and supplies, scheduling maintenance tasks, and managing budgets. Overall, a school management application can improve the efficiency and productivity of the school staff, students, and parents, while enhancing the educational experience for students..

Problem Definition & Design Thinking

Empathy Map



Ideation & Brainstorming Map

[illegible]

RESULT

Data Model :

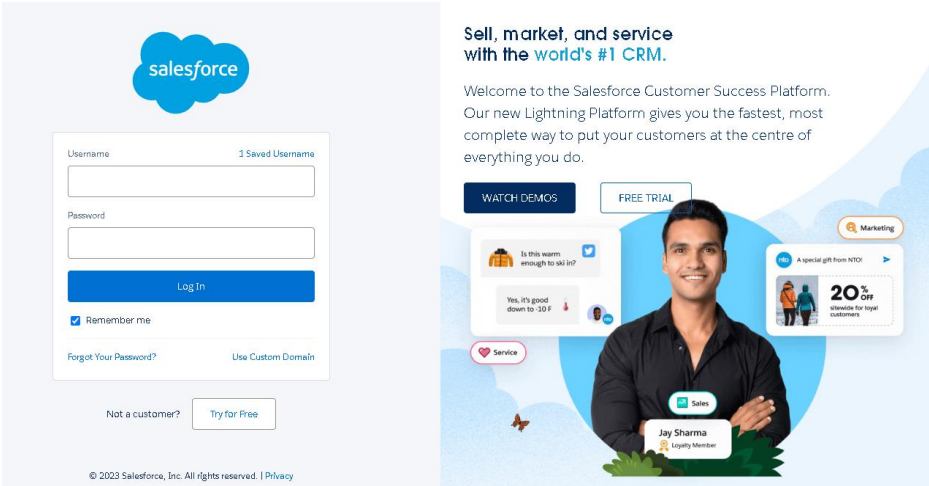
Object name	Field in the object	
School	Field lable	Data type
	School Name	Text
	School wepsite	URL
	Phone number	Phone
	State	Text Area
	Diistrict	Text Area
Parents	Parent name	Text
	Parent address	Text area

Students	Student name	Text
	result	Picklist
	Phone number	phone
	Parent number	phone
	Parent adress	Text area
	Number of students	Roll-up-Summary
	class	Number

Activity & ScreenShot

Milestone 1:Creation Salesforce Org:

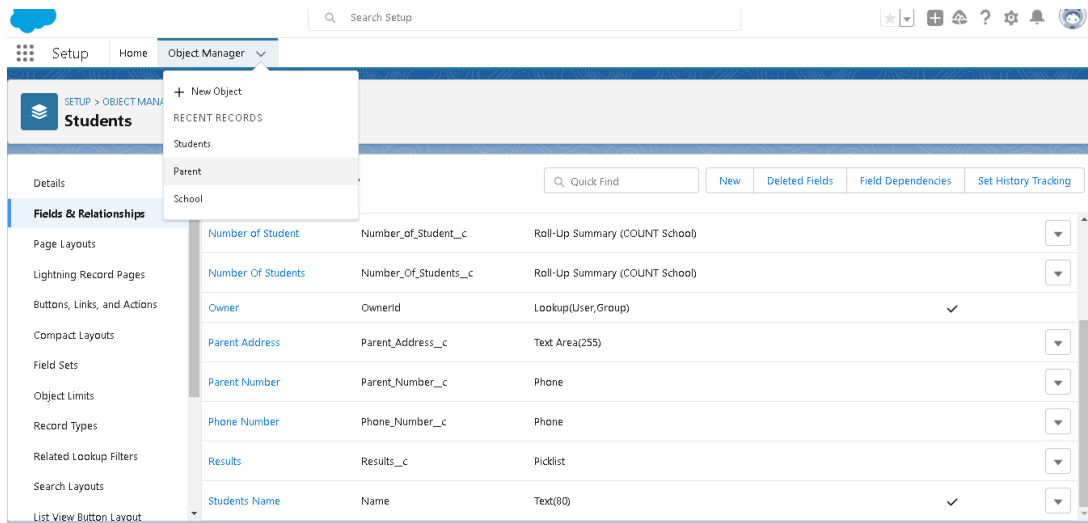
Activity 1:
Creating Developer Account
Creating a developer org in salesforce.



Milestone-2:Object

Activity 1 and 2 and 3: To Create an object:

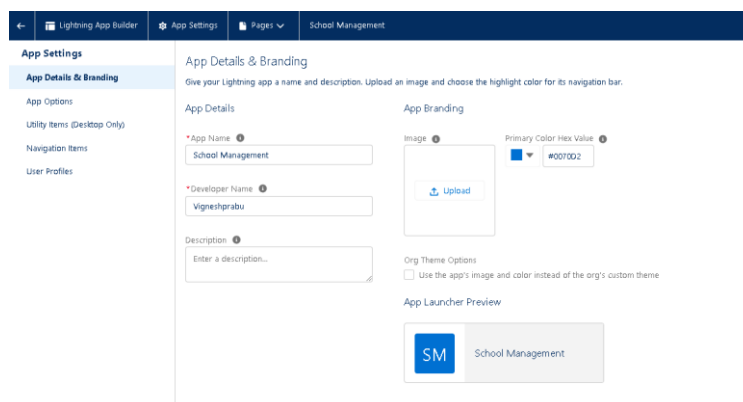
Creation of Objects for Vehicle Management, For this Vehicle Management to creating two objects i.e *School* , *Student* , *parent* .



Milestone-4:Lightning App

Activity-1:

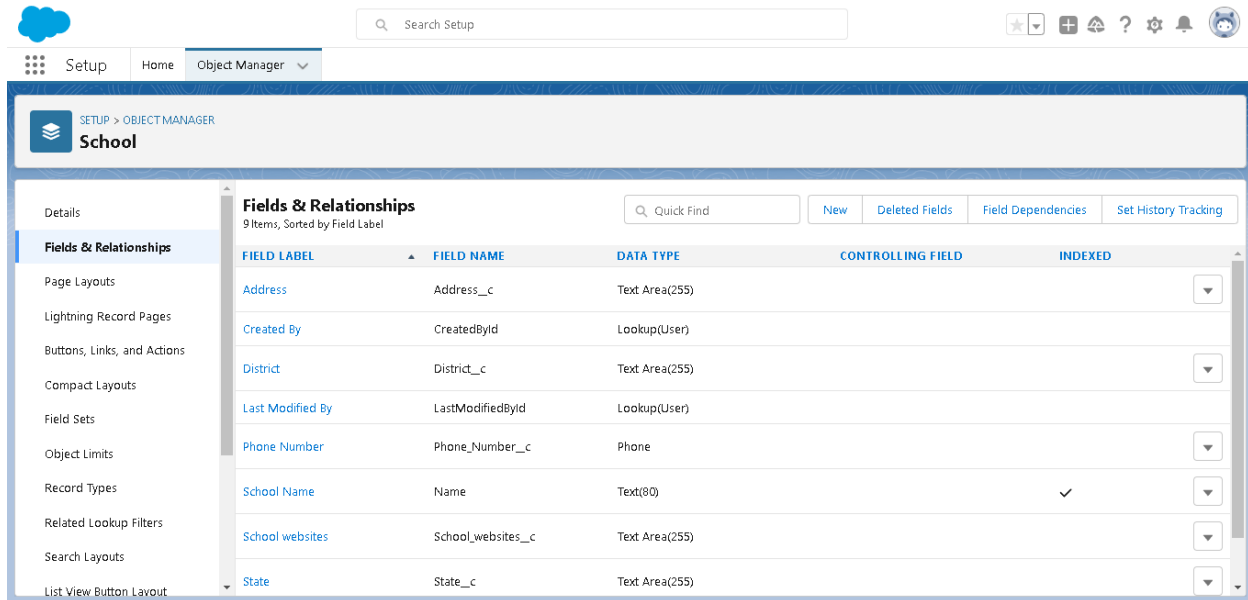
Creating the School management app



Milestone -4 :Fields and Relationship

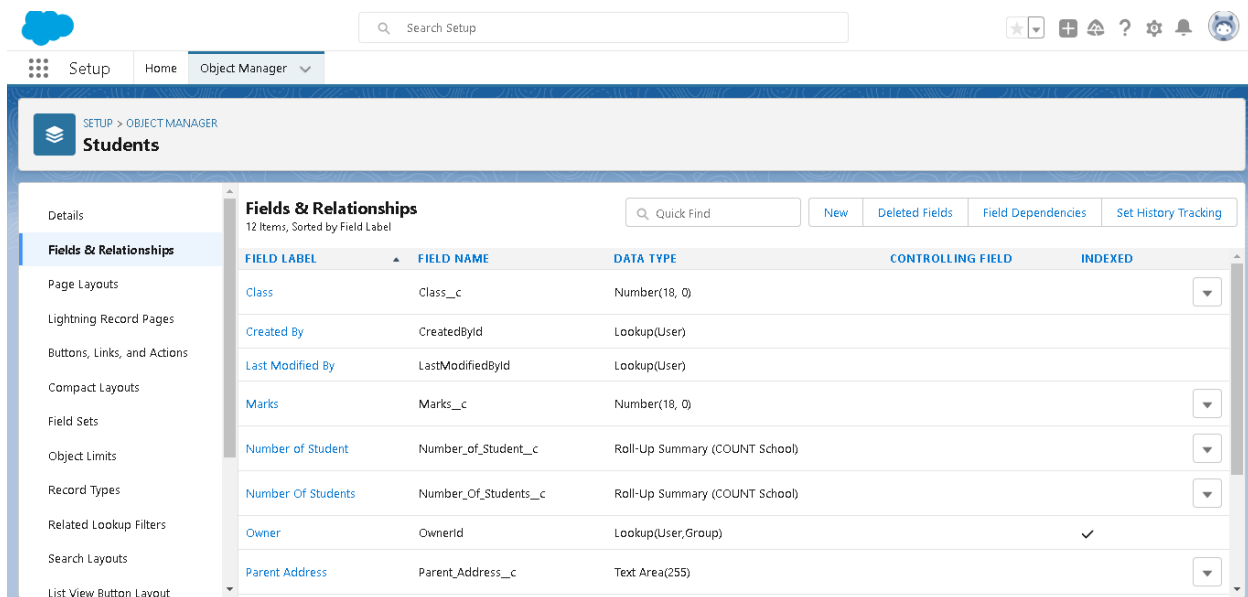
Activity-1 , 2 and 3 : Creation of fields:

Creating a Fields in student, parent and school objects



The screenshot shows the Salesforce Setup interface for the 'School' object. The 'Fields & Relationships' section is active, displaying a list of 9 fields. The left sidebar contains navigation links for Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, and List View Button Layout. The top navigation bar includes Setup, Home, and Object Manager. The search bar contains 'Search Setup'. The right sidebar has links for New, Deleted Fields, Field Dependencies, and Set History Tracking. The table below lists the fields for the School object.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text Area(255)		
Created By	CreatedById	Lookup(User)		
District	District__c	Text Area(255)		
Last Modified By	LastModifiedById	Lookup(User)		
Phone Number	Phone_Number__c	Phone		
School Name	Name	Text(80)		✓
School websites	School_websites__c	Text Area(255)		
State	State__c	Text Area(255)		



The screenshot shows the Salesforce Setup interface for the 'Students' object. The 'Fields & Relationships' section is active, displaying a list of 12 fields. The left sidebar contains navigation links for Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, and List View Button Layout. The top navigation bar includes Setup, Home, and Object Manager. The search bar contains 'Search Setup'. The right sidebar has links for New, Deleted Fields, Field Dependencies, and Set History Tracking. The table below lists the fields for the Students object.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Class	Class__c	Number(18, 0)		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Marks	Marks__c	Number(18, 0)		
Number of Student	Number_of_Student__c	Roll-Up Summary (COUNT School)		
Number Of Students	Number_Of_Students__c	Roll-Up Summary (COUNT School)		
Owner	OwnerId	Lookup(User,Group)		✓
Parent Address	Parent_Address__c	Text Area(255)		

The screenshot shows the Salesforce Setup interface, specifically the Object Manager for the 'Parent' object. The left sidebar lists various setup options, with 'Fields & Relationships' selected. The main content area displays a table of fields for the 'Parent' object, sorted by Field Label. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are: Created By (Lookup(User)), Last Modified By (Lookup(User)), Owner (Lookup(User,Group)), Parent Address (Text Area(255)), and Parent Name (Text(80)).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Parent Address	Parent_Address__c	Text Area(255)		
Parent Name	Name	Text(80)		✓

Milestone-5: Profile

Activity 1:

Creating a Profiles:
create a School profile and set its object permissions.

The screenshot shows the Salesforce Setup interface, specifically the Profiles section. The left sidebar lists various setup options, with 'Profiles' selected. The main content area displays the 'School profile' edit page. The page includes a 'Profile Edit' section with fields for Name (School profile), User License (Salesforce), and Description. Below this is a 'Custom App Settings' section with a table of application settings. The table has columns for Visible and Default, with a legend indicating that a red 'I' icon denotes Required Information.

	Visible	Default		Visible	Default
All Tabs (standard__AllTabSet)	✓	○	Sales (standard__Sales)	✓	●
Analytics Studio (standard__Insights)	✓	○	Sales Console (standard__LightningSalesConsole)	✓	○
App Launcher (standard__AppLauncher)	✓	○	Salesforce Chatter (standard__Chatter)	✓	○
Bolt Solutions (standard__LightningBolt)	✓	○	Salesforce Scheduler Setup (standard__LightningScheduler)	○	○

Milestone-6: Users

Activity 1: Creating a Users:

The screenshot shows the Salesforce Setup interface for editing a user named 'vignesh R'. The left sidebar contains navigation options: Setup, Home, Object Manager, Users, Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles, User Management Settings, Users, Feature Settings, Data.com, Prospector Users, User Interface, Action Link Templates, Actions & Recommendations, and App Menu. The main content area is titled 'User Edit' and includes a 'vignesh R' header. Below this is a 'General Information' section with fields for First Name, Last Name, Alias, Email, Username, Nickname, Title, Company, Department, and Division. To the right of these fields are dropdown menus for Role, User License, and Profile, and a checkbox for Active. Below the Active checkbox are several checkboxes for user types: Marketing User, Offline User, Knowledge User, Flowr User, Service Cloud User, Site.com Contributor User, Site.com Publisher User, and WDC User. A red bar at the bottom of the main content area indicates required information.

Search Setup

Setup Home Object Manager

user

Users

Permission Set Groups

Permission Sets

Profiles

Public Groups

Queues

Roles

User Management Settings

Users

Feature Settings

Data.com

Prospector Users

User Interface

Action Link Templates

Actions & Recommendations

App Menu

User Edit

vignesh R

Save Save & New Cancel

General Information

First Name vignesh

Last Name R

Alias vr

Email vignesh3342@gmail.com

Username vignesh3342@gmail.com

Nickname User16818419726255530574

Title

Company

Department

Division

Role <None Specified>

User License Salesforce

Profile School profile

Active ☒

Marketing User ☐

Offline User ☐

Knowledge User ☐

Flowr User ☐

Service Cloud User ☐

Site.com Contributor User ☐

Site.com Publisher User ☐

WDC User ☐

Milestone-7: Reports

Activity 1:

Reports

Creating a Reports

The screenshot shows the Salesforce Reports page. The top navigation bar includes 'School Management', 'Schools', 'Students', 'Parents', 'Reports', and 'Dashboards'. The main content area is titled 'Reports' and shows a list of recent reports. The table has columns for Report Name, Description, Folder, Created By, Created On, and Subscribed. The first two reports are 'Parents Report' and 'Students with Schools Report', both created by 'Vignesh Prabu' on 18/4/2023. The left sidebar contains navigation options: Recent, Private Reports, Public Reports, All Reports, FOLDERS, All Folders, Created by Me, Shared with Me, FAVORITES, and All Favorites.

Search...

School Management Schools Students Parents Reports Dashboards

Reports

Recent

2 items

Search recent reports...

New Report New Folder

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Parents Report		Private Reports	Vignesh Prabu	18/4/2023, 11:59 pm	
Created by Me	Students with Schools Report		Private Reports	Vignesh Prabu	18/4/2023, 11:58 pm	

Private Reports

Public Reports

All Reports

FOLDERS

All Folders

Created by Me

Shared with Me

FAVORITES

All Favorites

Trailhead Profile Public URL

Team Leader - <https://trailblazer.me/id/vicky143r>

Team Member 1 - <https://trailblazer.me/id/irulanalagu>

Team Member 2 - <https://trailblazer.me/id/muthm29>

Team Member 3 - <https://trailblazer.me/id/ksamy22>

Advantages & Dis advantages

Advantages:

Time-saving: Automating administrative tasks can save significant time for teachers and administrators, allowing them to focus on more important tasks like teaching and student support.

Increased Efficiency: An application that streamlines processes such as attendance tracking and grading can increase overall efficiency and reduce errors.

Improved Communication: A school management application can improve communication between teachers, students, and parents by providing a central platform for messaging, announcements, and updates.

Enhanced Data Management: A digital system can help store and organize large amounts of data in an organized and secure manner, making it easy to retrieve and analyze data.

Disadvantages:

Cost: Developing and implementing a school management application can be expensive, especially for smaller schools with limited resources.

Technical difficulties: Schools with limited technical resources may face challenges in adopting and using the application effectively.

Training: Teachers and staff may require training to effectively use the application, which can be time-consuming and costly.

Privacy and Security Concerns: Digital systems may raise privacy and security concerns, especially when it comes to student data, and schools must ensure they comply with data privacy laws and regulations.

APPLICATIONS

Student Information Management: A feature that allows schools to easily manage student information, such as contact information, medical records, and academic history.

Timetable Management: A feature that allows schools to create and manage timetables for teachers and students, ensuring that classes run smoothly.

Resource Management: A feature that allows schools to manage their resources, such as textbooks, classrooms, and other materials.

Fees Management: A feature that allows parents to pay fees online, and schools to manage and track fees.

Library Management: A feature that allows schools to manage their library resources, including book checkout, inventory management, and reservations.

Transport Management: A feature that allows schools to manage their transportation systems, including bus routes, schedules, and driver information.

Student Performance Analysis: A feature that allows schools to analyze student performance and create reports that can help identify areas where students need additional support.

CONCLUSION

In conclusion, the creation of an application for school management is an important solution to the current challenges faced by schools with manual systems. The brainstormed ideas including a student attendance tracker and online gradebook are just some of the features that could be included in a comprehensive school management application. Prioritization of these ideas should be based on the specific needs of the school and its stakeholders, including teachers, parents, and administrators. Overall, implementing a school management application can improve efficiency, save time, and enhance communication between all parties involved in the education process.

FUTURE SCOPE

The future scope of a school management application includes continued innovation and improvement to enhance the user experience and meet the evolving needs of educational institutions. Some potential areas for future development and expansion include:

Integration with other educational technologies: As schools continue to adopt new technologies, a school management application could integrate with other educational tools such as learning management systems, student information systems, and online assessment tools to create a comprehensive platform that streamlines all aspects of school management.

Personalized learning: A school management application could use data and analytics to personalize learning for each student, providing tailored recommendations for educational resources and activities based on their strengths, weaknesses, and learning styles.