Creating an ASP.NET WebForms Application for School Database Management .

Introduction This project involves the creation of an ASP.NET WebForms application to build a user interface for managing a school database. Rainbow School is developing software for school management, and the goal is to create a prototype of the UI and navigation flow to understand the application's requirements.

In this project, we will create views and navigation for managing student data. This is a prototype with a focus on the user interface, and no backend code will be implemented.

Algorithm:

Step 1: Database Setup

1.1. Open SQL Server Management Studio.
1.2. Execute the following SQL commands to create the database and the Students table:

```
create database SchoolManagement;
use SchoolManagement;
create table Students
( StudentID int primary key identity(1,1),
  FirstName nvarchar(50) not null,
  LastName nvarchar(50) not null,
  DateOfBirth date,
 Gender nvarchar(10),
 Address nvarchar(100));
insert into Students (FirstName, LastName, DateOfBirth, Gender, Address)
values
('John', 'Doe', '2000-01-15', 'Male', '123 Main Street, Delhi'),
('Jane', 'Smith', '2001-05-20', 'Female', '456 Park Avenue, Mumbai'),
('Amit', 'Patel', '2002-03-10', 'Male', '789 Oak Road, Bangalore'),
('Priya', 'Sharma', '2000-11-08', 'Female', '101 Pine Lane, Kolkata'),
('Rahul', 'Gupta', '2001-09-25', 'Male', '222 Cedar Street, Chennai');
```

1.3. Verify the table creation using:

```
select * from Students;
```

Step 2: WebForms UI Creation

2.1. Open Visual Studio and create a new WebForms project.
2.2. Add a new WebForm for Student Management.
2.3. Design the UI using ASP.NET controls:
Use GridView to display a list of students.
Use FormView for detailed student view.

Include TextBoxes, Labels, and Buttons for interaction.

2.4. Implement navigation controls:

Use Menu, SiteMapPath, or Hyperlinks for navigation.

Create links to navigate between different parts of the application.

Step 3: Algorithm Completion

3.1. Save your work in Visual Studio.

3.2. Test the application locally to ensure the UI displays correctly.

3.3. Refine UI elements for better user experience if needed.

Conclusion:

This algorithm outlines the steps to set up a database and create a WebForms application for managing student data in a school management system. Remember, this is a prototype focusing on the user interface, and no backend code is implemented. Actual coding involves translating these steps into the respective programming language constructs in Visual Studio using ASP.NET WebForms.