School Management System

Create a school Management System with the following requirements.

Allow the teacher to add students; following fields should be captured for each student.

* First Name
* Middle Name
* Last Name
* Date of Birth
* Address
* Father’s Name
* Mother’s Name
* Primary Contact Number
* Secondary Contact Number

Allow teacher to link students to a class and division.

Allow the teacher to select a class, and then list all the students in that class. For each student the teacher should able to enter the marks for each term.

* Mathematics
* Science
* Hindi
* English
* Value Education
* Geography
* Drawing

**Assumptions**

* All Subjects are out of 100 marks and passing marks is 35 for each subject.
* There can be maximum 4 divisions for each class, Divisions are named as A, B, C &D. There will be minimum 1 division for a given class and Max 20 Students per class.

**Reports:**

1. Show a report to list the top three students in a class across divisions.
2. Show a report to list the top five students in the selected class and division.
3. Show a report to list all top 3 students for each subjects in a class across divisions
4. Show a report to list top 5 students for each subject in the selected class and division.
5. List all the students in a class and divisions with the following details
   1. Full Name
   2. Date of Birth
   3. Address
   4. Primary Contact Number
   5. Secondary Contact Number

**Interview Selection Process**

Create an Interview Selection Process System with the following requirements

Allow the candidates to upload their CV along with the following details on the Upload Resumes page

* First Name
* Middle Name
* Last Name
* Date of Birth
* Address
* Total Years of Experience
* Technologies worked on
* Post Applied for
* Mobile Number
* Email Address

Once the C.V is uploaded along with the candidate details. The administrator should able to view the data in the grid. Following Filters should be available to filter the candidates Total Experience, Based on tech stack, Post Applied for.

* Full Name
* Date of Birth
* Mobile Number
* Total Experience
* Tech Stack
* Post Applied For
* Interview Status (New/Scheduled Interview/ Interview Round 1 (Technical )/Interview Round 2 (Practical test)/Interview Round 3(HR)
* Selection Status (Not Screened/ Screening In Progress/ Shortlisted/ Offer letter given/ Offer letter accepted)

If the administrator selects the user then he can view the interview schedule process.

**Interview Schedule Form:**

* Set the interview date
* Set the Interviewer from the drop down list
* Notes for the interviewer from HR  
  (Any background information given to the HR which needs to be conveyed to the interviewer)
* Notes from the Interviewer

In this form he will have the list of the available Senior Developers who can take the interview. Per day one Senior developer can take only conduct max 2 interviews.

Once the administrator clicks on the Confirm Schedule button. A Mail will be send to the Candidate , Interviewer and the administrator about the interview.

**Inventory System**

Create an Inventory tracking System with the following requirements –

Develop screens that allows user to Add / Edit / Delete Product details –

* ProductCode Unique
* ProductName
* Category Foreign key to Category table
* UnitPrice
* QtyInStock
* IsDiscontinued
* ReOrderLevel

Add a new Page that will allow user to make sales entry. The sales screen has following fields

* Category
* Product
* QtySold
* Rate

On selecting a category, all available products for that category is displayed in a list. User can then select Product and fill other details to add Product to sales screen. User will repeat this process to add one or more products and then finally save all added products at once to the database.

An email is required to be sent if the Product qty in stock goes below ReOrder level for any of the product sold. A single mail is to be sent in case multiple products have their qty in stock below ReOrder level.

**Reports:**

* Design a report that lists all Products in the table with QtyInStock below ReOrderLevel. Provide a download button that downloads the above report as Csv i.e. Comma separated values file.

**Bus Booking System**

Create a Bus booking System which allows two types of users to use the application.

1. Admin
2. Application user

**Admin User Module:** An admin user I should able to add buses and update capacity of the buses.

1. **Add Bus form:** Allow Adding/Editing of a bus the following fields should be saved.
   1. Bus Company Name: (Paulo Travels/Neeta Transport)
   2. Bus Number
   3. Origin Location
   4. Destination Location
   5. No. Chair Seats
   6. No. Sleeper Seats
   7. Bus Type (A/C, Non-A/C)
2. **Bus Available Form:** Allow the admin to specify the dates on which the Bus will be available for booking. On this form allow Filters to list the buses and editing the bus availability status of each day of the week.

**On this form following fields will be shown along with the result grid.**

* Bus Filter :
  + Bus Route
  + Bus Type

**Filter Type:**

* 1. Bus Route.  
     Example: [<Origin Location> to <Destination Location>] i.e Goa to Mumbai

Once the user selects this filter list all the buses which are allocated to this route.  
 This filter is compulsory, if no value is selected then no buses will be listed.

* 1. Bus Type: (All, A/c, Non-A/c)  
     This filter will narrow down the results returned from Bus Route filter. This filter should be disabled if no value is set for the Bus Route filter.

The following columns should be displayed in the result grid.

* Bus Route
* Bus Type
* Bus Status : (Enabled/Disabled)

If the admin selects any bus from the list then he should able to set the day of the week for which the bus would be available.   
  
Note: Same bus should not have multiple routes defined for the same day of the week. Each bus will be identified uniquely by its Registration Number.

**Reports:** Allow the Application user to view the list of buses available on a given route and date.