JavaScript Part-4 - Lab Assignment [Small Project involving HTML, CSS and Javascript]

Project: Online Appointment Booking System

Project Overview:

Develop a **fully functional online appointment booking system** using **HTML, CSS, JavaScript (DOM Manipulation), and Form Handling**. This project will include:

- **User Input Forms (Appointment Booking)**
- **Dynamic UI Updates (DOM Manipulation)**
- **Form Validation**
- **CSS Styling & Animations**
- **Data Persistence using Local Storage**

Features & Requirements

1. Home Page (HTML + CSS + JavaScript)

- Create a **modern home page** with:
  - A **welcome message**
  - A list of **available services** (e.g., Doctor Consultation, Salon Booking, Car Service, etc.)
  - A **"Book Appointment"** button for each service

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2. Appointment Booking Form (Form Handling & Validation)

- Clicking "Book Appointment" opens a **form popup/modal** with the following fields:
  - **Full Name** (Required)
  - **Email Address** (Must be a valid email format)
  - **Phone Number** (10-digit numeric input)
  - **Select Service** (Dropdown: "Doctor", "Salon", "Car Service", etc.)
  - **Preferred Date & Time** (Date-Time Picker)
  - **Special Requests (Optional)** (Textarea)
  - **Agree to Terms** (Checkbox, required)
  - **Submit Button**

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3. Form Validation (JavaScript)

- Validate inputs before submission:

- o Name must not be empty.
- o Email must be in a valid format.
- o Phone number must be 10 digits.
- o Preferred Date & Time must be in the future.
- o Terms checkbox must be checked.
- Show **real-time validation error messages** below each field.

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4. Display Booked Appointments (DOM Manipulation)

- After submission, display a **dynamic list/table** of booked appointments, including:
  - o **Customer Name**
  - o **Service Selected**
  - o **Date & Time**
  - o **Status** (Default: "Pending")

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5. Store Data Using LocalStorage

- Save all appointment bookings in `localStorage` so that:
  - o If the page is refreshed, previous appointments remain visible.

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6. Appointment Confirmation Popup (JavaScript + CSS)

- After submitting, display a **confirmation popup** with a message like:
  - o "Thank you, [Name]! Your appointment for [Service] on [Date & Time] is confirmed."
- Include a **close button** to dismiss the popup.

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7. Responsive & Themed UI (CSS)

- Use **CSS animations** to make form interactions smooth.
- Ensure the design is **mobile-friendly**.

Bonus Features (For More Challenge)

✔️ Allow users to **reschedule/cancel appointments**.
✔️ Add a **status update feature** (Admin can change "Pending" to "Confirmed" or "Cancelled").

✔ Include a **search & filter feature** to find appointments quickly.
✔ Send an **email confirmation** (if integrating with a backend).