

Step-By-Step Blueprint To-Do List App With The Requested Features:

Blueprint for To-Do List App

1. Core Features

1. **Categorization of Tasks:**
 - Two main categories:
 - **1-Day to 7-Day Tasks:** For short-term goals or urgent tasks.
 - **1-6 Month Goals:** For long-term objectives.
 2. **Countdown Timer:**
 - Real-time countdown showing the remaining time for each task.
 - Updates every second.
 3. **Task Management:**
 - **Add Tasks:** Users can add tasks with:
 - Task Name
 - Category (Dropdown: "1-Day to 7-Day" or "1-6 Month")
 - Due Date (using a date picker)
 - Notes (optional)
 - **Edit Tasks:** Users can modify task details if needed.
 - **Delete Tasks:** Remove completed or unnecessary tasks.
 4. **Task Status:**
 - **Mark as Completed:** Allow tasks to be marked as done with a visual indicator.
 - **Overdue Tasks:** Highlight tasks past their due date (e.g., with red text).
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2. UI/UX Design

1. **Task Input Form:**
 - Inputs: Task Name, Category, Due Date, Notes.
 - Submit button: "Add Task."
2. **Task Display:**
 - Two sections for tasks:
 - **1-Day to 7-Day Tasks**
 - **1-6 Month Goals**
 - Each task card displays:
 - Task name
 - Countdown (e.g., "2 days left" or "1 month left")
 - Edit/Delete icons

- Visual indicators for:
 - Green = Completed
 - Yellow/Orange = Due Soon
 - Red = Overdue
 - 3. **Responsiveness:**
 - Ensure the app works on desktop and mobile.
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3. Functionalities

1. **Add New Task:**
 - Validate input (e.g., ensure the due date is valid).
 - Append the task to the appropriate category.
 2. **Countdown Timer:**
 - Use JavaScript `setInterval` to update the timer in real-time.
 3. **Edit Task:**
 - Provide an edit option (e.g., a modal form or inline editing).
 4. **Delete Task:**
 - Allow users to delete tasks with a confirmation prompt.
 5. **Mark as Completed:**
 - Update the task's state visually (e.g., strike-through).
 - Move to a separate "Completed" section (optional).
 6. **Save Data:**
 - Use `localStorage` to save tasks persistently.
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4. Data Structure

- Use an array of objects to store tasks:

```
[
  {
    id: 1,
    name: "Complete assignment",
    category: "1-Day",
    dueDate: "2025-02-01T12:00:00",
    notes: "Finish math assignment",
    completed: false
  },
  {
    id: 2,
    name: "Plan vacation",
    category: "6-Month",
    dueDate: "2025-08-01T12:00:00",
    notes: "Book tickets and accommodations",
    completed: false
  }
]
```

5. Steps to Build

1. **HTML Setup:**
 - **Header:** App name/title.
 - **Form Section:** Inputs for task name, category, due date, notes, and add button.
 - **Task Sections:** Two sections for:
 - "1-Day to 7-Day Tasks."
 - "1-6 Month Goals."
 2. **CSS Styling:**
 - Use a clean layout with colors to differentiate categories.
 - Add responsiveness for mobile devices.
 3. **JavaScript Logic:**
 - Create an array to store tasks.
 - Write functions for:
 - Adding tasks
 - Editing tasks
 - Deleting tasks
 - Countdown timer logic
 - Update the UI dynamically based on task states.
 4. **LocalStorage Integration:**
 - Save task data to `localStorage` on every action.
 - Load data on page load.
 5. **Testing:**
 - Test all features:
 - Adding, editing, deleting tasks.
 - Countdown accuracy.
 - Data persistence with `localStorage`.
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6. Advanced Features (Optional)

1. **Search and Filter:**
 - Add a search bar to find tasks by name.
 - Filter tasks by category or status (completed, overdue, etc.).
 2. **Notifications:**
 - Use browser notifications for reminders (e.g., 1 hour before a task is due).
 3. **Dark Mode:**
 - Add a toggle to switch between light and dark themes.
 4. **Drag-and-Drop:**
 - Allow reordering of tasks for better organization.
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Ui/Ux Design:

