Smart Task Tracker - Excel VBA Project

# Introduction

The Smart Task Tracker is a user-friendly Excel-based tool powered by VBA, designed to streamline task distribution and monitoring across various departments. Users can input tasks at a central level, and based on the department selected, tasks are dynamically distributed to specific departmental sheets. The system is designed to be scalable, supporting future additions of departments and employees through dedicated sheets.

# Task Input Methods

There are two ways to input tasks into the system:  
1. Using the custom-built UserForm (task entry form).  
2. Manually adding tasks into the main sheet followed by using the 'Sync Task' button to distribute.

# Task Entry Form

The following is the custom task form provided for structured data entry:

The form allows the user to enter the task name, due date, priority (Low, Medium, High), status (To Do, In Progress, Done), and assign it to a department. The department dropdown is dynamic and auto-populates from the 'Department List' sheet, allowing easy updates and scalability.

# Task Distribution Logic

Once the form is submitted, the task is automatically added to the relevant department's sheet. This ensures that each department only sees tasks assigned to them. For tasks entered manually, the same functionality is triggered via the 'Sync Task' button, which reviews all tasks and distributes them appropriately.

# Functional Buttons

The tool includes several functional buttons to enhance usability:

* Fit Column: Adjusts column widths for better readability.
* Fit Row: Adjusts row heights to fit content.
* Enter the Task: Opens the UserForm for structured task input.
* Apply Color Coding / Remove Color Coding: Applies or removes color highlighting based on task status:  
   To-Do (Red), In Progress (Blue), Done (Green).
* Assign Employee: Dynamically filters and assigns employees to tasks based on department selection using the 'Employee\_List' sheet.
* Sync Task: Distributes manually added tasks to the appropriate department sheets.

# Color Coded Task Example

The main task sheet visually represents tasks using background colors based on their status, helping users quickly identify progress at a glance.

# Department and Employee Management

The system is designed to scale. Users can manage departments and employees independently. Each department has its own sheet where tasks are copied and managed. Employee assignment is flexible, with the 'Assign Employee' feature ensuring employees are only assigned tasks relevant to their department.

Additionally, the "Assigned To" column in each department's Excel sheet is implemented using a dynamic drop-down list. This list is automatically populated with employee names from the centralized Employee\_List sheet, filtered by the selected department. This ensures that only employees belonging to that department appear as assignment options, keeping the system structured and easy to maintain.

# Future Enhancements

- Integration with email services to notify employees when they are assigned a task.  
- Dashboard integration using Excel or Power BI to visualize task distribution and completion rates.  
- Archiving completed tasks.  
- Adding task dependencies and Gantt-style scheduling.  
- Role-based user access control to restrict editing rights.