

10/15/2024

# SOFTWARE PROJECT MANAGEMENT(SPM)



**M.AMEER HAMZA**

**FA20-BCS-046**

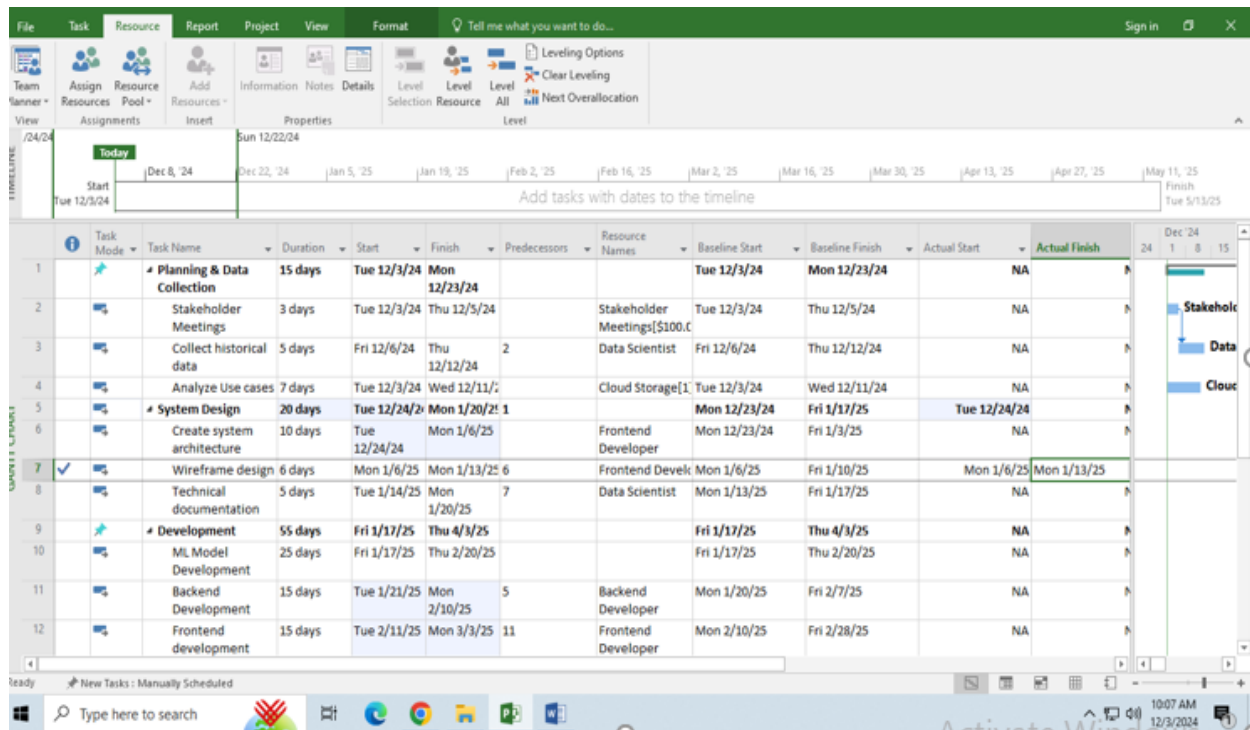
**SUBMITTED TO: Mam Fareeha Iftikhar**

# Assignment 4

## Task 1: Adjust Task Duration

### Description:

The duration of the "Wireframe Design" task was adjusted to account for an additional 3 days required to complete the work. This change reflects a delay in the planned schedule and demonstrates how unplanned duration extensions can impact the overall project timeline. Dependencies for subsequent tasks were automatically recalculated in the project schedule.

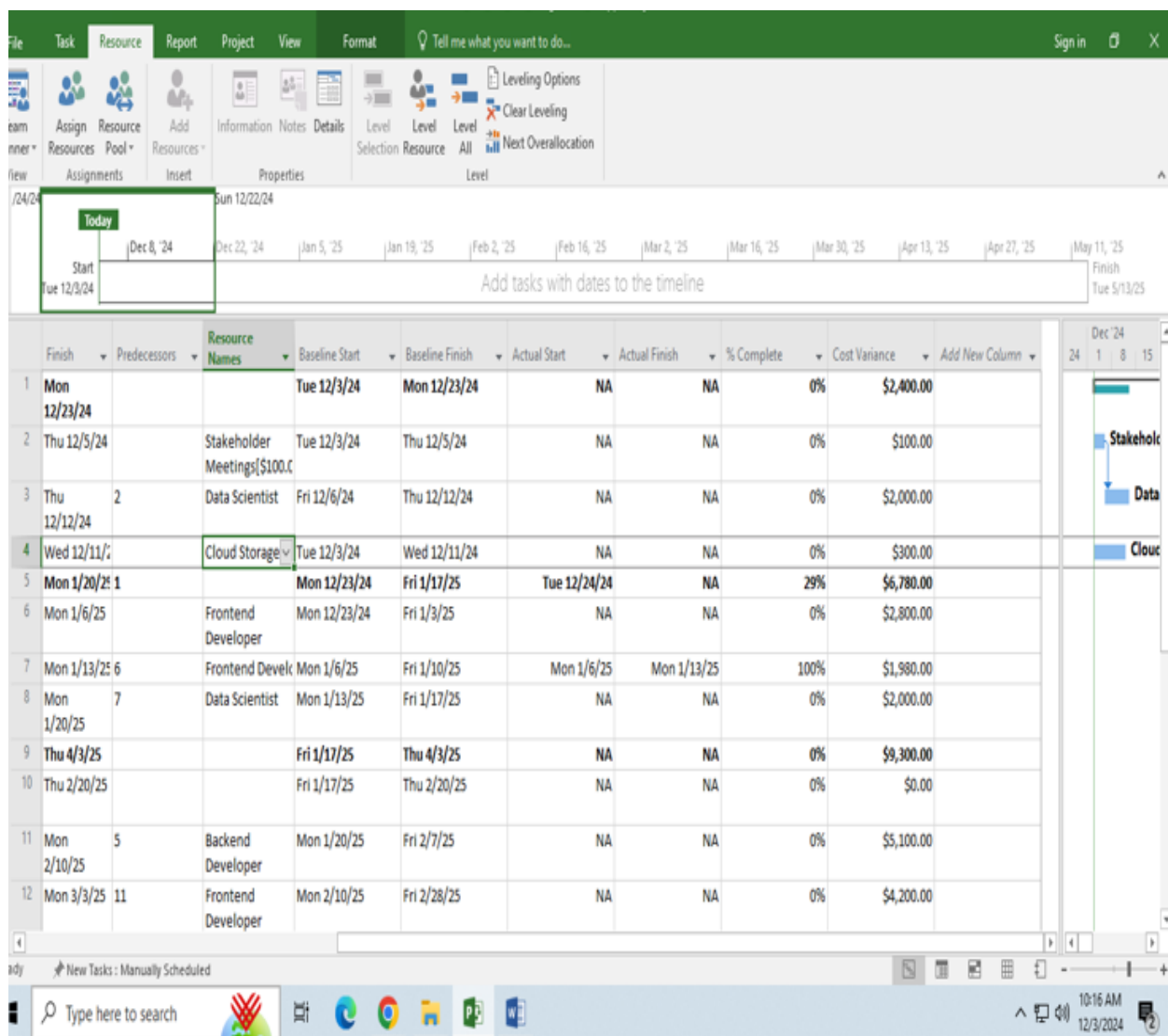


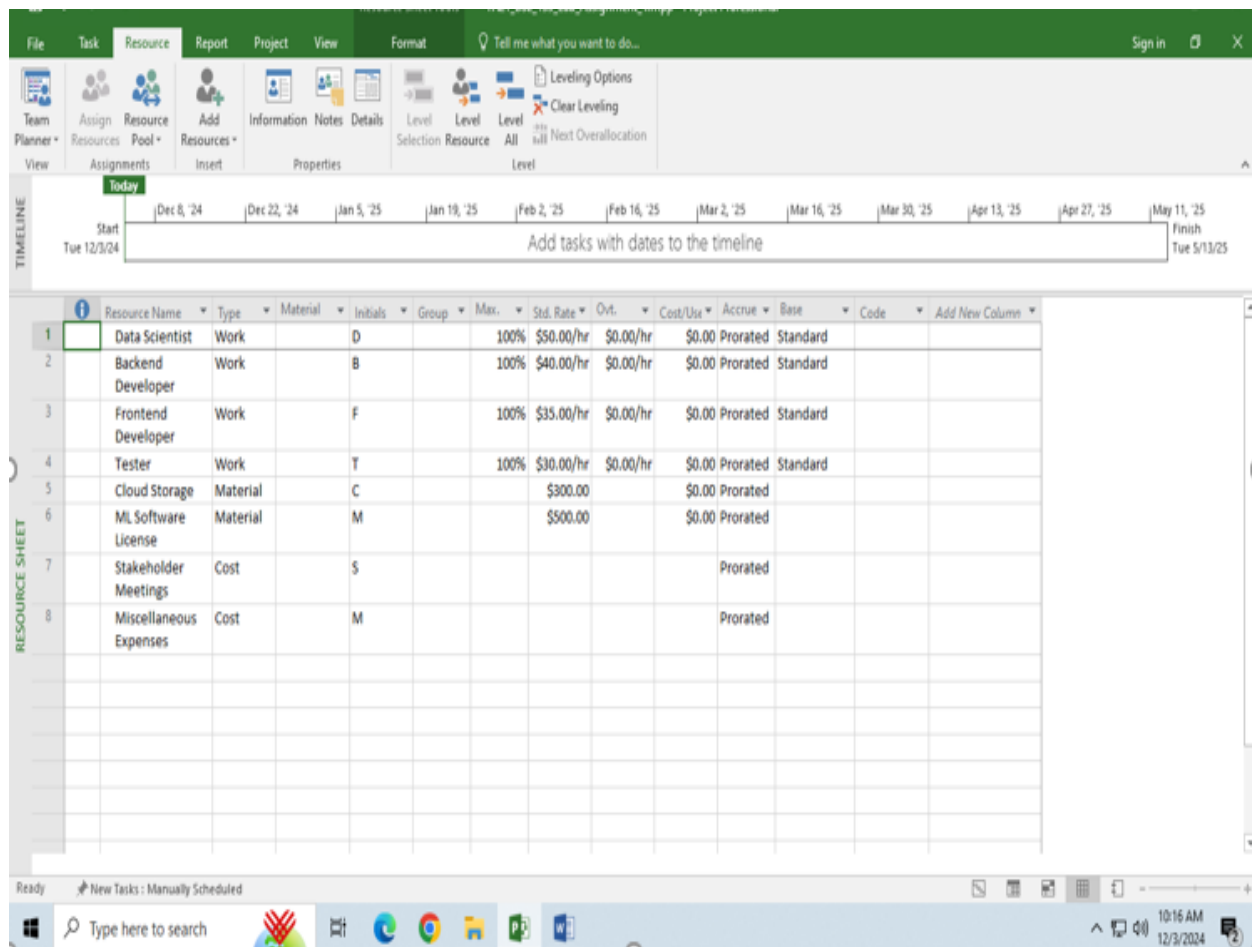
GANTT CHART	4	Analyze Use cases	7 days	Tue 12/3/24	Wed 12/11/24	Cloud Storage1	Tue 12/3/24	Wed 12/11/24	NA	NA
	5	System Design	20 days	Tue 12/24/24	Mon 1/20/25	1	Mon 12/23/24	Fri 1/17/25	Tue 12/24/24	NA
	6	Create system architecture	10 days	Tue 12/24/24	Mon 1/6/25	Frontend Developer	Mon 12/23/24	Fri 1/3/25	NA	NA
	7	Wireframe design	6 days	Mon 1/6/25	Mon 1/13/25	6	Frontend Developer	Mon 1/6/25	Fri 1/10/25	Mon 1/6/25
	8	Technical documentation	5 days	Tue 1/14/25	Mon 1/20/25	7	Data Scientist	Mon 1/13/25	Fri 1/17/25	NA

## Task 2: *Increase Cloud storage by 100\$ and observe cost variance*

### Description:

An additional \$100 was added to the material resource cost for cloud storage. This adjustment highlighted the impact of unplanned costs on the project's Cost Variance (CV). The increase in cost affected the project's overall budget, showing the importance of tracking material resources and preparing for contingencies.



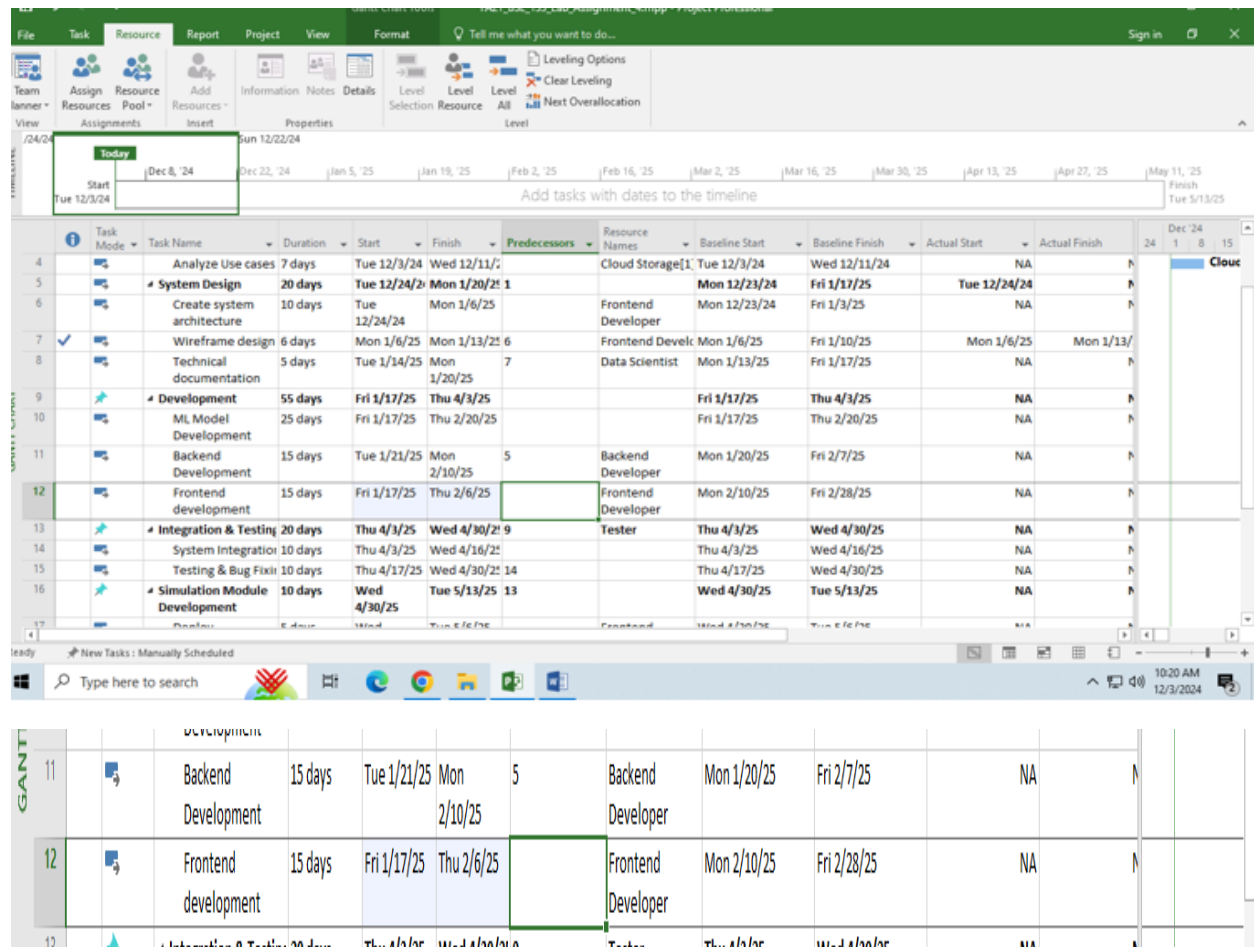


## Task 3: *Adjust task dependencies*

**Interpretation:** Dates are changed after removing dependency

### **Description:**

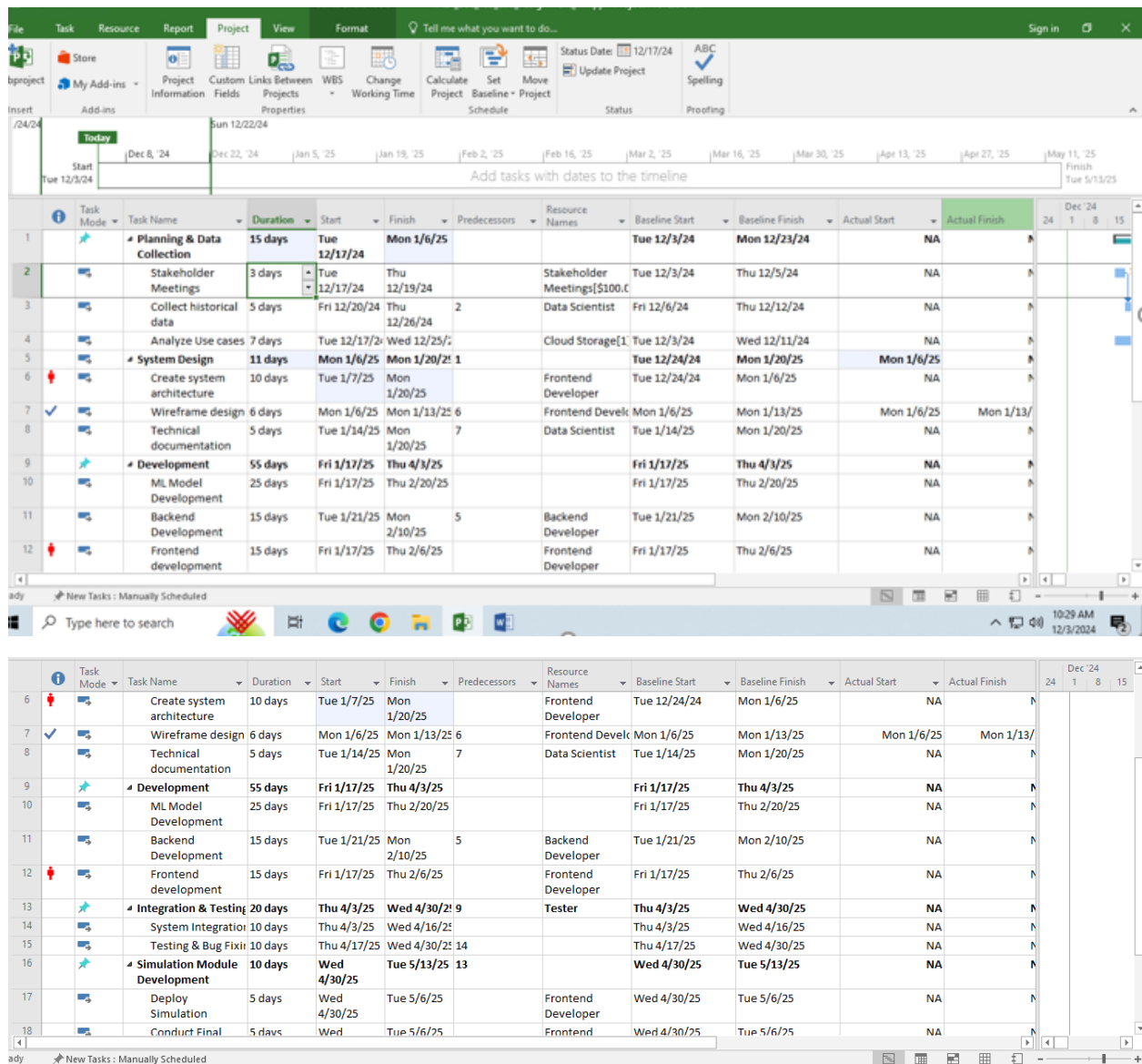
The dependency for "Frontend Development" was adjusted to allow it to start before "Backend Development" was completed. This change led to overlapping tasks, which shortened the project's critical path and demonstrated how modifying dependencies can optimize the schedule while balancing resource allocation.



## Task 4: *Modify start date and observe changes in overall project*

### Description:

The project start date was delayed by two weeks to accommodate unforeseen circumstances. This adjustment propagated changes across all tasks, affecting their start and finish dates. Baseline dates were compared against the actual dates, illustrating the impact of delays on schedule variances and the need for recalibration.



## Conclusion:

In summary, the adjustments made to task durations, costs, dependencies, and the project start date highlighted the impact of unplanned changes on both the project timeline and budget. These modifications emphasized the importance of flexibility, continuous monitoring, and prompt recalibration to manage delays and cost overruns effectively. Through earned value analysis, we also saw the financial consequences of these changes, reinforcing the need for careful planning and timely decision-making.