Project Management Task

You are part of a team building a **Library Management System** for a local university. Your job is to plan, track, and execute this project using Monday.com.

Project Details:

- **Duration:** 12 weeks (3 months)
- **Team:** 8 members (each of you will take on multiple roles)
- **Budget:** $100,000
- **Goal:** Replace the paper-based system with a modern digital solution

LEARNING OBJECTIVES

By completing this exercise, you will learn:

1. How to break down a project into manageable tasks
2. How to assign resources and set timelines
3. How to track progress using project management tools
4. How to identify and manage dependencies
5. How to use Earned Value Management (EVM) concepts

STEP-BY-STEP INSTRUCTIONS

STEP 1: ACCESS MONDAY.COM

1. **Go to:** monday.com
2. **Sign up for a free account** (use your student email)
3. **Choose:** "Start from scratch" when prompted
4. **Name your workspace:** "LMS Project - [Your Name]"

STEP 2: CREATE YOUR BOARD

1. Click **"+ Add"** → **"Board"**
2. **Board name:** "Library Management System"
3. **Choose template:** Select **"Project Management"**
4. Click **"Use template"**

STEP 3: SET UP YOUR COLUMNS

Your board should have these columns:

Column Name	Type	Purpose
Item Name	Text	Task name
Status	Status	Progress (Not Started, In Progress, Done)
Assignee	People	Who's responsible
Timeline	Date	Start and end dates
Priority	Color	Critical, High, Medium, Low
Phase	Dropdown	Planning, Design, Development, Testing, Deployment

Column Name	Type	Purpose
Est. Hours	Numbers	Estimated time required
Actual Hours	Numbers	Time actually spent
% Complete	Numbers	Progress percentage (0-100%)
EVM Notes	Text	For Earned Value tracking

To add columns:

1. Click **"+"** next to existing columns
2. Select column type
3. Name the column
4. Click **"Add"**

STEP 4: CREATE PROJECT GROUPS (PHASES)

Create these groups in your board:

1. **Planning & Initiation**
2. **Requirements Gathering**
3. **System Design**
4. **Development - Sprint 1**
5. **Development - Sprint 2**
6. **Development - Sprint 3**
7. **Testing**
8. **Deployment**
9. **Project Closure**

To create groups:

1. Click **"Add Group"** at the bottom
2. Type the group name
3. Press Enter
4. Repeat for all phases

YOUR TASKS TO CREATE

GROUP 1: Planning & Initiation

Create these tasks:

Task Name	Assignee	Timeline	Priority	Est. Hours
Kickoff Meeting with Stakeholders	[Your Name]	Next Monday, 2 hours	Critical	4
Define Project Scope Document	You + Partner	Monday-Tuesday	High	8

Task Name	Assignee	Timeline	Priority	Est. Hours
Create Project Charter	You	Tuesday	High	2
Identify All Stakeholders	You	Tuesday	Medium	3
Develop High-Level Timeline	You	Wednesday	High	4

Instructions:

1. Click the **"+"** in the "Planning & Initiation" group
2. Type the task name
3. Fill in the other columns:
    - **Status:** Start with "Not Started"
    - **Assignee:** Click and select your name
    - **Timeline:** Click and select dates
    - **Priority:** Click and choose color
    - **Est. Hours:** Type the number

GROUP 2: Requirements Gathering
Create these tasks:

Task Name	Timeline	Priority	Est. Hours
Interview Library Staff	Week 2	High	16
Document User Stories	Week 2	High	20
Create Requirements Matrix	Week 2	Medium	8
Prioritize Features (MoSCoW)	Week 2	Critical	6

GROUP 3: System Design
Create these tasks:

Task Name	Timeline	Priority	Est. Hours
Database Schema Design	Week 3	High	24
UI/UX Wireframe Creation	Week 3	High	30
System Architecture Design	Week 3	High	20

Continue this pattern for all groups...

ASSIGN TEAM ROLES

Each student will play these roles:

1. **Project Manager** - Oversees everything
2. **Business Analyst** - Focuses on requirements
3. **Tech Lead** - Focuses on technical tasks
4. **Developer** - Implements features
5. **QA Tester** - Tests the system
6. **UI/UX Designer** - Designs interface
7. **Database Admin** - Manages database tasks
8. **DevOps Engineer** - Handles deployment

To assign tasks:

1. Look at the "Assignee" column
2. Click on the person icon
3. Type your name or your partner's name
4. Press Enter

ADD DEPENDENCIES

Some tasks must wait for others. Set these dependencies:

1. **"UI Design"** must wait for **"Requirements Gathering"**
2. **"Development"** must wait for **"System Design"**
3. **"Testing"** must wait for **"Development"**

To set dependencies:

1. Click on a task
2. In the right panel, find **"Dependencies"**
3. Click **"Add"**
4. Select the task it depends on
5. Choose: **"This task can only start after..."**

EARNED VALUE MANAGEMENT (EVM) PRACTICE

Week 1: Set Baseline

1. For each task, add **"Budget"** in the "EVM Notes" column
   - Small task: $500
   - Medium task: $1,000
   - Large task: $2,000
2. **Calculate Planned Value (PV):**
   - Week 1 tasks total budget = Your PV for Week 1

Week 2: Track Progress

1. **Mark some tasks as "Done"** (50% of Week 1 tasks)
2. **For "Done" tasks:** Enter Actual Hours (estimate)
3. **Calculate Earned Value (EV):**
   - EV = (Tasks completed × Budget) + (Tasks 50% done × 0.5 × Budget)

Week 3: Calculate Metrics

1. **Total Actual Cost (AC):** Sum of all "Actual Hours" × $50/hour rate
2. **Calculate:**
   - CPI = EV / AC
   - SPI = EV / PV
3. **Add notes in EVM column:**
   - "CPI = 0.9" (if spending more than earning)
   - "SPI = 1.1" (if ahead of schedule)

PRACTICE EXERCISES

Exercise 1: The Scope Change

Scenario: Library wants to add "Mobile App" feature.

1. **Add a new task:** "Mobile App Development"
2. **Timeline:** Insert it in Week 7
3. **Est. Hours:** 40 hours
4. **Update dependencies:** What tasks does this affect?
5. **Update timeline:** How does this change the project end date?

Do this:

- Use the **Timeline view** to see the impact
- Write in EVM Notes: "Scope creep detected - EAC increased by $2,000"

Exercise 2: Resource Conflict

Scenario: Your best developer gets sick for a week.

1. **Find all tasks** assigned to that developer
2. **Reassign** to another team member
3. **Check Workload view:** Is anyone overloaded?
4. **Adjust timelines** if needed

Exercise 3: Budget Crisis

Scenario: After Week 4, you've spent 50% of budget but only completed 30% of work.

1. **Calculate:**
   - PV after Week 4: $40,000 (planned)
   - EV: $30,000 (actual work value)
   - AC: $50,000 (actual spending)
2. **Determine:**
   - CPI = 30,000/50,000 = 0.6
   - SPI = 30,000/40,000 = 0.75
3. **Take action:**
   - Which tasks can you cut?
   - Can you negotiate more budget?
   - Update your board accordingly

VIEWS TO USE

1. Timeline/Gantt View

To access:

1. Click **"Views"** at the top
2. Select **"Timeline"**
3. See your project as a Gantt chart

What to check:

- Are tasks properly sequenced?
- Any overlaps or gaps?
- Critical path visible?

2. Kanban/Board View

To access:

1. Click **"Views"**
2. Select **"Board"**
3. Drag tasks between columns

What to do:

- Move tasks from "Not Started" → "In Progress" → "Done"
- Limit 3 tasks in "In Progress" per person

3. Workload View

To access:

1. Click **"Views"**
2. Select **"Workload"**

What to check:

- Is anyone overloaded?
- Balance work among team members

4. Chart View

To access:

1. Click **"Views"**
2. Select **"Chart"**
3. Choose: **"Status Distribution"**

What to analyze:

- How many tasks in each state?
- Is work flowing smoothly?

CHECKPOINTS (What to Submit)

Checkpoint 1: Board Setup

- All phases (groups) created
- At least 20 tasks added
- All columns properly configured
- Team members assigned

Checkpoint 2: Project Planning

- All tasks have timelines
- Dependencies set correctly
- EVM baseline established
- Workload balanced

Checkpoint 3: Progress Tracking

- Week 1-2 tasks marked "Done"
- Week 3-4 tasks "In Progress"
- EVM calculations completed
- Issues logged and addressed

DELIVERABLES

Submit these screenshots:

1. **Full Board View:** Show all tasks and groups
2. **Timeline View:** Show Gantt chart with dependencies
3. **Workload View:** Show balanced team allocation
4. **EVM Calculation:** Show one week's calculations
5. **Status Report:** Generated from Monday.com

Take screenshots and paste all in a document/MS-Word file:

1. Press **"PrtScn"** on keyboard
2. Or use **Snipping Tool** (Windows) or **Shift+Command+4** (Mac)
3. Save as: "YourName-StudentID-LMS-MondayDotCom"