**Assignment 2- Create a Network Diagram and Identify Critical Path for the Loan Approval Project**

**1. Project Initialization**

* **Define project scope and objectives**: 2 days
  + **Start Date**: October 15, 2024
  + **End Date**: October 16, 2024
* **Develop loan approval guidelines**: 3 days
  + **Start Date**: October 17, 2024
  + **End Date**: October 19, 2024
* **Stakeholder meeting**: 1 day
  + **Start Date**: October 20, 2024
  + **End Date**: October 20, 2024

**2. Application Collection**

* **Publish loan application notice**: 1 day
  + **Start Date**: October 21, 2024
  + **End Date**: October 21, 2024
* **Collect applications**: 10 days
  + **Start Date**: October 22, 2024
  + **End Date**: October 31, 2024

**3. Eligibility Review**

* **Review loan applications**: 5 days
  + **Start Date**: November 1, 2024
  + **End Date**: November 5, 2024
* **Verify supporting documents**: 3 days
  + **Start Date**: November 6, 2024
  + **End Date**: November 8, 2024
* **Shortlist eligible factories**: 2 days
  + **Start Date**: November 9, 2024
  + **End Date**: November 10, 2024

**4. Factory Evaluation**

* **Conduct financial analysis**: 5 days
  + **Start Date**: November 11, 2024
  + **End Date**: November 15, 2024
* **Perform site inspections**: 4 days
  + **Start Date**: November 16, 2024
  + **End Date**: November 19, 2024
* **Final approval meeting**: 2 days
  + **Start Date**: November 20, 2024
  + **End Date**: November 21, 2024

**5. Loan Approval and Disbursement**

* **Issue loan approval letters**: 1 day
  + **Start Date**: November 22, 2024
  + **End Date**: November 22, 2024
* **Disburse loan**: 3 days
  + **Start Date**: November 23, 2024
  + **End Date**: November 25, 2024

**6. Monitoring and Reporting**

* **Monitor loan usage**: 60 days (ongoing)
  + **Start Date**: November 26, 2024
  + **End Date**: January 24, 2025
* **Prepare monthly reports**: 2 milestones, each 1 day:
  + First report: December 26, 2024
  + Second report: January 24, 2025

**7. Project Closure**

* **Prepare final audit report**: 3 days
  + **Start Date**: January 25, 2025
  + **End Date**: January 27, 2025
* **Close project**: 1 day
  + **Start Date**: January 28, 2025
  + **End Date**: January 28, 2025

**Summary of Start and End Dates by Phase:**

| **Phase** | **Start Date** | **End Date** | **Duration** |
| --- | --- | --- | --- |
| **Project Initialization** | October 15, 2024 | October 20, 2024 | 6 days |
| **Application Collection** | October 21, 2024 | October 31, 2024 | 11 days |
| **Eligibility Review** | November 1, 2024 | November 10, 2024 | 10 days |
| **Factory Evaluation** | November 11, 2024 | November 21, 2024 | 11 days |
| **Loan Approval and Disbursement** | November 22, 2024 | November 25, 2024 | 4 days |
| **Monitoring and Reporting** | November 26, 2024 | January 24, 2025 | 60 days (ongoing) |
| **Project Closure** | January 25, 2025 | January 28, 2025 | 4 days |

**Steps to Create the Network Diagram and Critical Path in MS Project:**

1. **Input the Updated Tasks**:
   * Open **Microsoft Project** and create a new project file.
   * Enter the tasks and assign start and end dates as per the updated timeline.
2. **Add Dependencies**:
   * Establish dependencies between the tasks (e.g., the factory evaluation phase can't begin until the eligibility review is completed).
   * Set appropriate dependency types (Finish-to-Start is most common).
3. **View the Network Diagram**:
   * Click **View** → **Network Diagram**. This will show a graphical representation of the tasks and their relationships.
   * The network diagram will automatically show task nodes connected by arrows, representing task dependencies.
4. **Identify the Critical Path**:
   * Click **Format** on the ribbon → Check the box for **Critical Path** to highlight tasks that are on the critical path (these tasks are critical because any delay in them will delay the entire project).
   * The critical path will be highlighted in red.
5. **Analyze Slack and Float**:
   * Tasks not on the critical path may have slack (or float), which means they can be delayed without affecting the project's end date.
   * To see slack time, switch to the **Gantt Chart View** → Right-click on any column → **Insert Column** → Choose **Total Slack**.
6. **Export the Network Diagram**:
   * You can export the network diagram to a PDF format for easy sharing and submission (File → Export → PDF).

**Deliverables:**

1. **Microsoft Project File (.mpp)** with the updated timeline, tasks, dependencies, and critical path.
2. **PDF Export** of the network diagram showing tasks and the critical path.
3. **Brief Report** (1-2 paragraphs) identifying critical activities and explaining how delays in these activities will affect the project timeline.