PROJECT ANALYSIS REPORT

Website Development

Project ID:	test-123
Method:	CPM
Time Unit:	days
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1. PROBLEM DEFINITION

1.1 Project Overview

This project analysis uses the **CPM** method to schedule and optimize project activities. The analysis determines the critical path, calculates activity slack times, and provides insights for project management decisions. Time measurements are in **days**.

1.2 Project Activities

ID	Name	Predecessors	Duration	Cost	Crash Time	Crash Cost
A	Requirements Analysis	-	5.0	$1000	3.0	$1500
B	Design Phase	A	8.0	$2000	6.0	$2800
C	Development	B	12.0	$5000	10.0	$6500
D	Testing	C	5.0	$1500	4.0	$2000

1.3 Analysis Objectives

• Determine project completion time

• Identify critical path

• Calculate activity slack times

• Optimize resource allocation

2. NETWORK DIAGRAM

2.1 Activity-on-Node (AON) Diagram

The network diagram below visualizes the project structure, showing the relationships between activities and the critical path. Critical activities are highlighted in red, while non-critical activities are shown in blue. Each node displays the activity ID, duration, and timing information (ES, EF, LS, LF).
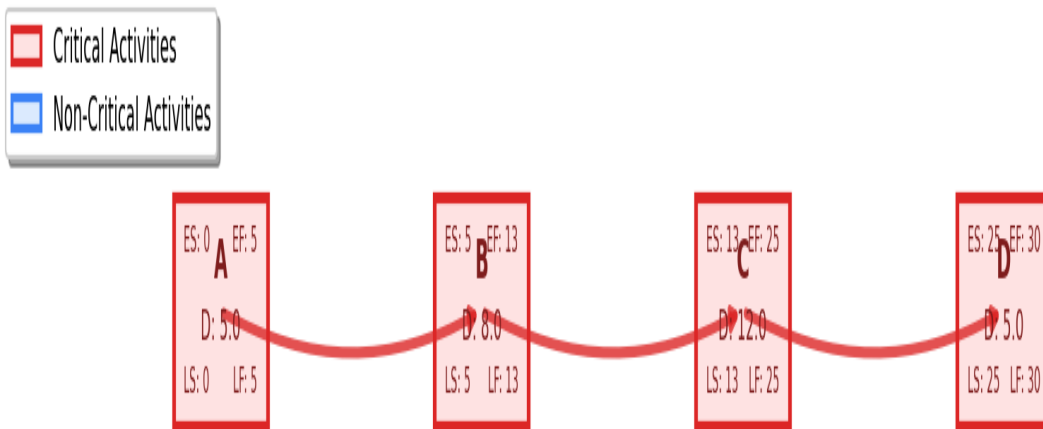
Activity-on-Node (AON) Network Diagram

Critical Activities
Non-Critical Activities

ES: 0 **A** EF: 5	ES: 5 **B** EF: 13	ES: 13 **C** EF: 25	ES: 25 **D** EF: 30
D: 5.0	D: 8.0	D: 12.0	D: 5.0
LS: 0 LF: 5	LS: 5 LF: 13	LS: 13 LF: 25	LS: 25 LF: 30

Figure 1: Activity-on-Node Network Diagram showing project structure and critical path

3. SOLUTION ANALYSIS

3.1 Project Summary

Metric	Value
Project Duration	30.00 days
Total Activities	4
Critical Activities	4
Critical Path Length	4

3.2 Critical Path

A → B → C → D

3.3 Activity Schedule

Activity	ES	EF	LS	LF	Slack	Status
A	0.0	5.0	0.0	5.0	0.0	CRITICAL
B	5.0	13.0	5.0	13.0	0.0	CRITICAL
C	13.0	25.0	13.0	25.0	0.0	CRITICAL
D	25.0	30.0	25.0	30.0	0.0	CRITICAL