THE UNIVERSITY OF DODOMA

THE COLLEGE OF INFORMATICS AND VIRTUAL EDUCATION

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (CSE)

ASSINGMENT TWO

GROUP NAMES

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Project: Building a New House
Budget: 1 Billion
Timeline: 2 Years

a) Project Cost Management Plan

i) Cost Estimation

Labor Costs: Use bottom-up estimation for skilled, semi-skilled, and unskilled labor, based on local market rates.

Material Costs: Gather quotations from multiple suppliers for essential materials like concrete, steel, and wood.

Equipment Costs: Budget for machinery rentals, maintenance, and fuel.

Overhead Costs: Include site utilities, permits, and safety measures.

ii) Cost Control

- Establish a baseline budget using a Work Breakdown Structure (WBS).
- Monitor using Earned Value Management (EVM) to track cost performance and variance
- Allocate a contingency reserve for unexpected expenses.

iii) Managing Cost Variances

- Identify variances early through periodic cost reports.

- Reallocate funds from low-priority areas if overruns occur.

- Approve changes via a Change Control Board (CCB) to ensure alignment with project goals.

b). Procurement Management Plan

i) Selecting Suppliers and Contractors

- Issue Request for Proposals (RFPs) to identify qualified vendors.

- Conduct pre-qualification assessments based on experience, certifications, and financial health.

ii) Vendor Evaluation Criteria

- Price and value for money.

- Timeliness and reliability.

- Compliance with project specifications and industry standards.

iii) Procurement Process

- **Planning**: Develop a procurement schedule aligned with project milestones.

- **Contracting**: Negotiate clear terms covering scope, payment, and dispute resolution.

- **Execution:** Monitor vendor performance via regular progress reports.

- **Closure:** Conduct final inspections and process payments post-completion.

c) Project Quality Management

i) Quality Planning

- Define quality benchmarks based on client requirements.

- Create a Quality Management Plan (QMP) outlining acceptable standards.

ii) Quality Monitoring and Control

- Use checklists and statistical sampling during site inspections.

- Implement tools like Six Sigma for defect reduction.

iii) Handling Quality Failures

- Conduct Root Cause Analysis to determine failure causes.
- Rework and revalidate affected areas without exceeding critical deadlines.

d) Project Risk Management Plan

i) Risk Identification and Assessment

- Categorize risks using a Risk Breakdown Structure (RBS) (e.g., financial, technical, environmental).
- Prioritize risks using a Risk Matrix (likelihood vs. impact).

ii) Risk Mitigation Strategies

- **For cost risks:** Maintain financial buffers.
- **For delays:** Add schedule contingencies.
- **For quality issues:** Use pre-approved suppliers.

ii) Handling Major Risks

- Develop contingency plans (e.g., hire backup subcontractors).
- Reorganize schedules and redistribute resources to minimize disruption.