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ITSE 1450

Module 3 Appliance Warehouse Case

**Work Breakdown Structure (WBS):**

Project Management

1.1. Develop Project Plan

1.2. Monitor and Control Project Work

1.3. Stakeholder Management

1.4. Communication Management

System and Industry Analysis

2.1. Conduct Industry Analysis

2.2. Conduct System Analysis for Service Department

2.3. Stakeholder Interviews and Surveys

2.4. Document Findings

System Design

3.1. Define System Architecture

3.2. Develop Interface Designs

3.3. Develop Database Designs

3.4. Develop System Prototypes

3.5. Review and Revise Designs

Implementation Plans

4.1. Develop Implementation Plan

4.2. Develop Training Plan

4.3. Develop Data Migration Plan

4.4. Develop Testing Plan

4.5. Develop Rollout Plan

Security Tasks

5.1. Conduct Security Risk Assessment

5.2. Develop Security Policies and Procedures

5.3. Implement Security Measures

5.4. Test Security Measures

5.5. Monitor and Update Security Measures

System Development for Service Department

6.1. Develop Scheduling System for Technicians

6.2. Develop Parts Ordering System

6.3. Develop Follow-up Appointment System

Testing

7.1. Develop Test Plan

7.2. Conduct Unit Testing

7.3. Conduct Integration Testing

7.4. Conduct User Acceptance Testing

Deployment

8.1. Prepare Deployment Environment

8.2. Deploy System

8.3. Conduct Post-Deployment Review

Maintenance and Support

9.1. Develop Maintenance Plan

9.2. Develop Support Plan

9.3. Conduct Ongoing Maintenance

9.4. Provide User Support

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task Name | Best | Worst | Most Likely | Expected Duration |
| Interview process | 4 days | 6 days | 5 days | 5 days |
| Development of User Questionnaire | 1 day | 2 days | 2 days | 2 days |
| Identification of Risks | 1 day | 2 days | 1.5 days | 1.5 days |
| DFD diagram | 3.5 days | 4.5 days | 4 days | 4 days |
| UML diagram | 2 days | 5 days | 4 days | 4 days |
| Layout of 1 report | 2 hours | 1 day | 4 hours | 4.5 hours |
| Layout of 1 user screen | 2 hours | 4 hours | 4 hours | 4 hours |
| Testing plan | 5 days | 7 days | 5 days | 5.5 days |
| Implementation plan | 3 days | 3.5 days | 3 days | 3 days |

**Potential Risks:**

1. Scope Creep

- The requirements may change during the project, leading to increased scope and work.

2. Budget Overruns

- The project may exceed the allocated budget due to unforeseen costs or poor estimation.

3. Schedule Delays

- The project timeline may be extended due to various reasons, such as resource availability, technical challenges, or changes in scope.

4. Technical Challenges

- The project team may face difficulties in implementing certain features or integrating different systems.

5. Inadequate Testing

- The system may not be adequately tested, leading to potential issues in the production environment.

6. Security Vulnerabilities

- The system may be susceptible to security threats and vulnerabilities that could compromise sensitive data.

7. Insufficient Training

- The service department staff may not receive adequate training, leading to inefficiencies in using the system.

8. Poor User Adoption

- The service department staff may resist using the new system, leading to reduced productivity.

9. Data Migration Issues

- There may be challenges in migrating data from existing systems to the new system.

10. Regulatory Compliance

- The system may need to comply with industry regulations, and failure to do so could result in penalties.

11. Vendor Reliability

- If third-party vendors are involved, their reliability and performance could impact the project.

12. Resource Availability

- The availability of key project team members or other resources could affect the project timeline.

13. Hardware/Software Failure

- The hardware or software used in the system may fail, leading to disruptions in the service department's operations.

14. Natural Disasters or Other External Factors

- Natural disasters or other external factors could impact the project timeline or resources.