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**Task Number: Unit 25 Task 2**

**Task Name: DERN-Support IT System – Software Project Proposal**

**Software Project Proposal**

* **Step 1: Overview of the Business Context**

**Dern-Support** is a small IT technical support company specializing in computer system repairs for both businesses and individual customers. The company offers on-site support for business clients, while individuals must either drop off their computers at an office or use a courier service for delivery.

* **Challenges Faced:**

1. Limited scalability due to manual processes for scheduling and tracking repairs.

2. Inefficient communication between customers and technicians.

3. Lack of a centralized system for managing customer requests and technician assignments.

* **Opportunities for Growth:**

1. Implementing an online booking and tracking system can streamline operations.

2. Enhancing customer engagement through a self-service portal can improve satisfaction.

3. Expanding service offerings, such as remote support, can increase revenue.

* **Step 2: Proposed Solution**
* **Full Stack Solution Overview:**

The proposed solution is a web-based platform that enables customers to request IT support. It will feature an intuitive customer portal and an administrative dashboard for managing repair jobs efficiently.

* **Key Features:**

**- For Customers:**

- User registration and account management.

- Online service request submission.

**- For the Company:**

- Job assignment and technician scheduling.

- Customer and repair history management.

- Analytics and reporting dashboard.

* **Step 3: Functional and Non-Functional Requirements**
* **Functional Requirements:**

1. Customer registration and login.

2. Service request submission.

3. Admin dashboard for monitoring and reporting.

4. User Dashboard for controlling and monitoring user profile.

* **Non-Functional Requirements:**

1. **Performance:** System should handle multiple concurrent users without latency.

2. **Security:** Secure user authentication and encrypted data storage.

3. **Scalability:** Ability to support business growth and service expansion.

4. **Availability:** 99.9% uptime to ensure continuous service access.

5. **Usability:** Intuitive UI/UX for both customers and administrators.

* **Step 4: Key Performance Indicators (KPIs)**

1. Average time taken to resolve service requests.

2. Customer satisfaction rating based on feedback.

3. System uptime and availability.

4. Reduction in manual scheduling efforts.

5. Increase in the number of service requests handled per month.

* **Step 5: Risks and Implications**
* **Potential Risks:**

1. **Data Security:** Risk of customer data breaches.

2. **User Adoption:** Customers and staff may require training to use the system effectively.

* **Mitigation Strategies:**

1. Implement robust security protocols including encryption and two-factor authentication.

2. Use cloud-based solutions to handle scalability needs.

3. Provide user-friendly tutorials and training sessions.

**This proposal provides a structured approach to developing an efficient, scalable, and user-friendly IT support solution for Dern-Support. It addresses current operational challenges while leveraging technology to improve efficiency and customer experience.**