Activity A (ii): The Proposal

This section outlines the core elements of your solution.

1. The Business Context

- **Describe the industry and business environment.**
    - What type of business is it? (Retail, healthcare, finance, etc.)
    - What digital solutions are commonly used in this industry?
    - What challenges does the business face that your solution will address?

2. Functional Requirements of the Solution

- **Describe what the system should do.**
    - Core features that enable users to complete tasks (e.g., user login, data processing, report generation).
    - Any automation or integrations with existing systems.

3. Non-functional Requirements of the Solution

- **Define system qualities beyond functionality.**
    - Performance (e.g., response time under load)
    - Scalability (ability to handle increased users)
    - Security (data encryption, role-based access)
    - Usability (intuitive design, accessibility compliance)
    - Reliability and availability (uptime guarantees)

4. Decomposition of the Problems to be Solved

- **Break the project into smaller problems.**
    - Identify key challenges (e.g., secure authentication, processing large datasets).
    - How these problems relate to the functional and non-functional requirements.
    - Possible technical approaches to solving each.

5. Key Performance Indicators (KPIs)

- **How will success be measured?**
    - System uptime percentage.
    - Response time for key features.
    - Accuracy of data processing.
    - User satisfaction ratings.

6. User Acceptance Criteria

- **Define when the solution is 'done'.**
    - Specific conditions that the solution must meet before approval.
    - Example: "Users must be able to log in within 3 seconds 99% of the time."

7. Description of the Proposed Solution

- **Summarize how the system will work.**
  - High-level architecture (cloud-based, mobile app, web-based dashboard).
  - Technologies used (programming languages, databases, frameworks).
  - How it fits into the business workflow.

8. How the Recommended Solution Meets the Needs of the Client and Users

- **Justify why this is the right solution.**
  - How it solves the identified business problems.
  - How it improves efficiency, reduces costs, or enhances user experience.

9. How Potential Risks Will Be Mitigated

- **Identify risks and how to handle them.**
  - Cybersecurity threats → Implement encryption & two-factor authentication.
  - System downtime → Use cloud-based hosting with failover support.
  - User resistance to change → Provide training sessions.

10. Relevant Regulatory Guidelines and Legal Requirements

- **List laws and regulations your solution must follow.**
  - GDPR for data privacy.
  - Industry-specific compliance (e.g., HIPAA for healthcare, PCI DSS for payment security).
  - How your system ensures compliance.

Appendix: Activity A (i) - The Research

This section supports your proposal with research insights.

Appendix 1: Industry Research

- Overview of how digital solutions are used in this business sector.
- Examples of industry standards or benchmarks.

Appendix 2: Hardware and Software Considerations

- Recommended system requirements.
- Possible hardware needs (e.g., cloud hosting, IoT devices).

Appendix 3: Emerging Technologies

- AI, blockchain, cloud computing, etc., and how they could enhance the solution.

Appendix 4: Regulatory and Legal Research

- A summary of legal and compliance requirements.
- Best practices for ensuring legal adherence.