Feasibility Study

1. Technical Feasibility Technical feasibility evaluates the resources and technology required to fulfill user requirements within allocated time and budget. Key tasks include:

- Assessing the technical skills of the development team
- Determining stability and reliability of chosen technology
- Ensuring widespread adoption of the technology for community support

2. Operational Feasibility Operational feasibility examines whether the system can address business problems and user requirements. It involves:

- Prioritizing user requirement issues
- Evaluating acceptability of proposed solutions
- Assessing user adaptability to the new system
- Confirming organizational satisfaction with alternative solutions

3. Economic Feasibility Economic feasibility assesses financial viability, considering:

- Costs for software development and long-term organizational gains
- Expenses for full software investigation (requirements elicitation and analysis)
- Cost of hardware, software, training, and maintenance

Case Study: GrowGuide is a web-based solution designed to assist cardamom farmers with tailored agricultural guidance. By leveraging modern technology, GrowGuide analyzes soil quality and real-time weather conditions to provide precise fertilizer and pesticide recommendations, optimizing crop yield and quality.

Features:

1. **User Roles:**
    - **Administrators:** Oversee system operations and ensure data accuracy.
    - **Employees:** Handle data entry and verification for reliable recommendations.
    - **Farmers:** Input soil and environmental data to receive actionable insights.
2. **Functionality:**
    - Tracks and manages essential agricultural practices, including fertilization, pesticide application, watering, and mulching.
    - Bridges traditional farming practices with modern agricultural technologies.

Technical Details:

- Developed using PHP, JavaScript, CSS, and HTML
- Provides an intuitive and responsive user interface

By promoting sustainable and efficient cardamom cultivation, GrowGuide serves as a practical, innovative tool for farmers.

Implementation Plan for GrowGuide:

1. **Technical Feasibility**
    - Assess system compatibility with existing infrastructure.
    - Ensure the development team has expertise in PHP, JavaScript, CSS, and HTML.
2. **Operational Feasibility**
    - Gather user feedback through prototype testing.
    - Train farmers and employees on system use.
3. **Economic Feasibility**
    - Estimate costs for development, training, and ongoing maintenance.
    - Evaluate the long-term financial benefits for farmers and the organization.