Ideation Phase
Brainstorm & Idea Prioritization Template

Date	31 January 2025
Team ID	**LTVIP2025TMID34941**
Project Name	Disease Recognition in Chickens
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:

☑ Step 1: Team Gathering, Collaboration and Select the Problem Statement

The team collaboratively reviewed user needs and discussed the most impactful problem statements. After evaluating PS-1 and PS-2, the team selected the following core problem to solve:

Selected Problem Statement
"Small-scale poultry farmers struggle to detect diseases in chickens early due to lack of tools and veterinary access, leading to late treatment, high bird mortality, and financial loss."

💡 Step 2: Brainstorm, Idea Listing and Grouping

During brainstorming, team members contributed ideas individually and then grouped similar ones for better structure:

Raw Ideas:

- Use AI-based image recognition to detect diseases from chicken feces.
- Create a mobile app to upload and analyze images on the spot.
- Include educational tips in the app for disease prevention.
- Add alert notifications for potential outbreaks.
- Train model using transfer learning (e.g., MobileNet).
- Provide multilingual support for local farmers.
- Offline feature for low-connectivity regions.
- Connect to local veterinary networks via the app.

Grouped Ideas:

1. **AI/Technology Integration**
    a. AI-based image detection of disease
    b. Transfer learning for fast and efficient model training
2. **Farmer-Friendly Interface**
    a. Mobile app with simple UI
    b. Offline support
    c. Multilingual support
3. **Farmer Support Services**
    a. Disease education and prevention tips
    b. Real-time alerts
    c. Connect to nearby veterinary services

📊 Step 3: Idea Prioritization

Ideas were evaluated based on **Impact**, **Feasibility**, and **Time**. Priority was given to solutions that are high-impact and implementable in a short timeframe.

Idea	Impact	Feasibility	Priority
AI-based image detection using deep learning	High	Medium	✅ High
Transfer learning (MobileNetV3)	High	High	✅ High
Mobile app with simple UI	High	Medium	✅ High
Multilingual support	Medium	Medium	Medium
Offline mode for app	Medium	Low	Low
Veterinary network integration	High	Low	Medium
Real-time alerts for outbreak	High	Medium	High
Educational disease tips in app	Medium	High	Medium

✅ **Final Priority Features for MVP (Minimum Viable Product)**:

- AI-based fecal image disease detection
- Transfer learning with pre-trained model
- Mobile-friendly user interface
- Real-time alerts for suspected diseases