Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	27 June 2025
Team ID	LTVIP2025TMID33049 team id
Project Name	Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management
Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

Product Backlog

Priority	ID	Feature	Description	Story Points
High	P1	Data Collection & Labeling	Collect and organize image/symptom data for 4 disease categories	8
High	P2	Model Training (Transfer Learning)	Train model using CNN and transfer learning (MobileNet or ResNet)	13
High	P3	Model Evaluation	Test accuracy, precision, recall, and confusion matrix	5
Medium	P4	API Development	Wrap the model in a RESTful API	8
High	P5	Mobile App UI Design	Build user interface in Flutter or React Native	8
High	P6	User Input (image + symptoms)	Enable farmers to upload images and symptoms	5
High	P7	Diagnosis & Treatment Output	Show prediction results + treatment suggestions	5
Medium	P8	Offline Functionality	Enable basic use without internet	8

Low	P9 Feedback & Reporting	Allow users to submit corrections or get veterinary help	5
Low	P10 Dashboard (Admin/Vet)	Show reports, usage stats, disease map (optional)	13

📅 **Sprint Planning (3 Sprints Example)**

Sprint 1: Data & Model MVP (2 Weeks)

Goal: Build a working backend model
Backlog Items:

- P1: Data Collection (8 pts)
- P2: Model Training (13 pts)
- P3: Model Evaluation (5 pts)

🟦 **Total Points: 26**
🟢 *Outcome:* Trained and evaluated model with API-ready predictions.

Sprint 2: Mobile App v1 (2 Weeks)

Goal: Functional app with diagnosis capability
Backlog Items:

- P5: UI Design (8 pts)
- P6: Image/Symptom Upload (5 pts)
- P7: Results Display (5 pts)
- P4: API Integration (8 pts)

🟦 **Total Points: 26**
🟢 *Outcome:* App can submit image & symptoms, get predictions.

Sprint 3: Enhancements & Feedback (2 Weeks)

Goal: Improve UX and add offline/feedback features
Backlog Items:

- P8: Offline Mode (8 pts)
- P9: Feedback System (5 pts)
- P10: Admin Dashboard (optional, 13 pts if time permits)

🟦 **Total Points: 13–26**
🟢 *Outcome:* More robust app, real-world testable.

📜 **Sample User Stories**

🐥 **Farmer User:**

- **As a farmer**, I want to upload an image of a sick chicken so that I can receive a possible diagnosis.
- **As a farmer**, I want the app to work offline so I can use it in remote areas.

👩‍⚕️ **Veterinary Admin:**

- **As a vet**, I want to see app usage and disease trends in a dashboard so I can monitor outbreaks.

🧠 **Data Scientist:**

- **As a data scientist**, I want a labeled dataset of poultry diseases so I can train and validate a model.

🔢 Story Points Explanation

Points Effort Level Example

1	Tiny	Add a button, change a label
3	Small	Build a symptom input form
5	Medium	Implement model output display with logic
8	Large	Implement offline mode or integrate with REST API
13	Very Large	Train and evaluate deep learning model, build dashboard

📋 Project Tracker (Sprint Board Format)

Sprint	User Story / Task	Status	Story Points	Assignee	Comments
Sprint 1	Data Collection & Labeling (P1)	✅ Done	8	Data Team	Image folders organized
Sprint 1	Model Training (P2)	✅ Done	13	ML Team	Using MobileNetV2
Sprint 1	Model Evaluation (P3)	✅ Done	5	ML Team	91% Accuracy Achieved
Sprint 2	Mobile App UI Design (P5)	🟡 In Progress	8	UI Team	Login + Upload ready
Sprint 2	Image/Symptom Upload (P6)	⬜ To Do	5	App Dev	
Sprint 2	API Integration (P4)	⬜ To Do	8	Backend Dev	Waiting for API endpoint
Sprint 3	Offline Functionality (P8)	⬜ To Do	8	App Dev	Planned w/ local storage
Sprint 3	Feedback & Vet Contact (P9)	⬜ To Do	5	UI Team	

📉 Burndown Chart :

A burndown chart tracks how many points are left vs. time.

🕒 Sprint 2 (10 days)

Day	Planned Points	Remaining Points	Notes
Day 1	26	26	Sprint begins
Day 2	26	21	UI design task started
Day 4	26	18	Image upload under dev
Day 6	26	13	API integration pending
Day 8	26	8	UI & form working
Day 10	26	TBD	Sprint ends