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Comps

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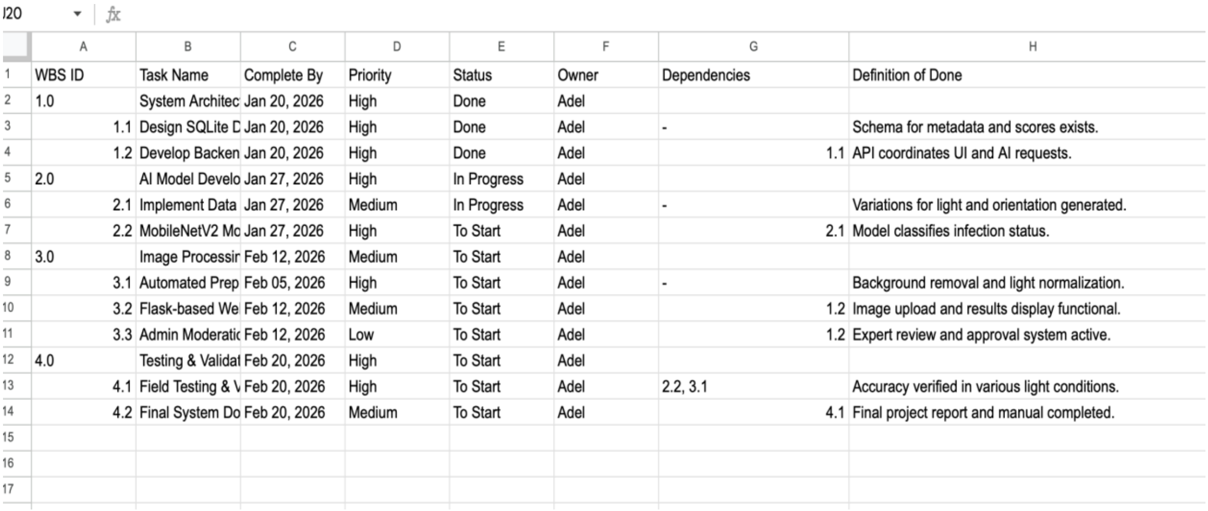
Part 1: WBS-Numbered Project Task List



WBS ID	Task Name	Complete By	Priority	Status	Owner	Dependencies	Definition of Done
1.0	System Architec	Jan 20, 2026	High	Done	Adel		
1.1	Design SQLite D	Jan 20, 2026	High	Done	Adel	-	Schema for metadata and scores exists.
1.2	Develop Backen	Jan 20, 2026	High	Done	Adel	1.1	API coordinates UI and AI requests.
2.0	AI Model Develo	Jan 27, 2026	High	In Progress	Adel		
2.1	Implement Data	Jan 27, 2026	Medium	In Progress	Adel	-	Variations for light and orientation generated.
2.2	MobileNetV2 Mo	Jan 27, 2026	High	To Start	Adel	2.1	Model classifies infection status.
3.0	Image Processir	Feb 12, 2026	Medium	To Start	Adel		
3.1	Automated Prep	Feb 05, 2026	High	To Start	Adel	-	Background removal and light normalization.
3.2	Flask-based We	Feb 12, 2026	Medium	To Start	Adel	1.2	Image upload and results display functional.
3.3	Admin Moderatic	Feb 12, 2026	Low	To Start	Adel	1.2	Expert review and approval system active.
4.0	Testing & Validat	Feb 20, 2026	High	To Start	Adel		
4.1	Field Testing & \	Feb 20, 2026	High	To Start	Adel	2.2, 3.1	Accuracy verified in various light conditions.
4.2	Final System Do	Feb 20, 2026	Medium	To Start	Adel	4.1	Final project report and manual completed.

Part 2: Summary Questions

1. What are your top 5 risky tasks and why?

- MobileNetV2 Model Training (2.2): High risk because the model's ability to distinguish infection depends on a limited dataset.

- Automated Preprocessing (3.1): Critical because if normalization fails, the AI cannot distinguish infection status regardless of complexity.

- Field Testing & Validation (4.1): High risk as laboratory-trained models may perform differently under varied field lighting.

- Data Augmentation (2.1): Risky because the robustness of the system relies on these generated variations to compensate for data limits.

- Backend API Gateway (1.2): Risk stems from its role as the system "Hub"; a failure here halts communication between all modules.

2. What are your top 5 dependencies that could delay the project?

- Preprocessing → AI Model: The model is strictly dependent on focused, background-free images for accurate inference.
- Data Augmentation → AI Model: Model training cannot be completed without the variations needed for robustness.
- Backend API → UI/Database: The UI and storage functions rely on the API to bridge requests and updates.
- AI Model → Field Testing: Validation cannot begin until the classification model is fully refined and trained.
- SQLite Database → Backend API: The API requires a stable database structure to store metadata and coordinates.

3. Where is your MVP cut line (what you will still deliver if time runs out)? The MVP (Minimum Viable Product) cut line excludes the Admin Moderation Panel and advanced Geolocation Mapping. If time runs out, the delivered system will consist of the core MobileNetV2 engine , the Flask-based upload UI , and the Preprocessing module to ensure the primary goal of automated infection detection is met.