SMART INDIA HACKATHON 2024

Farmers Disease Diagnostic/Reporting Portal - Mobile Portal Al Based

- **Problem Statement ID –** 1673
- **Problem Statement Title –** Farmers Disease Diagnostic/Reporting Portal - Mobile Portal Al Based
- **Theme –** Agriculture, FoodTech & Rural Development.
- **Team Leader–** Sam Anderson Y
- **Team ID –** MCA001
- **Team Name (Registered on portal) –** Neural Matrix

Neural Matrix

GreenEye

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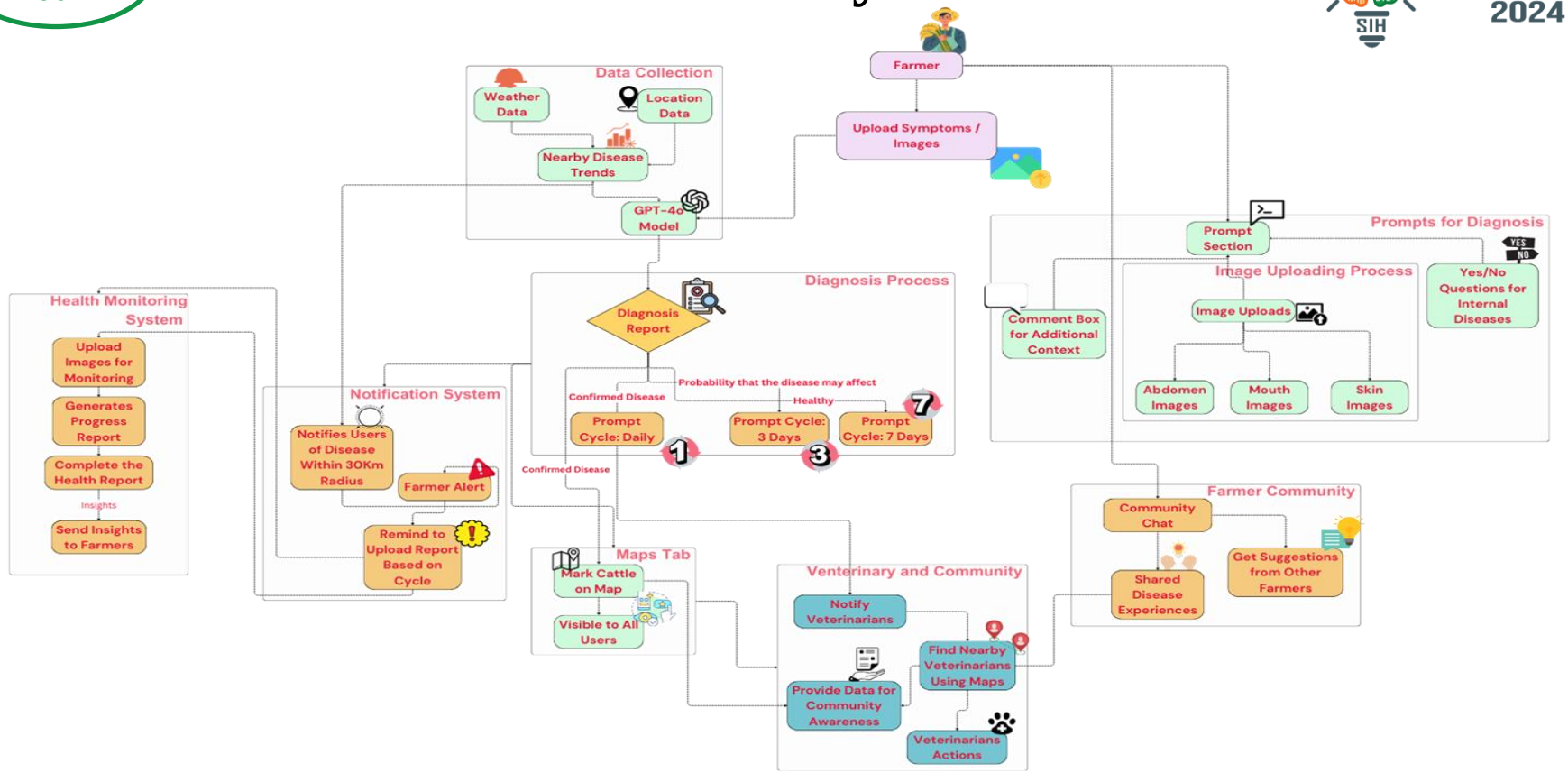


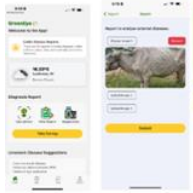
EXPECTED OUTCOME

Farmers Disease Diagnostic/Reporting Portal - Mobile Portal AI Based

Enhanced Disease Diagnosis

Livestock Disease Suggestions

- Foot and Mouth Disease (FMD)
- Brucellosis
- Peste des petits ruminants (PPR)
- Hemorrhagic Septicemia
- Anthrax
- Blue Tongue Disease
- Black Quarter (BQ)
- Swine Fever
- Avian Influenza
- Newcastle disease.



AI algorithms analyze farmers' uploaded cattle images and health data, accurately identifying diseases for effective treatment.

Timely Reporting and Intervention

The app notifies veterinarians automatically in severe cases, enabling prompt interventions with real-time location tracking.

Increased Access to Expert Knowledge

The Veterinarians can view the detailed report of the farmer's cattle and give suggestions and appointments according to it

Improved Farm Productivity

Early detection and effective disease management enhance cattle health, leading to increased productivity and profitability.

Data Collection and Analysis

Farmers' health reports and real-time disease data are analyzed for regional trends and visualized for decision-making.

Cost-Effective Disease Management

Prevention Steps:

1. Isolate infected animals to prevent spread.
2. Vaccinate unaffected livestock.
3. Implement vector control to reduce spread by insects.
4. Maintain cleanliness in living areas.

The app minimizes costs by reducing reliance on physical vet visits, offering preventive measures and remote solutions.

Empowerment and Education of Farmers

Farmers receive PDFs and resources on natural remedies and preventive practices, building their self-reliance and knowledge base.

Integration with Existing Surveillance Systems

The app integrates state and district-level livestock data, enhancing existing systems with real-time insights and visualizations.

Community Engagement and Support

The platform connects farmers and veterinarians, fostering collaboration through shared data, visualizations, and tracking tools.

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Real Time Data collection

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FEASIBILITY AND VIABILITY

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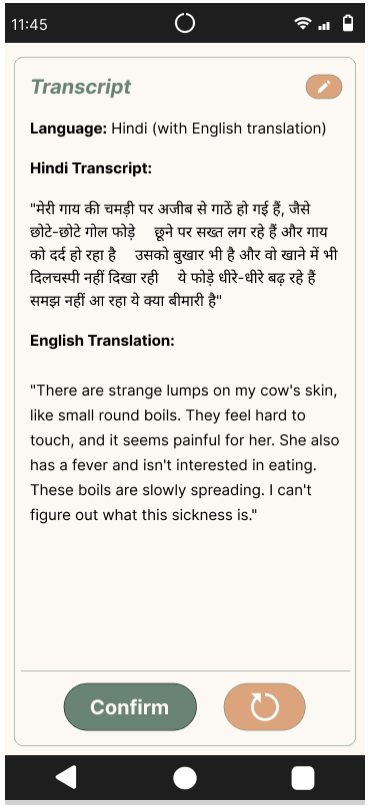
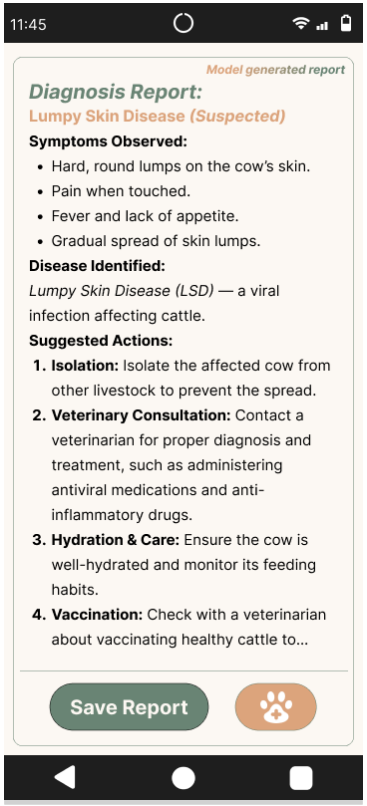
1. GPS enabled image uploads allow precise location tracking for veterinary assistance.

2. Voice simplifies reporting, reducing the need for text based interactions.



1. User friendly, more like a farmer friendly interface that ensures high adoption among farmers.

2. Fast veterinary notifications improves response times, enabling timely actions for better livestock and crop health.



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IMPACT AND BENEFITS

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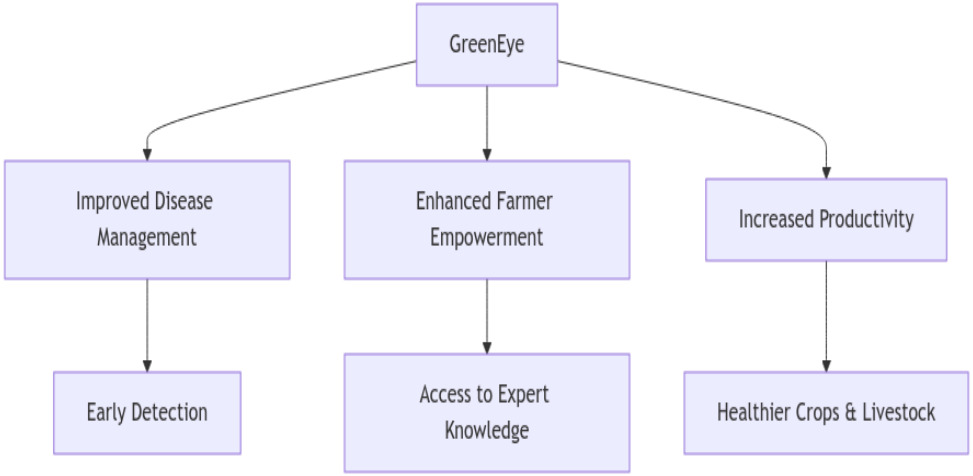
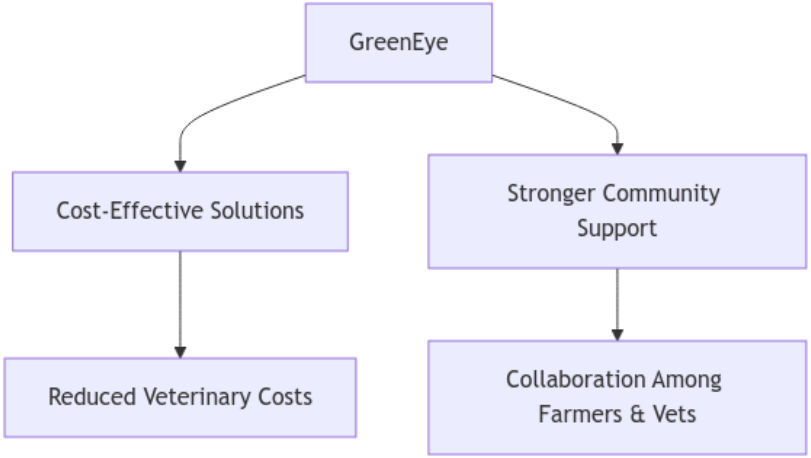


GreenEye helps farmers catch diseases early and make better decisions for their farms.



GreenEye builds a strong farming community and helps farmers earn better.

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RESEARCH AND REFERENCES

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References

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