Arcanix 1.0

COSMIC CODE HACKATHON 2025

- Problem Statement: **Smart Digital Solution for Anganwadi Center Management**

- Project Name: **Anganwadi Sarathi**

- Team Name: **Sloth Bears**

Team Members:

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Revolutionizing Anganwadi Management with Smart Digital Solutions

Introducing a comprehensive digital platform to transform Anganwadi operations, addressing inefficiencies, enhancing transparency, and ensuring accountability.

The Current Challenges in Anganwadi Management

Attendance Inaccuracies

Manual attendance tracking leads to inaccuracies and potential fraud.

Instances of ghost beneficiaries reported in 28% of Anganwadi centers (Source: Independent Audit Report, 2022).

Ration Mismanagement

Inefficient ration distribution results in wastage and unequal access.

Approximately 15-20% of rations are lost due to mismanagement (Source: Ministry of Women and Child Development Data, 2023).

Ineffective Supervision

Limited real-time monitoring and reporting hinder effective supervision.

Supervisors spend most of their time on manual data entry (Source: Internal Time and Motion Study, 2023).

Introducing Our Smart Digital Solution: Key Features

1 **Facial Recognition Attendance**

Eliminates proxy attendance and ensures accurate records.

Reduces attendance fraud by automating the manual data entry process.

2 **Ration Optimization**

Manages stock levels, distribution, and reduces wastage through data-driven insights.

Potential to decrease ration wastage by 30-40%.

3 **Supervisor Reporting**

Provides real-time data, automated reports, and facilitates informed decision-making.

Reduces reporting time drastically, enabling supervisors to focus on program implementation (Projected efficiency gains).

Facial Recognition: Secure and Efficient Attendance

Facial recognition technology for fraud-proof attendance tracking.

Real-time attendance monitoring for supervisors and administrators.

Offline functionality ensures attendance can be recorded even without internet connectivity.

Generates attendance reports with higher accuracy.

Example: Anganwadi worker can mark attendance of all beneficiaries in under 5 minutes.

Ration Optimization: Ensuring Accurate Distribution

1 Inventory Management

Real-time inventory management to minimize wastage.

2 Beneficiary Tracking

Mobile app for beneficiaries to track ration distribution.

3 Wastage Reduction

Reduces chances of ration management.

Example: Anganwadi workers can track stocks of certain items, reducing the risk of stockouts.

Supervisor Reporting: Seamless Monitoring and Evaluation

1   ### Data Visualization

Centralized dashboard for real-time data visualization.

2   ### Secure Communication

Secure communication channel for instant updates and feedback.
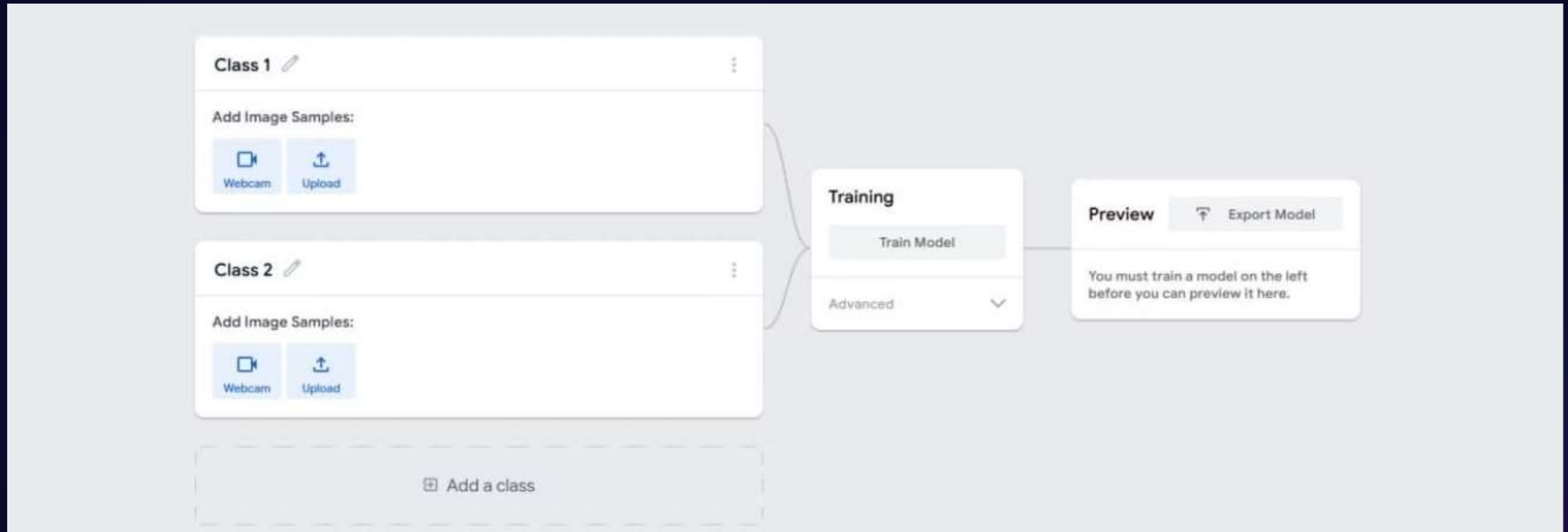
3   ### Data Integration

Integration with existing government databases for comprehensive data analysis.

Example: Supervisor can access a report on the status and complaints of children in their sector with a single click.

Technical Flowchart of the Face-Detection Model

This system makes it easy for the supervisor to evaluate the real-time data on Worker and children attendance.

- Provides fraud-proof attendance tracking.
- Eliminates proxy attendance and ensures accurate records.
- Fastens the process of attendance marking by eliminating the manual data entry process.
- Provides offline functionality making it useful in areas of low internet connectivity.

Technical Considerations: Robust and Reliable

Offline Support
The app functions seamlessly even in areas with limited internet connectivity.

Real-Time Sync
Data synchronization ensures all stakeholders have access to the latest information.

Scalability
Designed to support a growing number of Anganwadi centers without compromising performance.

User-Friendly Interface
Intuitive design for ease of use by Anganwadi workers and supervisors.

Conclusion: Transforming Anganwadi Management for a Brighter Future

Our Smart Digital Solution offers a comprehensive approach to enhance efficiency, transparency, and accountability in Anganwadi centers.

Facial recognition, ration optimization, and supervisor reporting drive operational improvements.

Scalable, user-friendly, and technically robust solution for long-term success. Join us in revolutionizing Anganwadi management and empowering communities.