SMART INDIA HACKATHON 2025

- Problem Statement ID - **SIH25153**
- Problem Statement Title – **Mapping of Implementing and Executing Agencies across PM- AJAY Components**
- Theme - **Smart Automation**
- PS Category- **Software**
- Team Name - **Resemblers**

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PM-AJAY Connect — Unified Coordination & Monitoring Platform

The solution suggested is **a smart, AI-enabled, cloud-based digital** platform named **as PM-AJAY Connect**, which is aimed at simplifying **the planning, coordination, fund flow, monitoring, and reporting** of all three components of PM-AJAY scheme- **Adarsh Gram, GIA and Hostel**.
At the present, project execution is **impaired by disjointed communication, manual tracking, and accountability**. PM-AJAY Connect helps to fill these gaps by developing **one window interface** among all the stakeholders, such as the Centre, State/UTs, District Administration, Implementing and Executing Agencies, and Citizens.

1. Detailed explanation of the proposed solution

- A **centralized digital platform** (web + mobile) for managing **Adarsh Gram, GIA, and Hostel** projects under PM-AJAY.
  Real time dashboard: a dashboard that will display **the funds, progress, and performance** live.
- **Public dashboard**: Public dashboard is where the general progress of the scheme is shown and grievances can be submitted.
- **Smart Communication Hub:** Automated notifications, task assignment, fund approval requests, role-based reminders.
- Integrates **agency mapping**, **real-time fund tracking**, and **AI-based monitoring**.
- Enables **faster decision-making** and improves **transparency** across Centre–State–Agency levels.
- **Accountability** : clear responsibility of all the implementing and executing agencies showing their spheres of work and duties.

This ensures **better coordination**, **faster approvals**, **timely execution**, and **higher accountability** at every stage.

2. How it addresses the problem

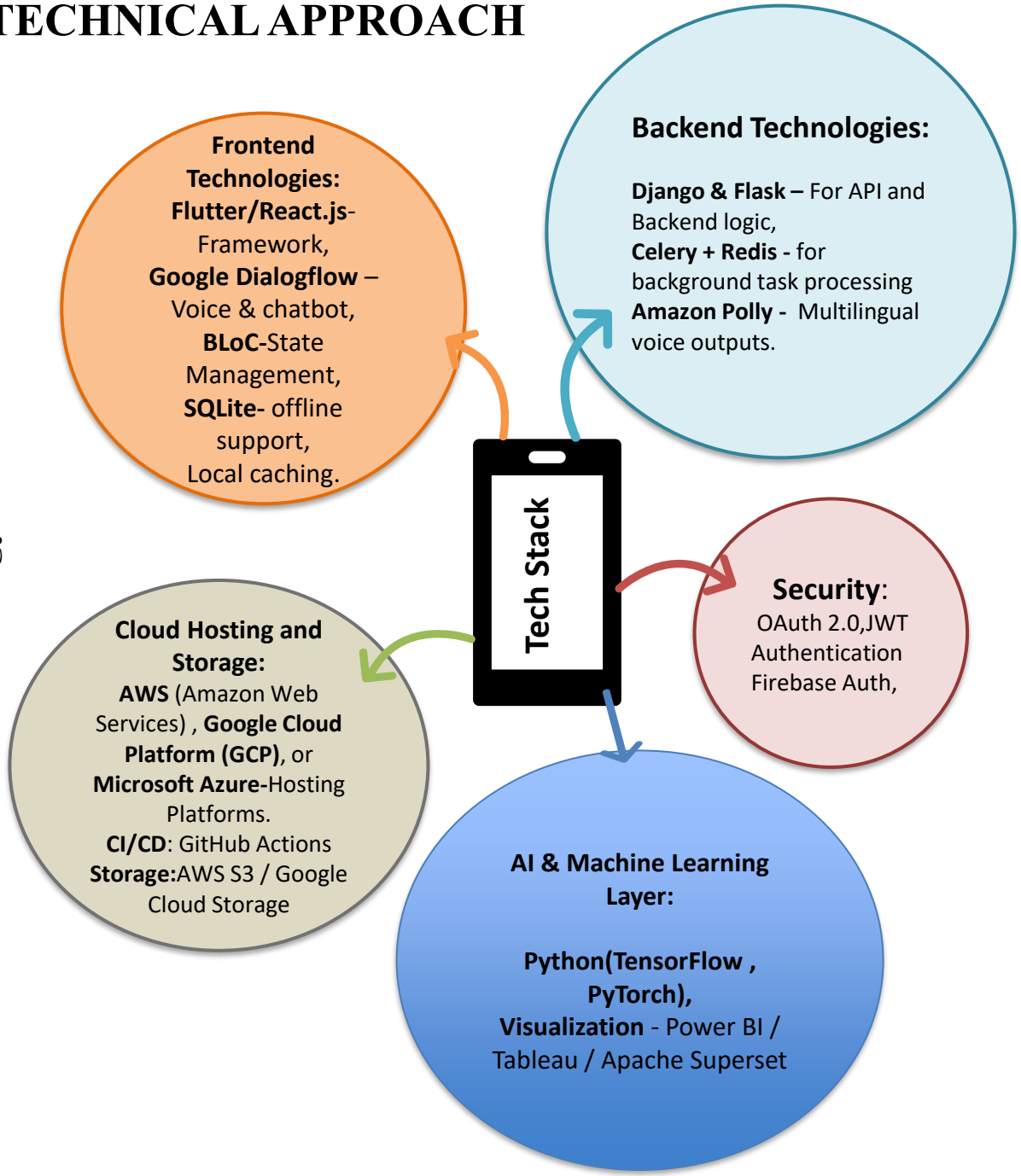
- A digital Agency Repository will keep up to date information of all **implementing/executing agencies, mapped** according to their roles and areas.
- Inter-agency coordination is enhanced through **role-based** access, **structured workflows** and **automated notifications**.
- **Fund Flow Module** displays real time **transaction with accountability** at every stage.
- **Site verification** using IoT, AI alerts, and live dashboards help to see the changes of **progress and delays** in real-time.
- An integrated **communication and notification** center is used instead of the dispersed **email/letter** communications.
- All **tasks and financial** dealings are recorded **electronically** and the responsible officers/agencies, and therefore **accountability** can be tracked.
- **Public dashboard** enables citizens to monitor their **village or hostel project**, which enhances trust and social audit.

3. Innovation and uniqueness of the solution

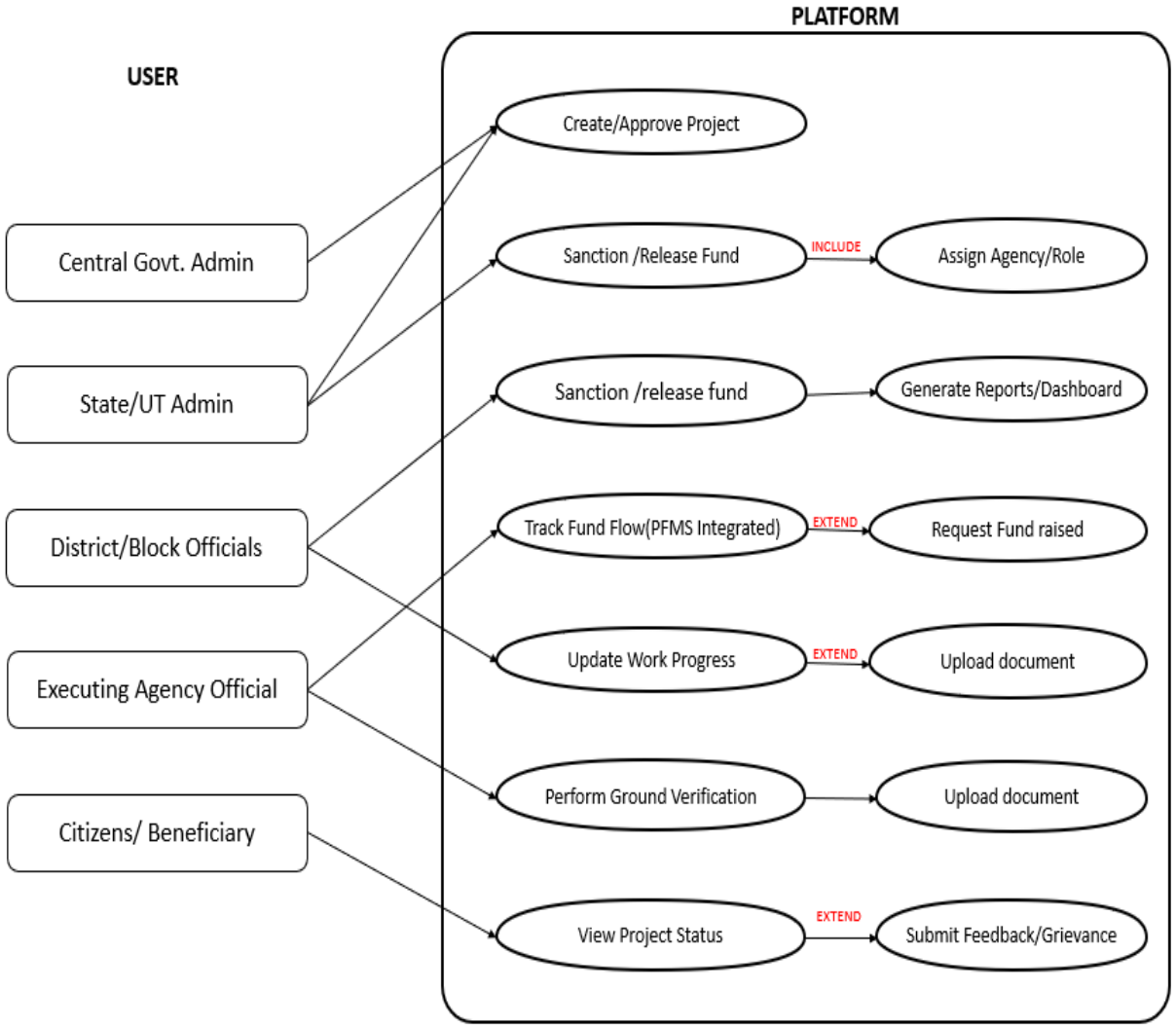
- **All-in-One Platform**: This is the integration of agency mapping, fund flow tracking, communication and project monitoring into a single system, in contrast with the current fragmented government MIS.
- **AI & IoT Integration**: Predictive delay warning with AI, and ground validation with IoT (geo-tagged proof uploads) i.e. it is proactive and not reactive.
- **Digital Accountability Trail** : All activities can be traced to an accountable officer / agency, and an auditing chain of execution can be established.
- **Real-Time Visibility and Smart Decisions**: Dashboards provide the Centre and State decision-makers with live information on how to intervene in time.
- **Citizen Participation** : Provides public dashboards and grievance feedback loops, increasing trust and reducing corruption.
- **Scalability and Reusability** : The platform is scalable to other schemes (e.g., PMGSY, Jal Jeevan Mission), and is therefore an agent of reusable government infrastructure.
- **Mobile & Offline-First Design**: Enables field operatives to update progress, upload evidence, and interact with officials in near real-time, even in low-bandwidth rural settings

TECHNICAL APPROACH

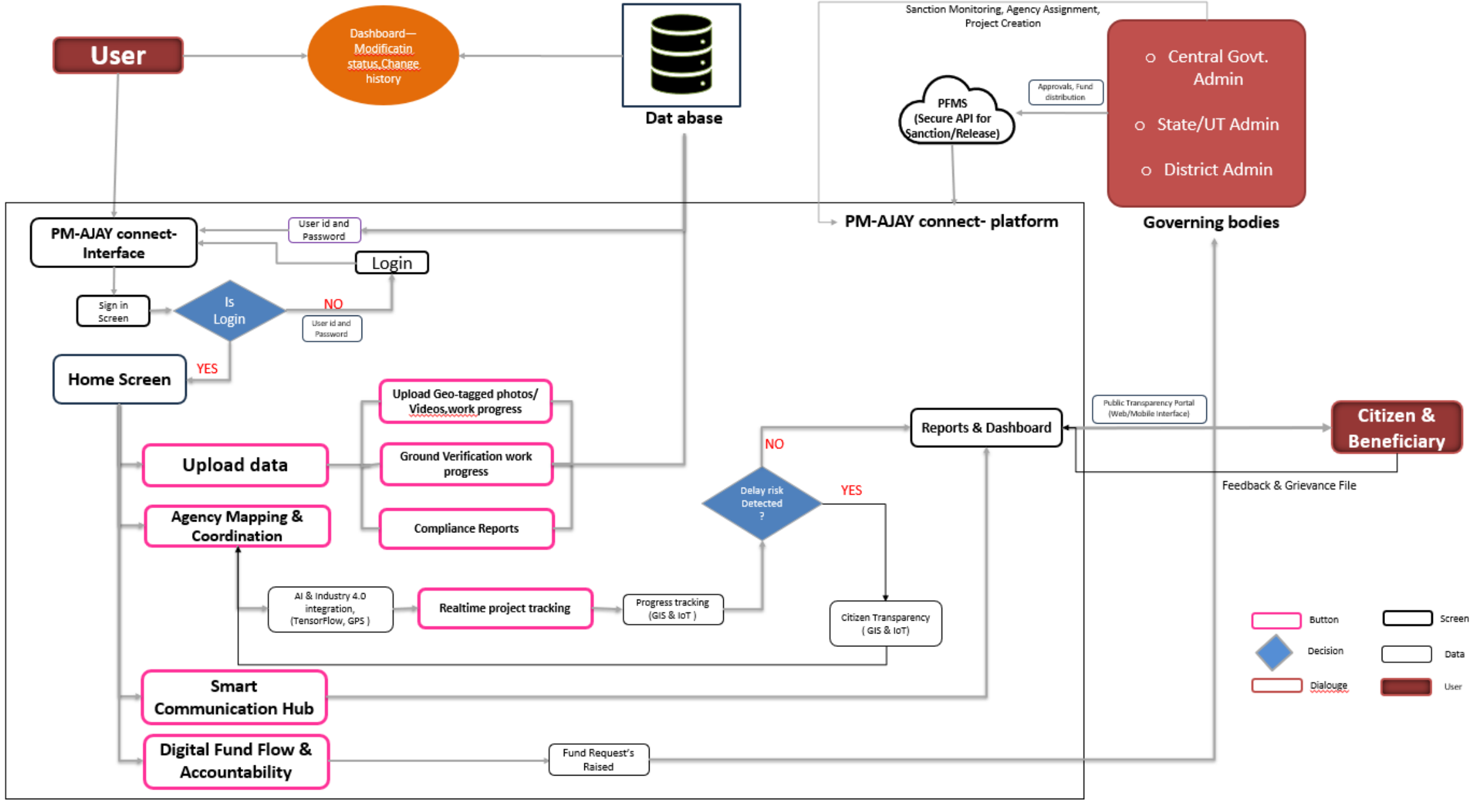
Technology Stack



Use Case Diagram



DATA FLOW DIAGRAM



FEASIBILITY AND VIABILITY

Feasibility Analysis

- **Current Infrastructure**: The current infrastructure indicates that most of the State/UT departments are already digitally literate and internet accessible at the administrative level. The solution will be able to integrate with the current government databases via APIs.
- Clear Roles by the users **(Centre, State/UT, Implementing Agencies**).
- Mobile + Web Compatibility: Allows access to the officials of the **State/UT, implementing agencies, and central ministry**.
- Role-Based **Dashboards** are user-friendly with ease of navigation.
- Higher ROI by saving more time and transparency and improved use of funds.
- Less manual work and quicker communication led to reduced Administrative Costs.
- Workflow Automation eliminates coordination book times.

Potential challenges and risks

- Data integration with existing state systems
- User adoption resistance
- Cybersecurity and data privacy
- Connectivity issues in rural areas
- Continuous monitoring and support required

Strategies for overcoming these challenges

Use **standard APIs**, data validation layers, and phased onboarding of states.

Conduct **capacity-building workshops**, offer multilingual support, and provide easy training modules.

Use **end-to-end encryption**, comply with **CERT-In** guidelines, and deploy **secure login (2FA)** and role-based access control.

Introduce **offline mode with auto-sync** and mobile-friendly lightweight UI.

Establish a **National Helpdesk** + feedback loop and assign **nodal officers** at state level.

IMPACT AND BENEFITS

Potential Impact on the Target Audience

- Gives the community beneficiaries of the SC scheme easy access to scheme benefits via mobile apps.
- Provides accountability and straight forward communication between the citizens and government.
- The Central/State agencies can monitor the implementation with the help of the real-time data.
- Minimizes the time wasted and mistakes during the selection of beneficiaries and transferring funds.
- Enhances community building by way of education, livelihood and infrastructural assistance.
- Promotes skill-based and entrepreneurship among the young population.

Benefits of the Solution

1. Social Benefits
   - Increases accountability and transparency of implementation.
   - Encourages social inclusion and equality.
   - Enhances confidence between societies and the states.
2. Economic Benefits
   - Minimizes operation and administration expenses.
   - Promotes self-employment and entrepreneurship.
   - Improve the livelihood and economic growth in the area.
3. Administrative Benefits
   - Enhances interdepartmental coordination by means of centralized data.
   - Brings a better decision and real-time reporting.
   - Minimizes corruption and loss of funds.
   - Automatizes project monitoring, tracking and assessment.

RESEARCH AND REFERENCES

PM-AJAY Official Guidelines – https://socialjustice.gov.in
(Official Ministry of Social Justice & Empowerment site outlining scheme objectives, components, and implementation.)
Adarsh Gram Scheme Information – https://rural.nic.in
(Details on integrated village development and related infrastructure.)
GIA (Grant-in-Aid) Component Guidelines – https://ngodarpan.gov.in
(Policy and NGO/agency mapping under Government grants.)
Hostel Component Guidelines for SC Students – https://scholarships.gov.in
(Government-hosted portal for educational and hostel benefit schemes.)