

Early Alert System for Dropout Risk in Girl Students Using AI

1. Introduction

Girl student dropout remains a major challenge in India due to social, economic, health, and cultural barriers. This project proposes an AI-driven early alert system to identify at-risk students and enable timely intervention.

2. Problem Statement

Schools often identify dropouts only after students permanently leave. There is no predictive system to detect early warning signs and coordinate interventions among stakeholders.

3. Proposed Solution

The system uses machine learning to analyze attendance, academic performance, socio-economic factors, health patterns, and infrastructure data to generate dropout risk scores.

4. System Architecture

The solution includes a web/mobile dashboard, backend services, machine learning engine, and automated alert mechanisms via SMS or WhatsApp.

5. Expected Impact

The project aims to reduce dropout rates, support SDG-4 (Quality Education), and empower schools and NGOs with data-driven decision-making tools.