CHAPTER-11

11.1 FUTURE SCOPE:

Integration with IoT Sensors

The system can be connected to real-time IoT sensors to automatically collect rainfall, river level, and soil moisture data for more accurate live predictions.

Real-Time Satellite Data Integration

Future versions can integrate satellite-based weather monitoring systems for better rainfall and storm tracking.

Mobile Application Development

A dedicated mobile app can be developed to provide instant flood alerts and notifications to users in affected regions.

Deep Learning Implementation

Advanced models such as LSTM (Long Short-Term Memory) networks can be used for time-series forecasting to improve prediction accuracy.

GIS-Based Flood Mapping

Integration with Geographic Information Systems (GIS) can help visualize flood-prone areas on interactive maps.

Government & Disaster Management Integration

The system can be connected with official agencies like the National Disaster Management Authority for coordinated emergency response.

Multi-Region Deployment

The architecture can be scaled to support multiple districts, states, or nationwide flood monitoring systems.

Automated Alert Systems

Future enhancements may include:

- SMS alerts
- Email notifications