# INSTITUTE OF SPACE TECHNOLOGY
## KICSIT, Kahuta Campus

## Android Development:-

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### 1. Introduction:-

SkyMate is an Android-based weather forecasting application designed to provide real-time weather updates and air quality information. The application helps users make informed decisions by displaying accurate weather data in a simple and interactive interface

### 2. Problem Statement:-

Many users face difficulty in accessing reliable weather information. Existing applications are either complex or lack air quality data. SkyMate solves this problem by providing a simple and efficient solution.

### 3. Objectives:-

- To develop an Android weather application
- To display real-time weather updates
- To provide air quality index information
- To design a user-friendly interface

### 4. Scope of The project:-

SkyMate is suitable for daily weather forecasting. The application can be extended to include notifications, dark mode, and multi-language support in future versions.

5. Tools And Technologies:-

- Android Studio for development
- Java for backend logic
- XML for UI design
- Weather API for real-time data
- JSON for data parsing

6. System Architecture:-

The system consists of:

- User Interface Layer
- Application Logic Layer
- API Integration Layer
- Data Processing Layer

### 7. Features of SkyMAte:-

- Real-time weather updates

- Temperature, humidity, and wind speed
- Air Quality Index (AQI)
- Location-based weather information

## 8. Future Enhancement:-

- Weather alerts and notifications
- Dark mode support
- Weekly and monthly forecast
- Multi-language feature

### 9. Conclusion:-

SkyMate is a reliable and user-friendly Android weather application. It provides accurate weather and air quality information, making it useful for everyday use.