



SDC-SI Mobile App Development Task – Weather App

As part of our selection process, we've designed a practical development challenge to assess your **UI skills, API integration ability, problem-solving approach, and code structure discipline**.

You can use any framework like Flutter, Android, SwiftUI or Flask.

Note: Please submit whatever progress you have made — even if the app is not fully complete. We will evaluate your work based on what you have implemented.

The Challenge – Weather App (UI Only – API Optional)

- **Weather card UI** – create a modern card-style layout exactly like the provided design, with a gradient background.
- **Search bar** – add a text field at the top for entering a city name.
- **Display core weather details on the card:**
 - City name
 - Temperature in Celsius (°C)
 - Weather condition (e.g., sunny, cloudy, rainy)
- **Extra weather info (optional but encouraged):**
 - Humidity percentage
 - Wind speed (e.g., km/h)
 - Toggle between Celsius (°C) and Fahrenheit (°F)
- **Basic UI/UX design** – ensure readability, proper spacing, and alignment of all elements.

Mandatory UI Completion



Optional API Integration

- **OpenWeatherMap API** – you may fetch real-time weather data instead of hardcoding it.
 - [Geocoding API](#): convert city names to latitude and longitude.
 - [Current Weather Data API](#): fetch weather details by lat/lon.
 - Example:
`https://api.openweathermap.org/data/2.5/weather?lat={lat}&lon={lon}&appid={API key}`
 - Required API Fields: `name` (city), `main.temp`, `weather[0].description`
 - Create an account on the [Openweather API](#) to get the api key.

Evaluation Points

- Code quality and project documentation.
- Implement error handling for API requests (*if API is used*).
- Optimize UI for performance and responsiveness.
- Add animations or transitions to enhance the user experience.
- Any extra efforts made to enhance the project will be appreciated and considered for bonus points.

⚡ **Note:** First complete all the **basic UI features** — these are the **bare minimum needed to qualify**. Once the basics are done, you can work on the **optional API integration and extra features** to increase your chances of selection.



Submission Format

Please provide:

- Public GitHub repo.
- APK link after uploading it on google drive.
- (*Optional*) Short screen recording walkthrough of the app.
- README in your GitHub repo summarizing all features and development practices used.