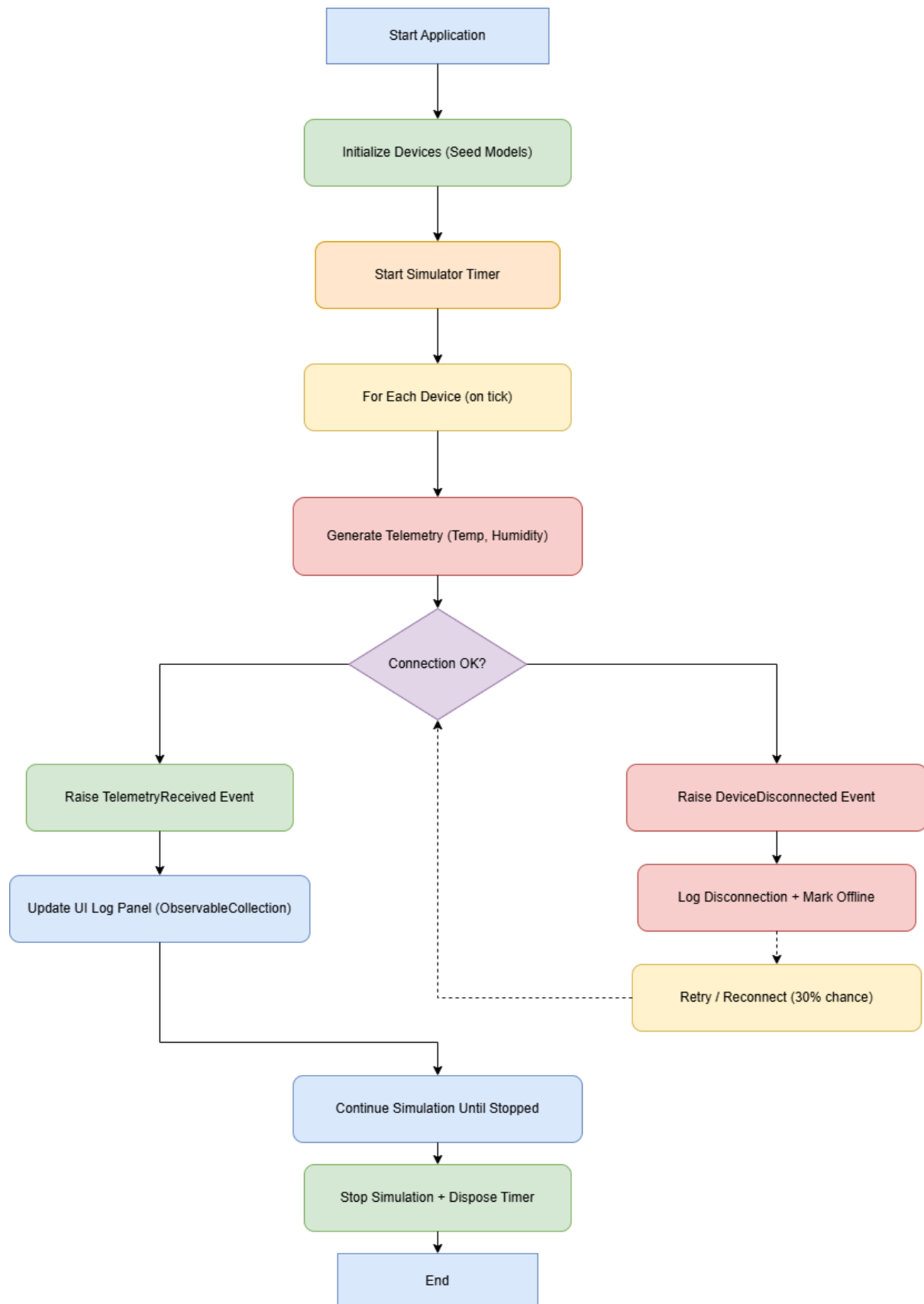


Flow Diagram



The flowchart above outlines the **core application logic** of the IoT Device Manager:

1. When the application starts, it initializes device records (from seed data).
2. The **DeviceSimulator** starts a timer loop.
3. For each tick, every device either:
 - Sends telemetry data (temperature & humidity), or
 - Simulates a **disconnection event** (10% chance).
4. Events are raised and logged in the **ObservableCollection**, which updates the WPF interface in real time.
5. Disconnected devices attempt to **reconnect** after several cycles (30% probability).
6. When the user stops the simulation or closes the app, the simulator disposes its timer and resources.

This logic demonstrates **real-time device simulation and error handling flow** consistent with IoT communication models.