Flowchart of Project 1 - Cognitive Customer Insights with Watson AI

Start

Initialize IBM Watson NLU (API Key + URL)

Display Streamlit UI:

- Title: "Customer Feedback Sentiment" Dashboard"
- Input: User Name
- Text Area: Feedback

Submit Feedback Button Clicked?
— No → Wait for user action

Yes ↓

Check: Is User Name Provided?
— No → Show Warning ("Please enter your name")

Yes ↓

Split Feedback Text into Lines

For each feedback:

- Call IBM Watson NLU API
- Analyze Sentiment + Entities

Extract:

- Sentiment, Score, Convert to Rating (1–10), Add Timestamp
- Append Results

Save Results to "feedback_data.xlsx":

- If file exists → Load & Append
- Else → Create new file

Show Summary Table, Feedback Ratings & Progress Bars

End