Lesson Plan: Build a Mood2Emoji App

Developed by: Kuthubu Zaman

Audience: Students aged 12–16
Duration: 60 minutes
Topic: Text Mood Detection with Emojis

Learning Objectives

1. Understand what sentiment analysis means.
2. Build a simple mood detector using Python and Streamlit.
3. Recognize how technology can interpret text emotions safely.
4. Apply logical thinking to create a kid-safe AI tool.

Lesson Flow (60 Minutes)

Time	Activity	Details
0–10 min	Warm-up Discussion	Talk about emojis, moods, and how messages can sound happy or
10–20 min	Concept Introduction	Explain sentiment and how computers detect positivity/negativity.
20–35 min	Guided Coding Activity	Build Mood2Emoji app step-by-step using Streamlit and TextBlob.
35–50 min	Hands-On Testing	Students type their own sentences and observe emojis.
50–60 min	Reflection & Wrap-up	Discuss how mood detection can be used responsibly in real life.

Topics Introduced

- Sentiment Analysis
- Text Polarity
- Rule-based logic
- Streamlit for web apps
- Responsible AI (kid-safe filters)

Activity Explanation

Students will:
1. Write a short sentence in the app.
2. Observe how the app gives feedback as an emoji.
3. Explore “ Teacher Mode ” to visualize the workflow.
4. Try modifying the text to see how results change.

Learning Outcomes

- Students gain hands-on exposure to AI for text understanding.
- Learn about ethical and safe AI design.
- Understand how apps turn logic into real-time output.
- Build confidence in experimenting with Python projects.

Assessment

- Observe engagement and participation.
- Mini quiz: “ How does the app decide which emoji to show? ”
- Bonus: Students explain the logic in their own words.

Materials Required

- Computer with Python & Streamlit installed
- Internet access
- Project code shared via GitHub

Safety & Inclusion

- The app filters inappropriate language.
- Encourages positive and respectful communication.
- Designed for a safe and fun learning experience.

End of Lesson Plan