Lesson Plan: Build a Mood2Emoji App

Target Age: 12–16 | Duration: 60 minutes

■ Goals

- Help students understand how computers can recognize emotions from text.
- Introduce basic concepts of Natural Language Processing (NLP) and sentiment analysis.
- Encourage positive communication and safe language use online.
- Make learning about AI fun, interactive, and age-appropriate.

■ Learning Objectives

By the end of this lesson, students will be able to:
- Identify emotions (happy, sad, neutral) in text.
- Explain how simple AI tools can detect text mood.
- Create and test a basic Streamlit app.
- Reflect on the importance of digital kindness.

■ Topics Introduced

- Introduction to emotions and sentiment in text
- Basics of AI and NLP (Natural Language Processing)
- Streamlit for interactive web apps
- Importance of safe and positive communication online

■ Lesson Flow (60 Minutes)

Time	Activity	Description
0–10 min	Introduction	Discuss emotions, emojis, and how we express ourselves online.
10–25 min	Demo the App	Show the Mood2Emoji app. Students test with various sentences.
25–45 min	Build or Explore	Guide students in writing simple code or exploring logic of mood detection.
45–55 min	Discussion	Talk about why using kind words matters in online communication.
55–60 min	Recap	Summarize learnings and connect coding with empathy.

■ Materials Needed

- Computer with Python 3.9+ installed
- Internet connection
- Streamlit and TextBlob packages
- Sample sentences for testing
- Project file: app.py from GitHub repo

■ Assessment / Reflection

- Ask students to write one sentence that spreads positivity.
- Have them predict what emoji the app will return.
- Reflect on how technology can be used to encourage kindness.

■ Learning Outcomes

- Students understand the basics of text sentiment and AI.
- Students recognize how digital tools can support emotional learning.
- Students practice writing positive, responsible messages online.
- Students build curiosity about how computers interpret language.