

Sentiment Analysis Activity Plan

Overview

Students explore how AI interprets human emotions in text using a process called Sentiment Analysis. Through examples, discussions, and hands-on model training, students will see how context, tone, and data quality affect how AI determines whether a message is positive or negative.

Recommended Audience: Middle School Students

Activity Length: 1 hour

Experience Level: Beginner

Technical Requirements

- Device Requirements
 - 1 computer per student during class (Mac, PC, Chromebook all work great!)
 - Online connectivity at a minimum of 10Mb/sec
 - Modern browsers on computers
 - Chrome
 - Firefox
 - or Safari Version 15.1 or higher
- Note on Student Accounts:
 - Students do not need an account to complete this activity. However, students can only save/return to their work later if they make an account before starting the Hour of AI.

Activity Materials

Teacher Resources

- [Sentiment Analysis Model – Teacher Guide](#)
- Discussion Question Prompts (Beginning and End of Class)
- Optional Guided Worksheet (digital or printed)

Student Activity: <http://codehs.com/hourofai/sentiment>

- [Sentiment Analysis Model – Student Version](#)

Content Standards

CSTA K–12 Computer Science Standards

1A-IC-16: Compare how people and computers process information differently.

Teacher Instructions

- Before the Hour of AI:
 - Review the technical requirements for this activity.
 - Review teacher and student resources.
 - Prepare to facilitate discussions around context, tone, and ambiguity in language.
 - Decide if students will use the guided worksheet digitally or on paper.
- During the Hour of AI:
 - Have students brainstorm:
 - What makes a message feel positive or negative?
 - Can the same sentence mean different things depending on tone?
 - Where do we see emotion being interpreted by technology in daily life?
 - Complete *Mixed-Up Message* activity
 - Read *Sentiment Analysis Notes*
 - Ask students to highlight real-world examples they find surprising.
 - Write one-sentence definitions of sentiment analysis.
 - Complete *Train Your Own Sentiment Analysis Model*
 - Have students predict AI classifications before testing.
 - Submit *Train Your Own Model Submission* reflection
 - Students discuss:
 - What is sentiment analysis?
 - Why is it difficult for AI to interpret emotions from text?
 - What kinds of data help computers better understand emotions?
 - After the Hour of AI:
 - Did you know that CodeHS offers K-12 AI curriculum, PD for teachers, and classroom tools? Go to codehs.com/ai to learn more how you and your students can continue learning about AI.

Need Help?

Email support@codehs.com to get in touch with our support team!