CS 2: Exit Ticket

Google form Link : https://forms.gle/VF2N6mJ5petLaHJN6

summary and insights generated:

*Key Student Feedback Themes**

✅ Understanding of Today's Topic
- **14 students** said *"I completely understood"*.
- **9 students** said *"I mostly understood"*.
- **1 student** said *"I somewhat understood"*.
- **1 student** said *"I'm somewhat confused"*.

🔍 **Insight:** Majority (92%) understood the session well, indicating clearly explained key concepts.

🌟 Engagement Ratings (1 to 5)
- **Most ratings are 4 or 5.**
  - *14 students gave a perfect 5.*
  - *9 students rated 4.*
  - *1 student rated 2.*

🔍 **Insight:** High engagement, with over 90% rating it 4 or above. Only one student felt minimally engaged (rating 2).

📚 Most Important Learnings (Selected Highlights)
- **Common themes:**
  - *Backpropagation*
  - *Logistic Regression*
  - *Bayesian Classification*, *Naive Bayes*
  - *Neural Networks*, *KNN*, *Perceptron*
  - *Visualization Tools*: *Connected Papers*, *RawGraphs.io*
  - *Conceptual foundations*: Differences between feedforward & backpropagation

🔍 **Insight:** All major machine learning techniques covered were retained. Students recognized both theoretical and practical components.

❓ Questions/Hurdles Students Still Have
- "How to apply optimization models?"
- "When to stop the iteration of backpropagation?"
- "How are neural networks used in the real world?"
- "Are there any plagiarism-check tools?"

- “How are data science concepts applied practically?”

🔍 **Insight:** Students are curious about:
  - Application of theory in real problems
  - Model optimization strategies
  - Application-based learning, especially in the industry

💡 Suggestions
- **Frequent suggestions included:**
  - *“Include real-world applications/examples”*
  - *“Animated/visual explanations”*
  - *“Application-based learning”*
  - *“More tool demonstrations (like plagiarism checkers)”*

🔍 **Insight:** Learners are seeking more interactivity, visual components, and real-life relevance.

🤖 AI-Generated Insights

1. **Strong conceptual grasp:** Engagement & understanding levels are high. Students are invested in learning.
2. **Varied learning paces:** A small number still confused—highlighting need for differentiated assistance or recaps.
3. **Emphasis on application learning:** A consistent demand to move from conceptual understanding to *industry relevance*.
4. **Tech-savvy crowd:** Students are aware of external tools (like rawgraphs.io, Connected Papers) and are interested in more of these.

🔄 One Change to Make in Your Next Class

Add a “Real-World Applications” segment after each concept is explained, including:
- Use cases from industry (e.g., how backpropagation is used in real-world AI systems)
- Visual demos using tools (e.g., scikit-learn, TensorFlow visualizations)
- Even short animations or interactive dashboards (like what’s happening inside a neural network)

> Bonus tip: Address specific questions (like “when to stop iterations”) with quick experiments to let students try and visualize model behavior.