Dry Run Notes 10-5-24:

### **Key Feedback: (as formatted by ChatGPT)**

#### **1. Tie Back to AI**

* Highlight how A\* integrates into **artificial intelligence systems**:
  + **Game AI**: Helping characters find their way across terrains.
  + **Robotics**: Finding the best route for robot vacuums or delivery bots.  
    *"A\* gives AI the ability to 'think ahead' and make smarter decisions while exploring unknown environments."*

#### **2. Clarify the Importance of the Algorithm**

* Add more **why**:  
  *"A\* is not just about the shortest path; it’s about finding it fast and with fewer resources. This efficiency is crucial in real-time AI systems where every millisecond counts."*

#### **3. Make it Fun and Relatable**

* **Add an intro about yourself!!!**
* **Cute Maze Allegory**: Show a maze with a mouse searching for cheese, symbolizing the A\* search process.  
  *"Imagine you're this little mouse in a maze, trying to find cheese the fastest way possible! That's what A\* helps us do – find the shortest path while thinking ahead."*

#### **4. Add a Real-Life Example or Video**

* Include a **video demonstration** of Dijkstra’s algorithm (since it’s closely related to A\*), helping to visualize how these algorithms explore paths.  
  *Tip: Choose a video that contrasts A\* with Dijkstra’s to show why heuristics make A\* more efficient.*
* Include lots of images relating to what you’re speaking about

#### **5. Simplify Language (Dumb It Down)**

* For terms like **heuristics** or **Manhattan Distance**, add definitions on slides.
  + **Heuristics**: A clever guess that helps A\* figure out which paths are worth trying.
  + **Manhattan Distance**: The total steps it takes to get from point A to B, like walking through city blocks.  
    *"Think of heuristics like the mouse’s sense of smell, helping it figure out if it's getting closer to the cheese."*
  + What is “cost” in this context, what is BFS, etc (be careful about acronyms)