REFLECTIONS WORKSHEET

Wisdom from the Trenches

These worksheets are meant to encourage you to actively engage with the core concepts taught in this program. While the majority of the program will be focused on code, implementation, and practical skills, these worksheets give you the opportunity to reflect, brainstorm, and fill in any conceptual gaps.

Reflection #1: Machine Learning in the "Wild"

In the video, we introduced a few real-world (and quite cutting-edge) applications of machine learning. In the space below, brainstorm or research and then list 3 more real-world applications of machine learning that you personally find interesting. It's totally fine if you don't know how they work or what types of algorithms they use yet.

Reflection #2: The Decisions We Make

For each of your 3 personal real-world ML examples, write down what you think the key decision or prediction is. Do your best to **specify** or **quantify** it. For example, do not just write "predict stock price movement." Instead, write "determine the *probability* of a stock price going up or down." As you'll learn soon, thinking about *specific, quantifiable* outputs is the key to defining a **target variable** for your model.

Reflection #3: The Data We'd Need

For each of your 3 personal real-world ML examples, describe what you think will be the most important data to collect. In other words, think about what you'll actually need to arrive at your desired outputs listed in Reflection #2. We'll talk more about data collection in the next module.

Reflection #4: WTF is Machine Learning?

In your own words, describe the purpose and function of machine learning. Feel free to come up with your own analogy, if helpful. What advantages you think machine learning has over "explicit programming" and why do you think machine learning as a field is exploding in usage and demand?

Reflection #5: Why?

In the space below, write down *your* number one reason for wanting to learn machine learning and data science. What about it makes you excited? What do you plan to do after you acquire these skills? **Write down your goals, and let's knock them out of the park, together.**