**TensorFlow for Deep Learning Bootcamp:**

Notes taken for the **TensorFlow for Deep Learning Bootcamp**, by **Zero to Mastery**.

Notes taken by Travis Rillos. These notes and all app code and practice code organized in the following Github repository: [**https://github.com/xroadtraveler/tensorflow\_for\_deep\_learning\_bootcamp**](https://github.com/xroadtraveler/tensorflow_for_deep_learning_bootcamp).

**Other Course Resources:**

Course Github repository: <https://github.com/mrdbourke/tensorflow-deep-learning>

Online Book: <https://dev.mrdbourke.com/tensorflow-deep-learning/>

**Zero to Mastery Resources:**

Website: <https://zerotomastery.io/>

YouTube: <https://www.youtube.com/@ZeroToMastery>

LinkedIn Group: <https://www.linkedin.com/groups/12121940/>

**Discord Server**: @ZeroToMastery

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# Section 1 – Introduction:

## Course Outline:

* Just an overview.
* There are **18 Sections**.
* End goal is to pass Google’s TensorFlow exam.
* In this video, the order we’ll be focusing on things appears to be:
  + **TensorFlow Fundamentals**,
  + A **NumPy** and **Pandas** section,
  + A **Machine Learning Primer**,
  + Setting up a **Developer Environment** (Jupyter Notebook),
  + **Neural Network Regression**,
  + **Neural Network Classification**,
  + **Convolutional Neural Networks** (including Computer Vision),
  + **Transfer Learning**,
    - This is where we start building real-world projects.
    - The first project is called “Food Vision”.
  + **Natural Language Processing (NLP)**,
    - How LLM’s are made.
    - We’ll create a project called “SkimLit”.
  + **Time Series**,
    - We’ll create a project called “BitPredict”.
  + And finally, **TensorFlow Certification**.

**A graphic of a software developer certificate

Description automatically generated**

## Join Our Online Classroom:

* Mostly a plug for the Discord server. A private link to the channel is provided in the following page. I won’t post that to the notes, in respect for their course.
* Once I finish the course, I can post my certificate to their “Alumni Section”.
* **Note:** The link wants me to set up a new account that’s separate from my existing Discord account? I wonder if I can work around this…
  + I was able to manually enter the invite link into my mobile app.

## ZTM Resources:

**Website:** <https://zerotomastery.io/>

* The community section on the website (<https://zerotomastery.io/community/>) contains additional resources including ***Coding Challenges***.
* It also contains ***Open Source Projects***.
* There are other things, but I was less interested in them.
* There’s also a very useful tab containing a multitude of ***Cheat Sheets***.
* Another useful section involves advice on ***Career Paths***.

# Section 2 – Deep Learning and TensorFlow Fundamentals:

## What is Deep Learning?:

* A
* A
* A
* A
* A
* A
* A

# Template: Code Box:

from tkinter import \*

window = Tk() **🡨 🡨 🡨 Create window**

l1 = **Label**(window, text="**Title**") **🡨 🡨 🡨 Create labels**

l1.grid(row=0, column=0)

l2 = **Label**(window, text="**Author**") **🡨 🡨 🡨**

l2.grid(row=0, column=2)

l3 = **Label**(window, text="**Year**") **🡨 🡨 🡨**

l3.grid(row=1, column=0)

l4 = **Label**(window, text="**ISBN**") **🡨 🡨 🡨**

l4.grid(row=1, column=2)

window.mainloop()

def weather\_condition(temperature: float) -> str:

    if temperature > 7:

        return "Warm"

    elif temperature <= 7:

        return "Cold"

    else:

        return "Invalid input. Please enter a number."

**user\_input = float(input("Enter temperature: ")) 🡨 🡨 🡨**

print(weather\_condition(user\_input))