**🪄 MODULE 1: Teachable Machine – No-Code AI Demo (30–45 mins)**

**🎯 Objective:**

Introduce how machines learn to classify images, poses, or sounds without coding.

**🧾 Slide: “Let’s Build Our Own AI”**

* What is Teachable Machine?
  + Tool by Google that lets you **train AI models in minutes**
  + Works for: **Images**, **Sounds**, **Poses**
* Why is it powerful?
  + Makes ML accessible without programming

**🧪 Activity: Build an Image Classifier**

**Steps:**

1. Go to https://teachablemachine.withgoogle.com
2. Select **Image Project**
3. Create 2 classes (e.g., “Happy Face” vs “Sad Face”)
4. Collect 30 samples per class using webcam
5. Click “Train Model”
6. Test using live camera

🧠 Concept Link: "This is how classification models are trained using supervised learning."

**🧰 Optional Tasks:**

* Pose detection: “Raise Left Hand” vs “Raise Right Hand”
* Sound detection: “Clap” vs “Snap”

**📘 Student Outcome:**

* Learners **see how data is labeled and used to train** a model
* Understand the flow of input → model → output

**🧠 MODULE 2: Kaggle – Real-World Data Science (60–90 mins)**

**🎯 Objective:**

Learn to work with datasets, perform analysis, and understand ML workflows in Python (in-browser).

**🧾 Slide: “What is Kaggle?”**

* Free platform for:
  + Datasets
  + Competitions
  + Python notebooks (runs on cloud)
* No setup needed

**🧪 Activity: Titanic Survival Prediction**

**Steps:**

1. Visit https://kaggle.com/competitions/titanic
2. Open a **Notebook**
3. Use code to load and explore data:

python

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import pandas as pd

data = pd.read\_csv("/kaggle/input/titanic/train.csv")

data.head()

1. Analyze with simple code:

python

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data['Sex'].value\_counts()

data.groupby('Sex')['Survived'].mean()

1. (Optional): Train a simple logistic regression model

**📘 Student Outcome:**

* Students understand how ML starts with **data exploration**
* Learn to use **Python + Pandas** for real analysis
* Get exposure to **ML workflows** without deep math

**🔚 Final Wrap-Up Slide: Summary Comparison**

| **Tool** | **Purpose** | **Skills Needed** | **Outcome** |
| --- | --- | --- | --- |
| Teachable Machine | Visual learning of ML | None | Trained ML model from webcam/sound |
| Kaggle | Real-world data + coding | Basic Python | Exploratory analysis, ML prediction |