Slide 1;

Title

Slide 2:

Our Dataset

[Mobile Price Classification](https://www.kaggle.com/datasets/iabhishekofficial/mobile-price-classification)

(Bild)

Slide 3:

Features and target

(Bild)

Slide 4:

Goal, Hypothesis & Prediction

**Problem:**

* Classification problem – Predicting price category based on technical specifications

**Goal:**

* Assist manufacturers in identifying the appropriate price range for their mobile phones.

**Hypothesis:**

* Smartphone specifications strongly influence the price.
* A machine learning model can predict price category accurately using these features.

**ODER**

* There is a notable correlation between the features of a mobile phone and its classification into different price ranges.
* Specifically, as the features (such as RAM, CPU, or resolution) improve or increase, the corresponding price range is likely to expand as well.

**Prediction**

optimize the pricing of their mobile phones to position your products more effectively in the market

slide 5:

Preliminary schedule

(chatgpt)

|  |  |  |
| --- | --- | --- |
| **Phase** | **Tasks** | **Timeline** |
| **Data Collection** | Select dataset, explore data | Week 1 |
| **Data Analysis** | Cleaning, visualization | Week 2 |
| **Preprocessing** | Scaling, encoding, feature engineering | Week 3 |
| **Model Development** | Test different models | Week 4-5 |
| **Hyperparameter Tuning** | Optimize the best model | Week 6 |
| **Results & Interpretation** | Evaluate model, check for biases | Week 7 |
| **Documentation & Presentation** | Structure code, create slides | Week 8 |

Oder (me)

* Identify the relevant features
* Decide on the evaluation metrics to assess model’s performance
* Preprocess data
* Choose appropriate algorithm for classification
* Tune the hyperparameters (choose correct k)
* Make recommendations based on the result

Work distribution:

* Algorithm selection and model development: 4 weeks
* Model tuning and evaluation: 2 weeks
* Documentation and reporting: 2 weeks