Machine Learning Models & Evaluations.

① → Supervised Learning } Day 1
Unsupervised Learning }

Hyperparameter tuning } Day 2
Model Evaluation.

Reinforcement Learning
↳ Mainly for gaming
not our focus.

② → **Supervised Learning.**

» Supervised is guided under a teacher.
» Has output label & labeled data
(input + ~~output~~ desired output).

(2·1) Two types
→ Classification
↳ Regression.

(2·2) → Classification —→ assign test data into specific categories.
Eg:- Photo is dog (or) cat, etc.
Do you have cancer (Yes or No)

(2·3) → Regression —→ Helps in finding the correlation b/n variables &
enables to predict the continous output variable.

③ → **Unsupervised Learning.**

⇒ Helpful for finding useful insights
from the data.
» No labeled data. no categorized data.

(3·1) Two Types
→ Clustering
→ Association

(3·2) → Please go through 3 diagrams in your phone.

(3.3) Clustering → } Read on your own.
Association →

* ——→ Our project is supervised learning, so
unsupervised is not deep dived into.

④ → Classification   → just (if, else).
    subtypes.   → Logistic Regression   Decision tree
    & topics   ANN (Deep learning) Naive Bayes
                      SVM   Random forest
           K should   ← KNN
           always be
           odd.   XG Booster,   —→ used more.

⑤ Regression   * —→ will be used in your project.
              ⇒   Use random forest.

⑥ • fit → for underfit and overfit methods.
    ⇒ Bagging, boosting also taught✓   (LGPM
          Bias & Variance✓   Random forest)