**Agenda**

1. Business Problem
2. Data Collection
3. Tools Setup for Project
4. Load Data
5. Data Preprocessing
6. Make Data Ready for Training
7. ML Model Selection
8. Model Training
9. Cross Validation
10. Fine Tune Model
11. ML Model Testing

**Prerequisites**

Basic Python & Pandas,Numpy,Matplotlib,SEaborn,Scikit-learn

**Business Problem**



Data science solves real business problems by utilizing data to construct algorithms and create programs that help in providing optimal solutions to individual problems. Data science solves real business problems by using hybrid models of math and computer science to get actionable insights.

**Client problem**

Predict the price of house using it's multiple feature of house like:

* Size Of House
* No. Of Room
* Location
* Age
* Floor
* Type Of House

**Data Collection | House Price Prediction Learning**

**Data collection** is the process of **gathering** and **measuring information** on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes.

**Data Collection from Kaggle**

**Project Tools**

A programming tool or software development tool is a computer program that software developers use to create, debug, maintain, or otherwise support other programs and applications.

* Python
* Anaconda Navigator
* PyCharm
* Visual Studio Code
* Spyder
* Jupther

**Load Dataset**

Predict the price of a house by its features. If you are a buyer or seller of the house but you don't know the exact price of the house, supervised machine learning regression algorithms can help you to predict the price of the house just by providing features of the target house.

**How to load Dataset db**

Insert data from a SQL table into a Python Pandas Framework

<https://learn.microsoft.com/en-us/sql/machine-learning/data-exploration/python-dataframe-pandas?view=sql-server-ver16>

**Project Data Pre\_Processing**

* Data Understand
* Know Project DataSet
* Domain Expert Support
* Go to Kaggle Description for read dataset