Linear Regression:

- Blue dots are the observed or the true value.

- The line is the regression line or the predicted value.

- X Model features or predictors

- y model target or label

Linear Regression Equation:

y = f(X) + E

where :
- **y** is the target we are trying to predict.

- **f(X)** is the function equals to **b0 + b1X1 + ….+bnXn** where **n** number of features and **b0, b1, .., bn** unknown parameters we want to estimate.

- **E** is the error term The error term represents the difference between the actual observed values of the target Y and the values predicted by the linear regression model.

E = y_predicted - y_True