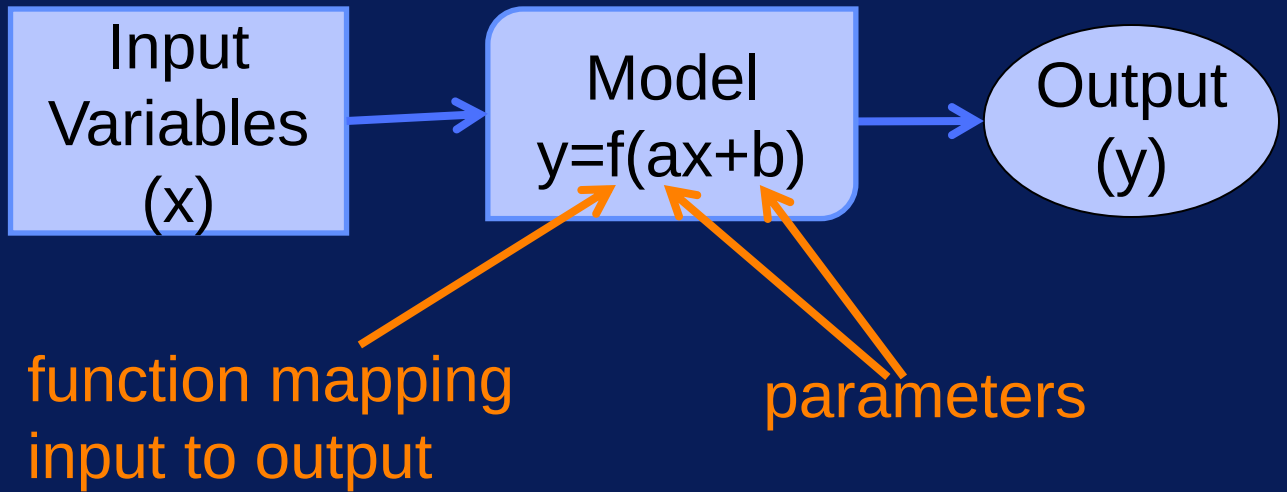
Building and Applying a Classification Model

After this video you will be able to..

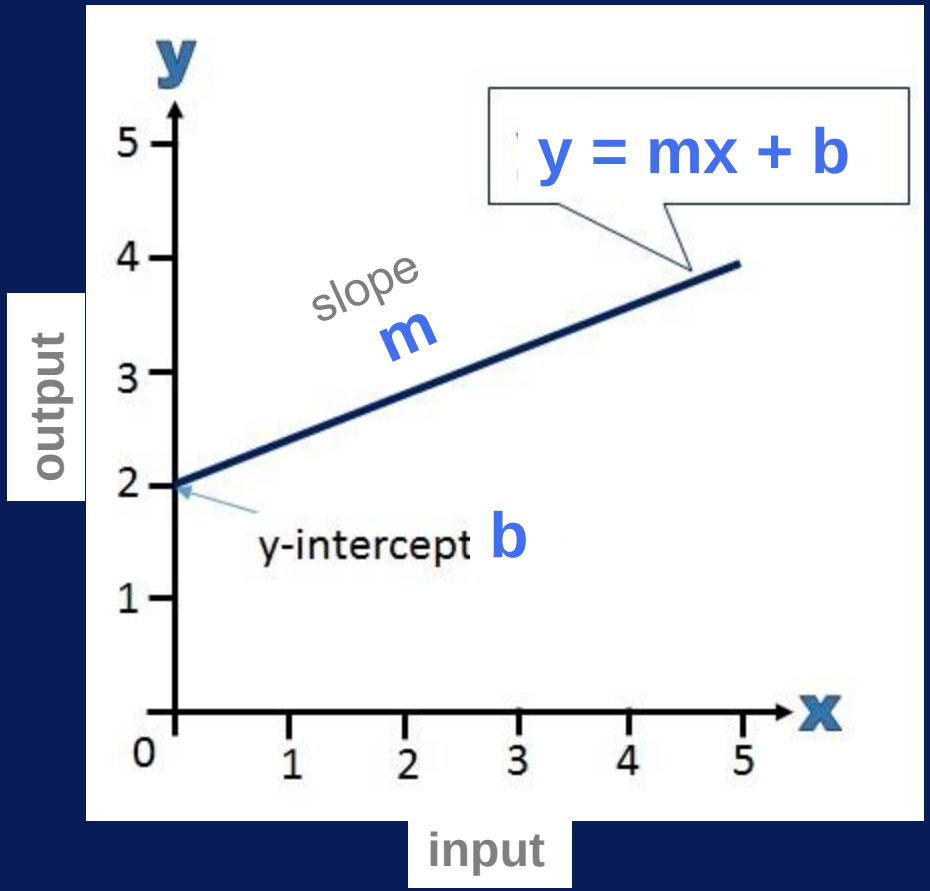
- Discuss what building a classification model means
- Explain the difference between building and applying a model
- Summarize why the parameters of a model need to be adjusted

What is a Machine Learning Model?

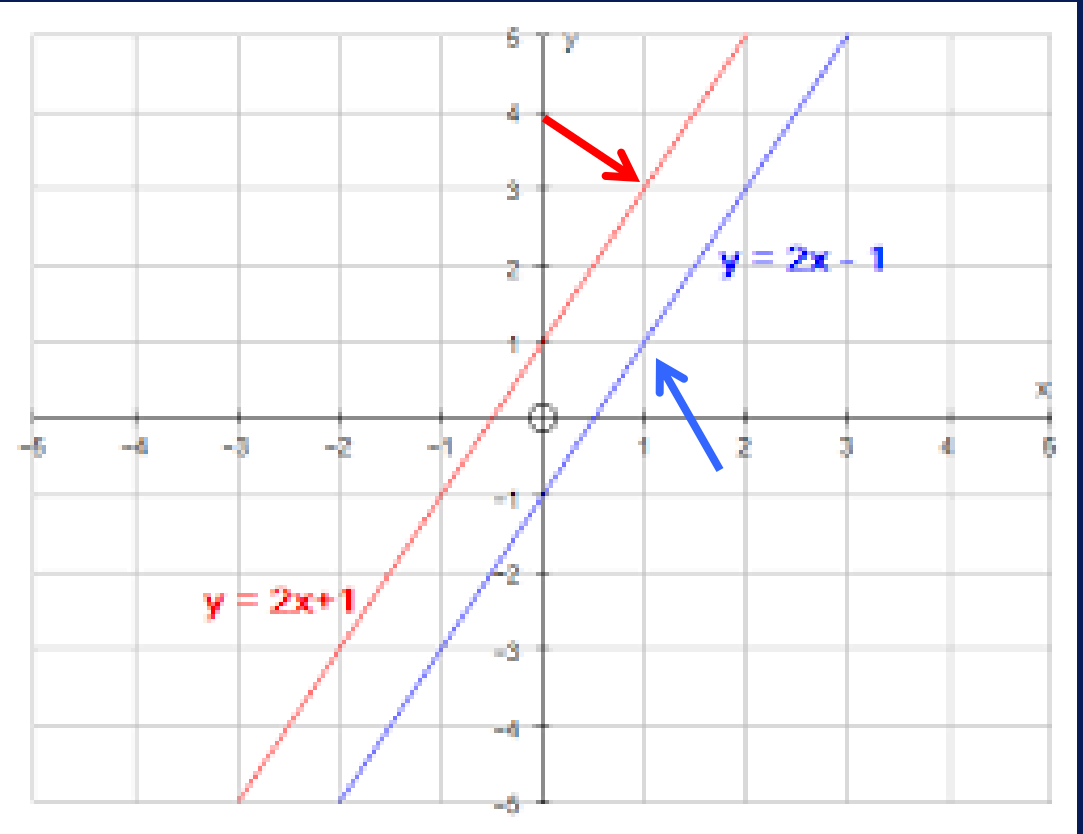
- A mathematical model with parameters that map input to output



Example of Model



Adjusting Model Parameters

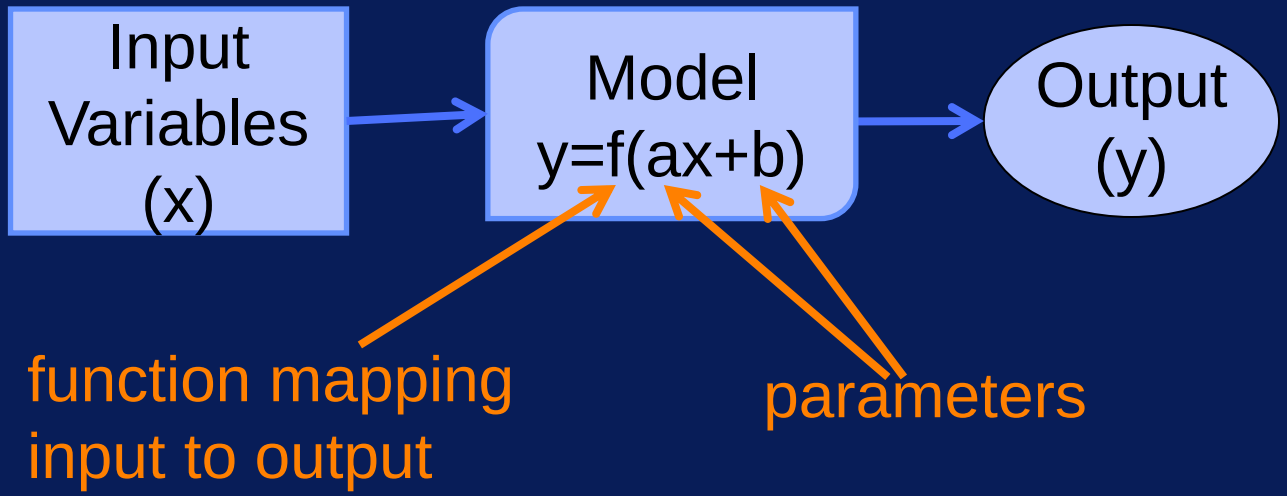


slope m = 2
y-intercept b = -1
x=1 => y=2*1-1=1

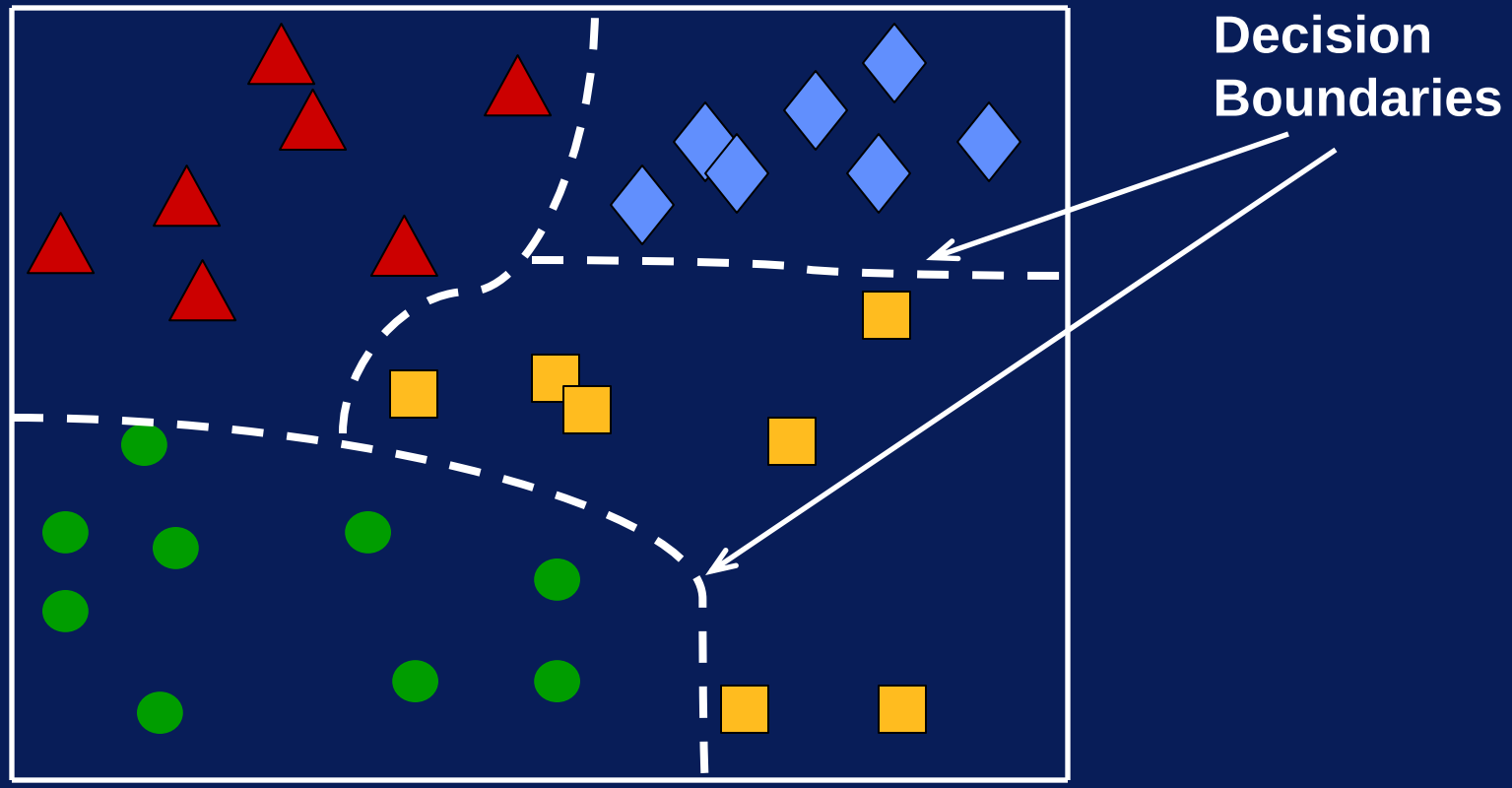
slope m = 2
y-intercept b = +1
x=1 => y=2*1+1= 3

Building Machine Learning Model

Model parameters are adjusted during model training to change input-output mapping.



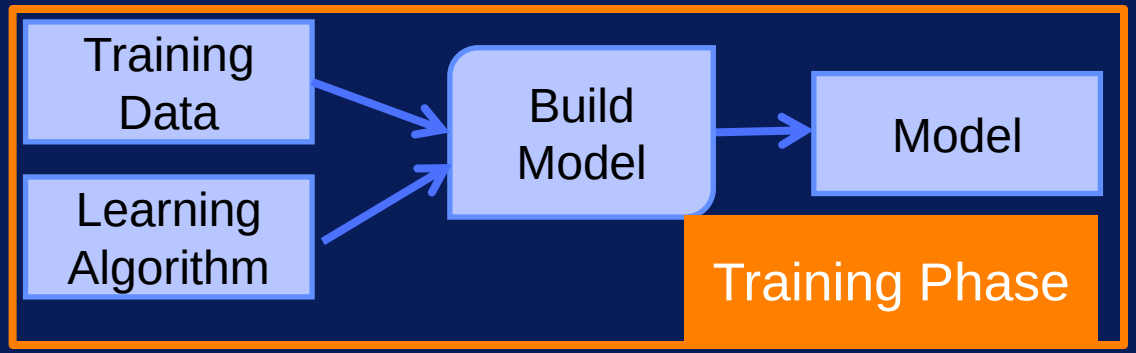
Building Classification Model

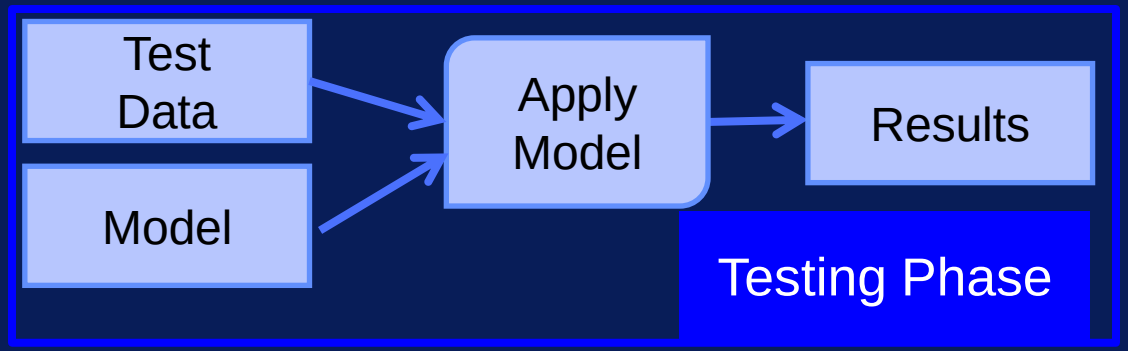


Building vs. Applying Model

- Training Phase
  - Adjust model parameters
  - Use training data
- Testing Phase
  - Apply learned model
  - Use new data

Building vs. Applying Model





Building a Classification Model