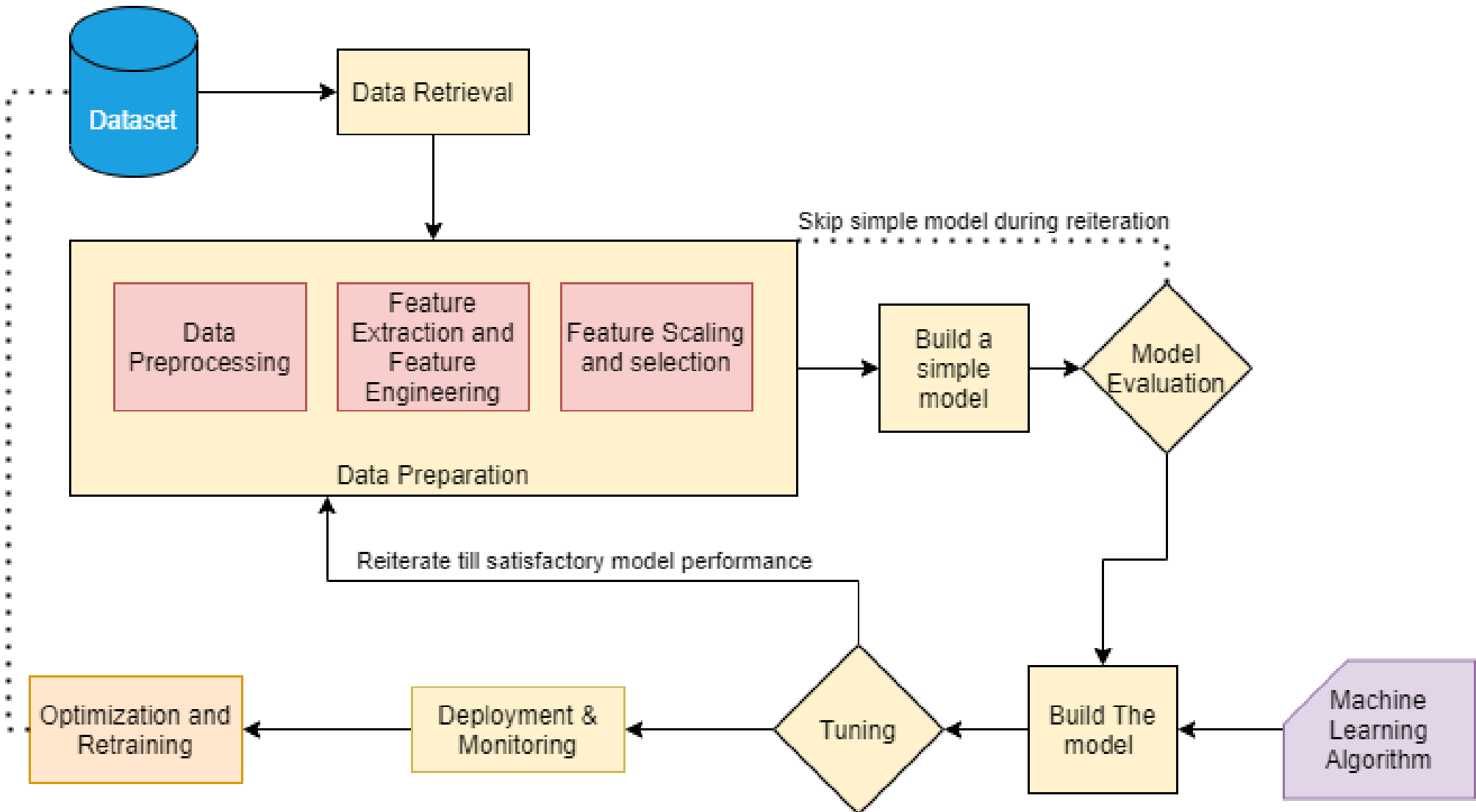
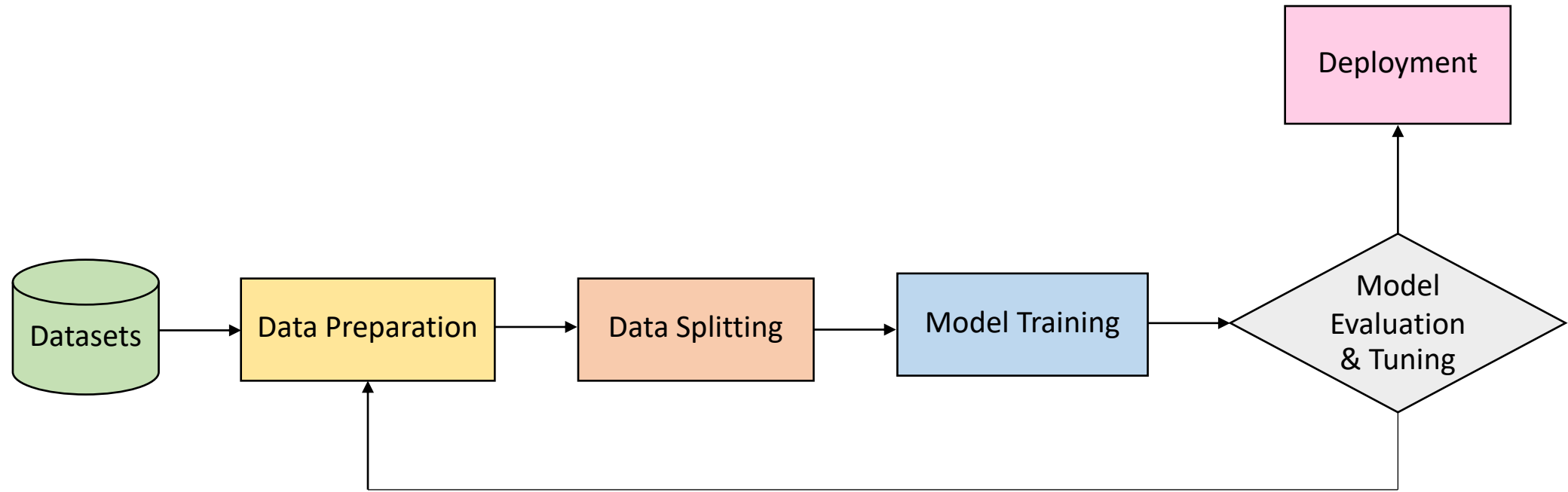


# **Machine Learning Workflow**

# Machine Learning Workflow

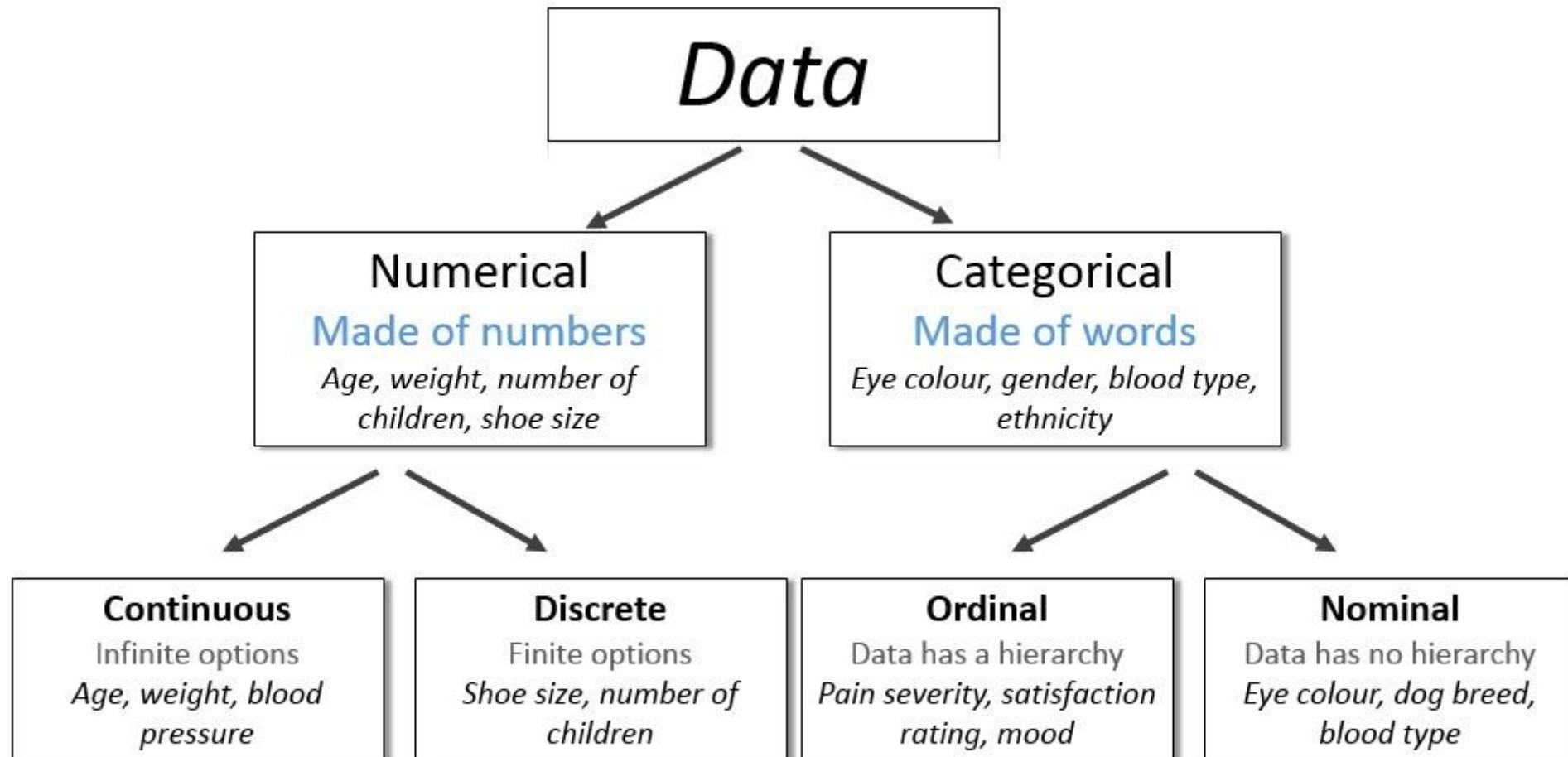


# Basic Machine Learning Workflow



# **Types of Data**

# Types of Data



# **Label Encoding**

# Label Encoding

This type of encoding is used when the variables in the data are **Ordinal Data**.

How do you feel today?

- ☒ 1 - Very Unhappy
- ☐ 2 - Unhappy
- ☐ 3 - OK
- ☐ 4 - Happy
- ☐ 5 - Very Happy









How satisfied are you with our service?

- ☒ 1 - Very Unsatisfied
- ☐ 2 - Somewhat Unsatisfied
- ☐ 3 - Neutral
- ☐ 4 - Somewhat Satisfied
- ☐ 5 - Very Satisfied

# One-Hot Encoding



# One-Hot Encoding

	Ear Shape	Face shape	Whiskers	Cat
	Pointy	Round	Present	1
	Oval	Not round	Present	1
	Oval	Round	Absent	0
	Pointy	Not round	Present	0
	Oval	Round	Present	1
	Pointy	Round	Absent	1
	Floppy	Not round	Absent	0
	Oval	Round	Absent	1
	Floppy	Round	Absent	0
	Floppy	Round	Absent	0

Ear Shape	Face shape	Whiskers	Cat
Pointy	Round	Present	1
Oval	Not round	Present	1
Oval	Round	Absent	0
Pointy	Not round	Present	0
Oval	Round	Present	1
Pointy	Round	Absent	1
Floppy	Not round	Absent	0
Oval	Round	Absent	1
Floppy	Round	Absent	0
Floppy	Round	Absent	0

# One-Hot Encoding

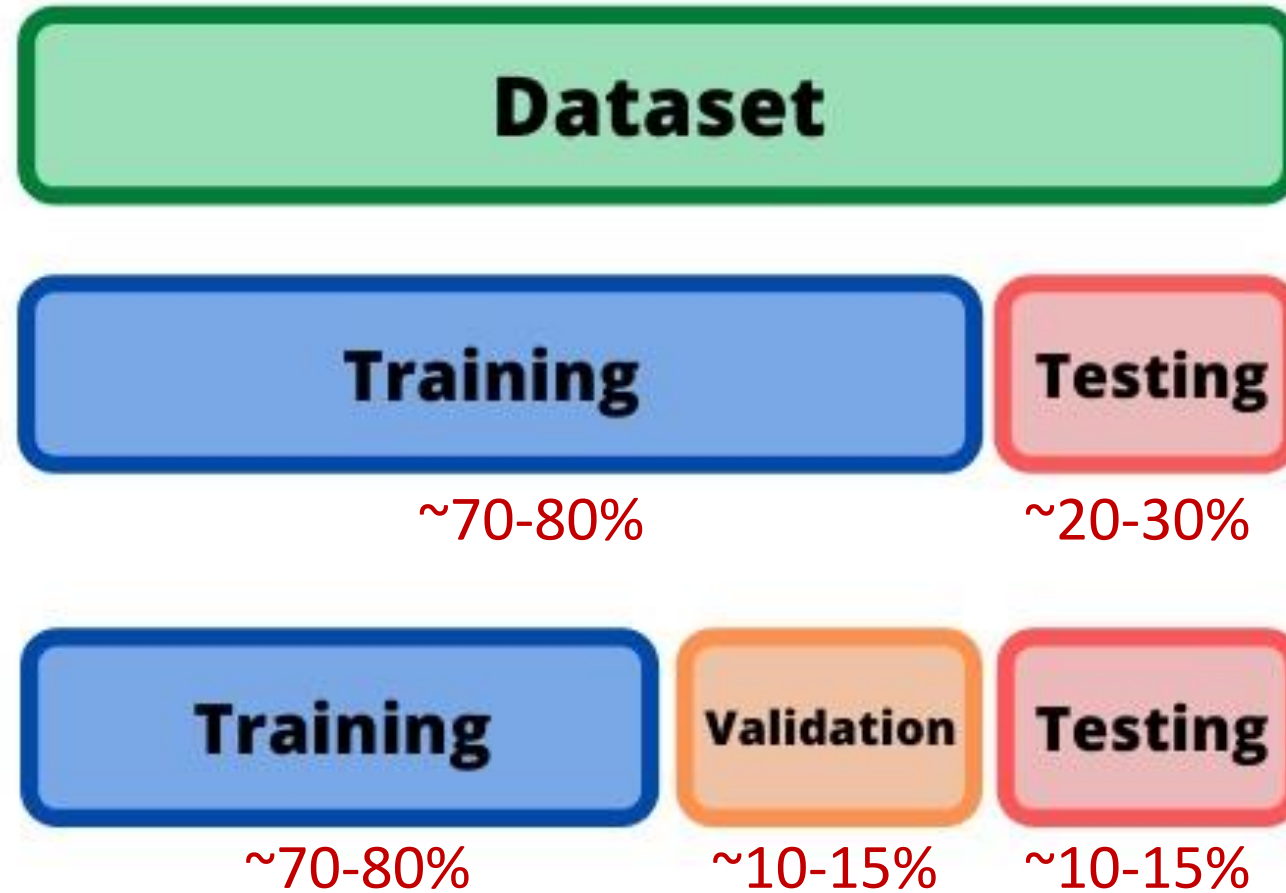
Ear Shape	Pointy ears	Floppy ears	Oval ears	Face shape	Whiskers	Cat
Pointy	1	0	0	Round	Present	1
Oval	0	0	1	Not round	Present	1
Oval	0	0	1	Round	Absent	0
Pointy	1	0	0	Not round	Present	0
Oval	0	0	1	Round	Present	1
Pointy	1	0	0	Round	Absent	1
Floppy	0	1	0	Not round	Absent	0
Oval	0	0	1	Round	Absent	1
Floppy	0	1	0	Round	Absent	0
Floppy	0	1	0	Round	Absent	0

# One-Hot Encoding

Ear Shape	Pointy ears	Floppy ears	Oval ears	Face shape	Whiskers	Cat
Pointy	1	0	0	1	1	1
Oval	0	0	1	0	1	1
Oval	0	0	1	1	0	0
Pointy	1	0	0	0	1	0
Oval	0	0	1	1	1	1
Pointy	1	0	0	1	0	1
Floppy	0	1	0	0	0	0
Oval	0	0	1	1	0	1
Floppy	0	1	0	1	0	0
Floppy	0	1	0	1	0	0

# **Data Splitting**

# Data Splitting



**Thank you for your attention**