




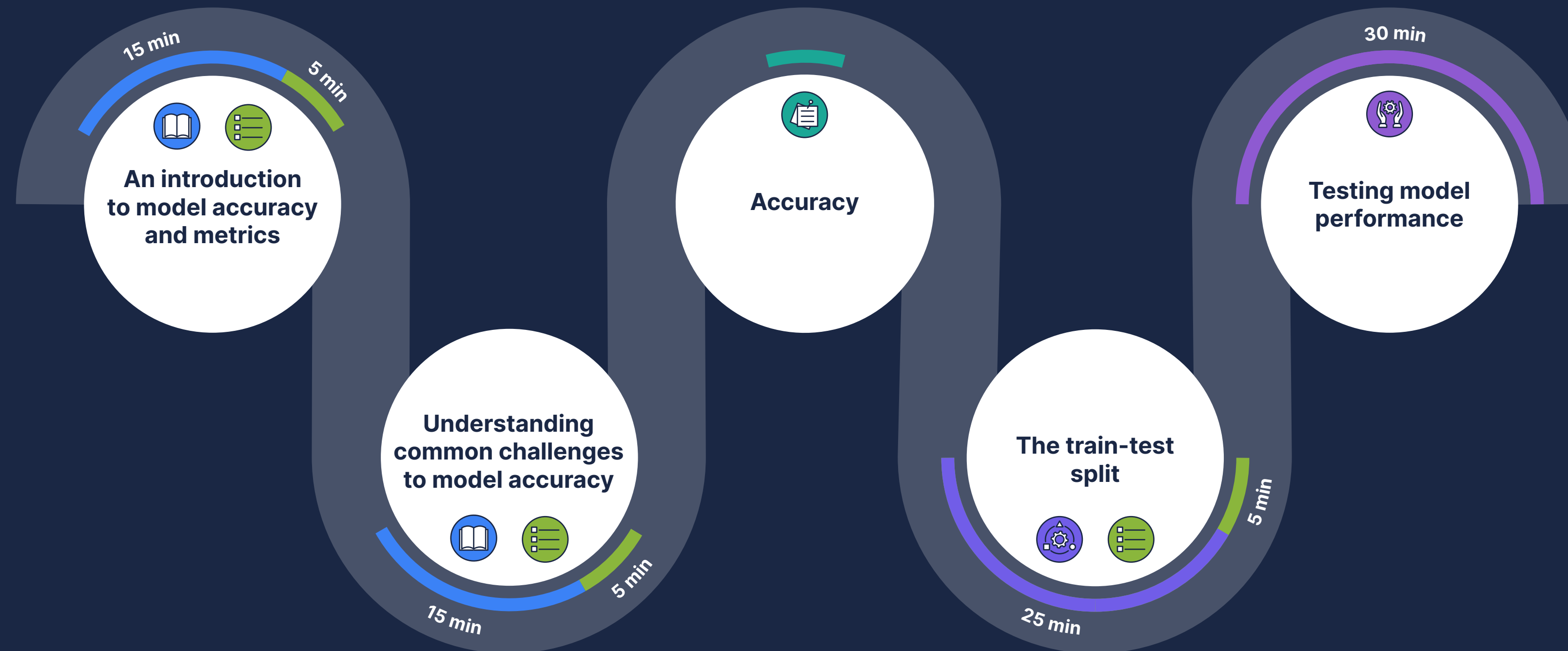


Model performance – Lesson overview

Predictive models are useful tools that guide decision-making and forecast future trends. However, to ensure that our **models are reliable** and can **deliver real-world value**, we must **thoroughly evaluate them** to identify weaknesses and opportunities for improvement.

In this lesson, we will explore the **various aspects of evaluating model performance** such as the **metrics** and **challenges** that underpin this evaluation. We will also look at how to assess a model's **ability to generalise to new data** and why this is an important indicator of a model's real-world performance.

 Slide deck	 Knowledge questions
 Reference card	 Examples
 Exercise	



Learning objectives

- Understand the significance of model accuracy and the metrics used to evaluate it.
- Understand why it's necessary to split a dataset and the techniques we can use.
- Implement the train-test split in Python to create training and testing sets.
- Identify common challenges that can affect model accuracy and the need to know about them.
- Train a model on the training data only and assess its performance using the testing set.

