Flowcharts and pseudocode - Lesson overview

Learning objectives:

- Know what programmatic thinking is and the different tools required to apply it to solve a problem.

- Be able to use flowcharts and pseudocode to represent algorithms and statements of logic, as well as convert logic between these two representations.

- Know what an if statement is and how to apply it and its variations or use boolean operators for the same control flow.

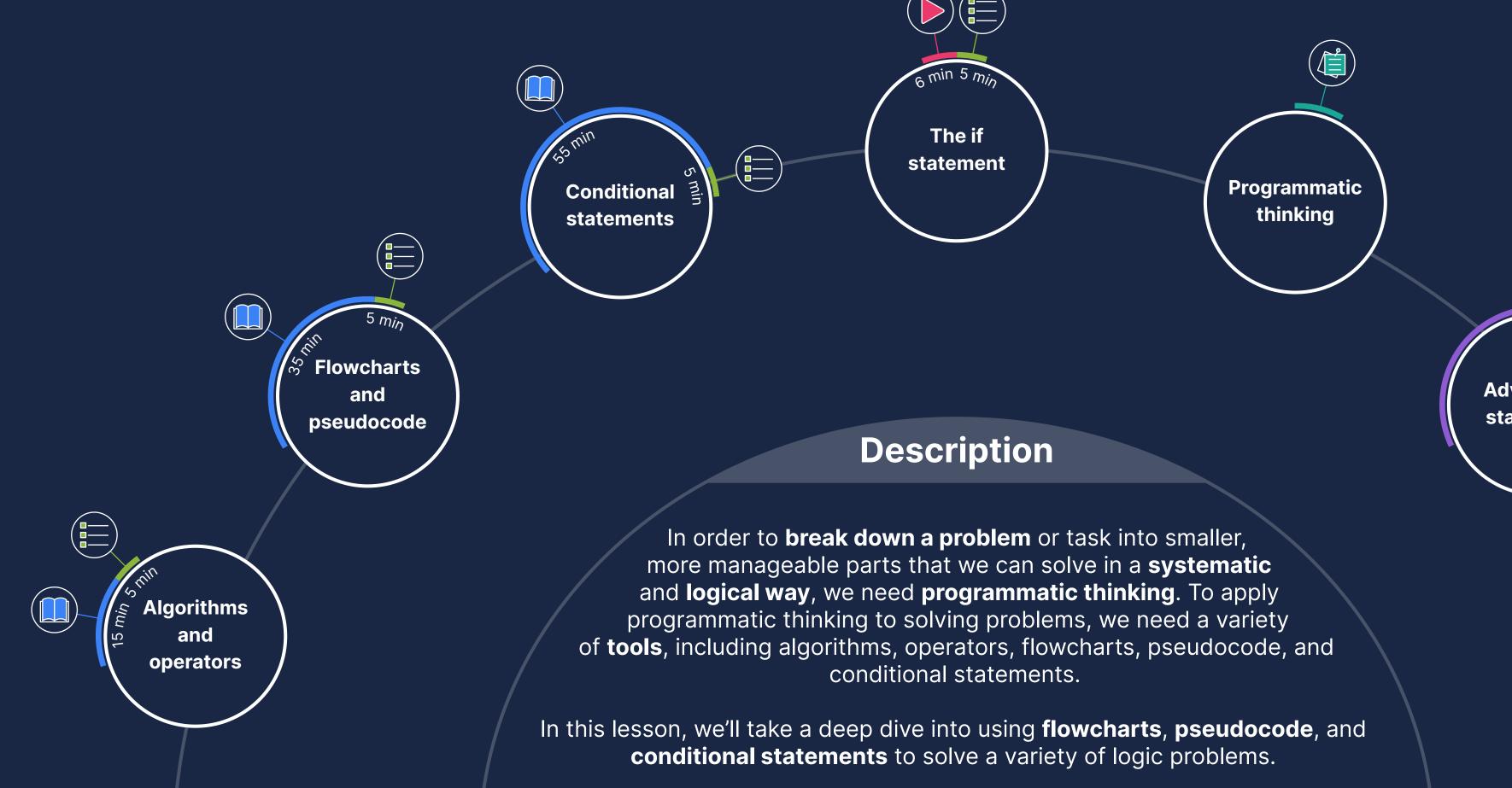- 📖 Slide deck
- 📋 Knowledge questions
- ▶ Video
- 📑 Reference card
- ⚙ Case study
- 📋 MCQ

- Algorithms and operators — 15 min, 5 min
- Flowcharts and pseudocode — 35 min, 5 min
- Conditional statements — 55 min, 5 min
- The if statement — 6 min, 5 min
- Programmatic thinking
- Advanced if statements — 80 min
- Flowcharts and pseudocode (MCQ) — 100 min

Description

In order to **break down a problem** or task into smaller, more manageable parts that we can solve in a **systematic** and **logical way**, we need **programmatic thinking**. To apply programmatic thinking to solving problems, we need a variety of **tools**, including algorithms, operators, flowcharts, pseudocode, and conditional statements.

In this lesson, we'll take a deep dive into using **flowcharts**, **pseudocode**, and **conditional statements** to solve a variety of logic problems.