

Classes, Objects and Constructors

Chapter 6: Classes, Objects and Constructors · Topic 1

Key Concept

A class defines properties (variables) and behaviours (methods) that its objects will have, acting as a blueprint or template.

An object is an instance of a class, created using the 'new' keyword, with its own specific values for the class's properties.

A constructor is a special method that runs automatically when an object is created, typically used to initialise the object's properties.

Understanding classes, objects, and constructors is fundamental to object-oriented programming (OOP), a key programming paradigm in Java.

Quick Revision Notes

- A class is a blueprint for objects.
- It defines properties and behaviours.
- An object is an instance of a class.
- Objects are created using the 'new' keyword.
- A constructor initialises an object's properties.
- It runs automatically when an object is created.
- Classes, objects, constructors are fundamental to OOP.
- OOP is a key Java programming paradigm.

Practice Questions

- 1 Write a simple class definition with two properties.
- 2 Create an object of a class you've defined.
- 3 Write a constructor for a class.
- 4 Discuss the difference between a class and an object.
- 5 Explain why constructors are useful.
- 6 Create a class representing a real-world object, like a car.