**Chapter 3**

Dart is a versatile and modern programming language designed for building high-performance applications, particularly for cross-platform development with Flutter. It features a simple syntax and begins with the main() function, where all execution starts. Dart supports variables for various data types like numbers, strings, booleans, lists, maps, and runes, enabling flexibility in handling data. It incorporates operators and flow statements like if-else, loops, and switch-case to control program logic. Dart is object-oriented, allowing the use of classes with features like inheritance and mixins for reusable and modular code. Asynchronous programming is a key strength, using Future and async-await to handle tasks like fetching data without blocking execution. With support for importing packages and a clean, readable structure, Dart simplifies coding while maintaining power and scalability.