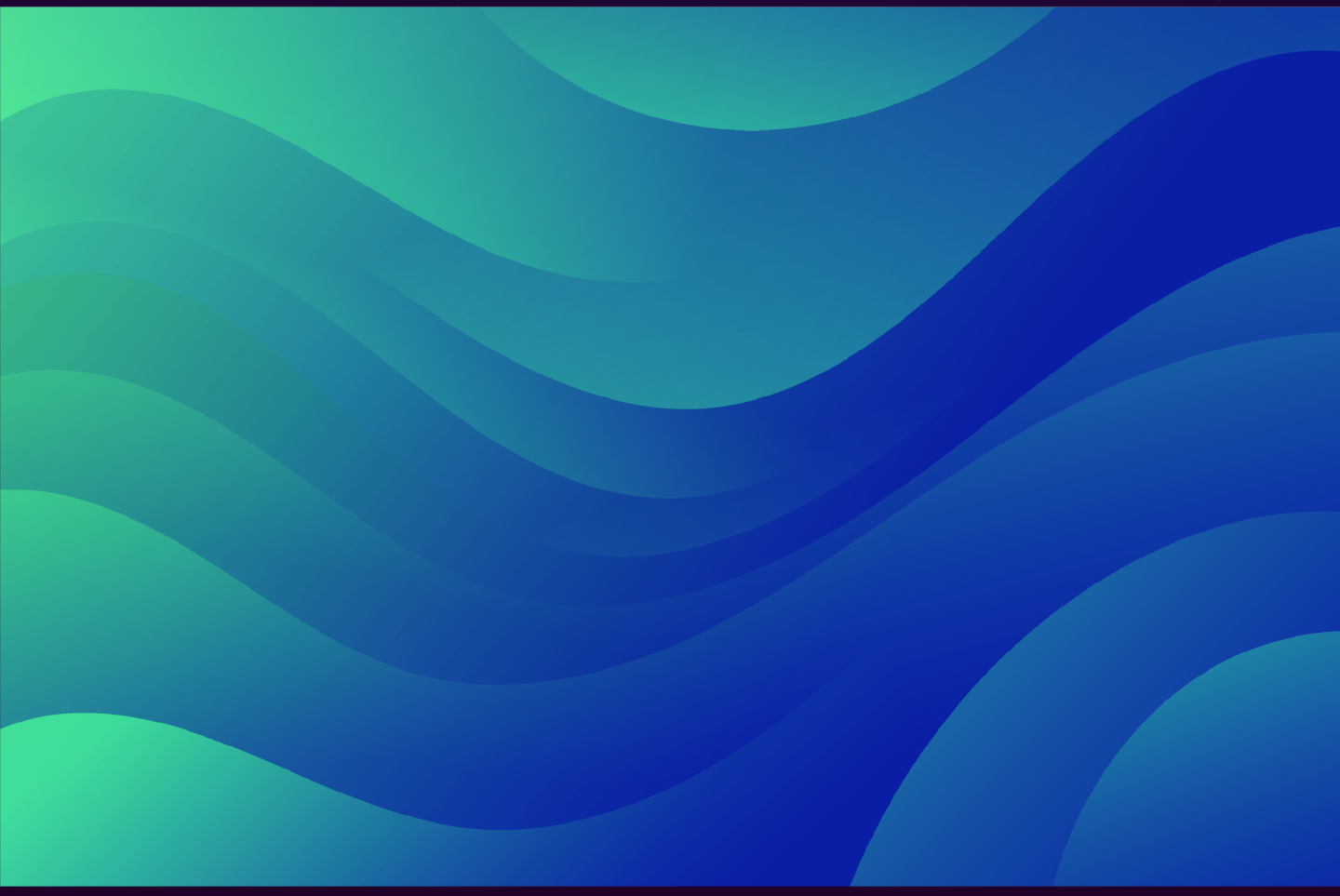
Android Studio Narwhal Essentials



Java Edition

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Android Studio Narwhal Essentials

Java Edition

Android Studio Narwhal Essentials – Java Edition

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Chapter 1

1. Introduction

This book, fully updated for Android Studio Narwhal Feature Drop, teaches you how to develop Android-based applications using Java.

Beginning with the basics, the book outlines how to set up an Android development and testing environment, followed by an overview of areas such as tool windows, the code editor, and the Layout Editor tool. An introduction to the architecture of Android is followed by an in-depth look at the design of Android applications and user interfaces using the Android Studio environment.

Chapters also cover the Android Architecture Components, including view models, lifecycle management, Room database access, content providers, the Database Inspector, app navigation, live data, and data binding.

Topics such as intents, touchscreen handling, gesture recognition, and the integration of artificial intelligence into Android apps are also included.

The concepts of material design are also covered in detail, including the use of floating action buttons, Snackbars, tabbed interfaces, card views, and collapsing toolbars.

Other key features of Android Studio and Android are also covered in detail, including the Layout Editor, the ConstraintLayout and ConstraintSet classes, view binding, constraint chains, barriers, and direct reply notifications.

Chapters also cover advanced features of Android Studio, such as Gradle build configuration, in-app billing, and submitting apps to the Google Play Developer Console.

Assuming you already have some Java programming experience, are ready to download Android Studio and the Android SDK, have access to a Windows, Mac, or Linux system, and have ideas for some apps to develop, you are ready to get started.

1.1 Downloading the Code Samples

The source code and Android Studio project files for the examples contained in this book are available for download at:

https://www.payloadbooks.com/product/narwhaljava-prag

The steps to load a project from the code samples into Android Studio are as follows:

1. From the Welcome to Android Studio dialog, click on the Open button option.
2. In the project selection dialog, navigate to and select the folder containing the project to be imported and click on OK.

1.2 Feedback

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1.3 Errata

While we make every effort to ensure the accuracy of the content of this book, it is inevitable that a book covering a subject area of this size and complexity may include some errors and oversights. Any known issues with the book will be outlined, together with solutions, at the following URL:

https://www.payloadbooks.com/narwhal-java-errata

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