Started on	Wednesday, 12 February 2025, 8:00 AM
State	Finished
Completed on	Wednesday, 12 February 2025, 8:22 AM
Time taken	21 mins 58 secs
Grade	**38.00** out of 40.00 (**95**%)

Question **1**

Correct

Mark 1.00 out of 1.00

In Flutter, what does the pubspec.yaml file primarily manage?

○ a.   Project's dependencies and assets ✔

○ b.   Debugging information

○ c.   UI layout design

○ d.   Device-specific configurations

The correct answer is: Project's dependencies and assets

Question **2**

Incorrect

Mark 0.00 out of 1.00

How is hot restart different from hot reload in Flutter?

○ a.   Hot reload is used for native code, while hot restart applies to Dart code changes.

○ b.   Hot restart requires recompiling the entire app, while hot reload injects code changes dynamically. ✖

○ c.   Hot restart applies changes without losing the app's state, whereas hot reload restarts the app entirely.

○ d.   Hot reload and hot restart are identical.

The correct answer is: Hot restart applies changes without losing the app's state, whereas hot reload restarts the app entirely.

Question 3

Correct

Mark 1.00 out of 1.00

Question: What is the purpose of flutter doctor command?

- ○ a. To analyze the app's performance
- ○ b. To view a list of available Flutter packages
- ○ c. To diagnose and fix issues in the code
- ◉ d. To check the Flutter installation and environment setup ✔

The correct answer is: To check the Flutter installation and environment setup

Question 4

Correct

Mark 1.00 out of 1.00

What is the output of the following code?

int? value;

print(value ?? 10);

- ○ a. An Error
- ○ b. value
- ◉ c. 10 ✔
- ○ d. null

Your answer is correct.

The correct answer is:
10

Question 5

Correct

Mark 1.00 out of 1.00

In Flutter, what is the purpose of the ? in the variable declaration int? nullableValue?

- ○ a. It specifies a constant variable.
- ○ b. It denotes a final variable.
- ○ c. It allows the variable to be initialized later.
- ◉ d. It indicates that the variable can be null. ✔

The correct answer is: It indicates that the variable can be null.

Question **6**

Correct

Mark 1.00 out of 1.00

What is the key characteristic of a mutable widget in Flutter?

- ○ a. It is stateless.
- ○ b. It can't hold dynamic data.
- ◉ c. It can be modified after creation.   ✔
- ○ d. It only supports constant values.

The correct answer is: It can be modified after creation.

Question **7**

Correct

Mark 1.00 out of 1.00

Why are APIs important in mobile app development?

- ○ a. They enhance device battery life
- ○ b. They improve app graphics
- ◉ c. They connect apps to external services and databases   ✔
- ○ d. They reduce app size

The correct answer is: They connect apps to external services and databases

Question **8**

Correct

Mark 1.00 out of 1.00

How do native development tools differ in functionality from cross-platform tools?

- ○ a. Native tools only support Android development but cross platform does not.
- ○ b. Cross-platform tools do not support APIs
- ◉ c. Native tools provide better hardware integration, while cross-platform tools focus on reusability   ✔
- ○ d. Native tools lack support for app testing .

Your answer is correct.

The correct answer is:
Native tools provide better hardware integration, while cross-platform tools focus on reusability

Question 9
Correct
Mark 1.00 out of 1.00

What environment variable needs to be set after installing Flutter?

- ○ a. FLUTTER_HOME
- ○ b. FLUTTER_SDK
- ◉ c. PATH ✔
- ○ d. FLUTTER_PATH

The correct answer is: PATH

Question 10
Correct
Mark 1.00 out of 1.00

What does JIT stand for in the context of Flutter?

- ◉ a. Just-In-Time ✔
- ○ b. Java Integration Toolkit
- ○ c. JavaScript in Time
- ○ d. Java Interface Tool

The correct answer is: Just-In-Time

Question 11
Correct
Mark 1.00 out of 1.00

At what point in the lifecycle of the a StatefulWidget does the dispose method get called?

- ○ a. During the first build of the widget
- ◉ b. After the widget is removed from the tree ✔
- ○ c. Before the widget is inserted into the tree
- ○ d. Only during hot reload

The correct answer is: After the widget is removed from the tree

Question 12

Correct

Mark 1.00 out of 1.00

In comparing Flutter and native development, Which statement is true?

○ a. Flutter allows for a single codebase for both Android and iOS.   ✔

○ b. Native development is less efficient than Flutter.

○ c. Flutter is suitable only for Android development.

○ d. Native development has a simpler learning curve than Flutter.

The correct answer is: Flutter allows for a single codebase for both Android and iOS.

Question 13

Incorrect

Mark 0.00 out of 1.00

In Flutter, what is the first method called when a StatefulWidget is inserted into the widget tree?

○ a. dispose

○ b. initState

○ c. build

○ d. createState   ✖

The correct answer is: initState

Question 14

Correct

Mark 1.00 out of 1.00

What is the key characteristic of a mutable widget in Flutter?

○ a. It only supports constant values.

○ b. It can be modified after creation.   ✔

○ c. It is stateless.

○ d. It can't hold dynamic data.

The correct answer is: It can be modified after creation.

Question 15

Correct

Mark 1.00 out of 1.00

Given the function:

void greet(String name, [String title = "Mr."]) {

  print("Hello, $title $name");

}

What is the output of greet("Smith")?

- ⦿ a. Hello, Mr. Smith   ✔
- ○ b. Hello, null Smith
- ○ c. Hello, Smith
- ○ d. An Error

Your answer is correct.

The correct answer is:
Hello, Mr. Smith

Question 16

Correct

Mark 1.00 out of 1.00

What does string interpolation allow you to do in Dart?

- ○ a. Convert a string to an integer
- ⦿ b. Embed expressions inside strings   ✔
- ○ c. Modify string length
- ○ d. Execute functions inside a string

The correct answer is: Embed expressions inside strings

Question **17**

Correct

Mark 1.00 out of 1.00

What is Flutter?

○ a. A database management system

◉ b. A mobile application development framework   ✔

○ c. An operating system

○ d. A programming language

The correct answer is: A mobile application development framework

Question **18**

Correct

Mark 1.00 out of 1.00

Which compilation method optimizes the Flutter app's performance and reduces its size for production deployment?

○ a. Just-in-Time (JIT) compilation

○ b. Interpretation

◉ c. Ahead-of-Time (AOT) compilation   ✔

○ d. Dynamic compilation

The correct answer is: Ahead-of-Time (AOT) compilation

Question **19**

Correct

Mark 1.00 out of 1.00

Which of the following best defines Flutter?

○ a. A machine learning library

◉ b. A mobile development framework   ✔

○ c. A programming language

○ d. A cloud computing platform

The correct answer is: A mobile development framework

Question **20**

Correct

Mark 1.00 out of 1.00

Which directory contains the main Dart code in a Flutter project?

- a.   assets
- b.   lib ✔
- c.   ios
- d.   android

The correct answer is: lib

Question **21**

Correct

Mark 1.00 out of 1.00

The Dart operator which provides a fallback value for null is _____.

- a.   ??=
- b.   &&
- c.   ??!
- d.   ?? ✔

The correct answer is: ??

Question **22**

Correct

Mark 1.00 out of 1.00

What is the purpose of the ?? operator in Dart?

- a.   To compare two values
- b.   To declare optional parameters
- c.   To handle null values by providing a fallback ✔
- d.   To concatenate strings

The correct answer is: To handle null values by providing a fallback

Question 23

Correct

Mark 1.00 out of 1.00

Which method is responsible for rebuilding a widget when its state changes?

- ○ a. didUpdateWidget
- ○ b. initState
- ○ c. dispose
- ◉ d. build   ✔

The correct answer is: build

Question 24

Correct

Mark 1.00 out of 1.00

Select from the options below which signify the evolution of mobile networks .

- ○ a. Transition of android from cupcake(android 1.5) to Android 11
- ○ b. The transition from smartphones to feature phones
- ○ c. The transition from native platforms to cross compatibility platforms
- ◉ d. Transition from 2G to 5G technologies   ✔

The correct answer is: Transition from 2G to 5G technologies

Question 25

Correct

Mark 1.00 out of 1.00

Identify the significance of the "hot reload" feature in Flutter

- ○ a. Automatically deploy apps to app stores
- ○ b. Securely store sensitive user information
- ○ c. Compile code to native machine code for better performance
- ◉ d. Perform real-time code changes without restarting the app   ✔

The correct answer is: Perform real-time code changes without restarting the app

Question **26**

Correct

Mark 1.00 out of 1.00

Evaluate the benefits of native development for a gaming app. What makes it suitable?

- ○ a. Minimal development cost
- ○ b. Easier code sharing across platforms
- ● c. Better performance and platform-specific optimization   ✔
- ○ d. Built-in cross-platform support

The correct answer is: Better performance and platform-specific optimization

Question **27**

Correct

Mark 1.00 out of 1.00

print(value ?? 10);

- ○ a. An error
- ○ b. value
- ○ c. null
- ● d. 10   ✔

The correct answer is: 10

Question **28**

Correct

Mark 1.00 out of 1.00

Which of the following best explains why mobile apps are considered significant for businesses?

- ○ a. Mobile Apps reduce the need for many employees
- ○ b. Mobile apps are easier to maintain
- ● c. They improve customer engagement and accessibility   ✔
- ○ d. With mobile apps there is no need for websites

The correct answer is: They improve customer engagement and accessibility

Question 29

Correct

Mark 1.00 out of 1.00

How does the setState method impact the Flutter widget tree?

○ a. It removes the widget from the tree

○ b. It adds a new widget to the tree

◉ c. It trigger a rebuild of the widget's UI   ✔

○ d. It has no effect on the widget tree

The correct answer is: It trigger a rebuild of the widget's UI

Question 30

Correct

Mark 1.00 out of 1.00

Which of the following defines an anonymous function in Dart?

○ a. AnonymousFunction()

○ b. void myFunction() => print("Hello");

○ c. function() { return "Hello"; }

◉ d. (int a, int b) => a + b;   ✔

The correct answer is: (int a, int b) => a + b;

Question 31

Correct

Mark 1.00 out of 1.00

Which compilation method is used by Flutter during development for faster iteration and debugging?

○ a. Static analysis

○ b. Ahead-of-Time (AOT) compilation

◉ c. Just-in-Time (JIT) compilation   ✔

○ d. Interpretation

The correct answer is: Just-in-Time (JIT) compilation

Question 32

Correct

Mark 1.00 out of 1.00

In the function void display ({String name = "Guest", String title = "Dr."}), what are name and title considered as ?

- ○ a. Anonymous parameters
- ○ b. Nullable parameters
- ◉ c. Optional named parameters   ✔
- ○ d. Positional parameters

The correct answer is: Optional named parameters

Question 33

Correct

Mark 1.00 out of 1.00

In the context of mobile app design, what does responsiveness refer to?

- ◉ a. The ability to adjust the app layout for different screen sizes   ✔
- ○ b. The ability to download the app easily
- ○ c. The ability of an app to be highly usable
- ○ d. The ability of an app to load offline

The correct answer is: The ability to adjust the app layout for different screen sizes

Question 34

Correct

Mark 1.00 out of 1.00

What is the difference between var and final in Dart?

- ◉ a. var is mutable; final is immutable   ✔
- ○ b. var is for constants; final is for mutable variables
- ○ c. var is immutable; final is mutable
- ○ d. They are the same

The correct answer is: var is mutable; final is immutable

Question 35

Correct

Mark 1.00 out of 1.00

If a business wants an app that works on both Android and iOS, which approach should it consider?

○ a. Web development

○ b. Native development

◉ c. Cross-platform development   ✔

○ d. Hybrid development

The correct answer is: Cross-platform development

Question 36

Correct

Mark 1.00 out of 1.00

Which of the following activities is not included in the first stage of the mobile app development lifecycle?

○ a. Identify the app's objectives

◉ b. Designing the project's Architecture   ✔

○ c. Creating the project plan

○ d. Outlining project activities and timelines

The correct answer is: Designing the project's Architecture

Question 37

Correct

Mark 1.00 out of 1.00

Which language would you use to build a native iOS application?

○ a. Java

○ b. Kotlin

○ c. Dart

◉ d. Swift   ✔

The correct answer is: Swift

Question **38**

Correct

Mark 1.00 out of 1.00

What does Flutter's hot reload feature allow developers to do?

○ a. Modify native code on-the-fly

○ b. Restart the app completely

○ c. Load the app from scratch

◉ d. Update code changes without losing the app's state ✔

The correct answer is: Update code changes without losing the app's state

Question **39**

Correct

Mark 1.00 out of 1.00

During Flutter development, which compilation method allows for dynamic code execution and reflection, aiding in faster development?

○ a.   Ahead-of-Time compilation

○ b. Interpretation

○ c. JIT and AOT are equally used during development

◉ d.   Just-in-Time compilation ✔

Your answer is correct.

The correct answer is:
 Just-in-Time compilation

Question **40**

Correct

Mark 1.00 out of 1.00

Identify which of the following statements best describes a higher-order function

◉ a. A function that can take other functions as arguments or return a function ✔

○ b. A function that returns a string

○ c. A function with no parameters

○ d. A function with only positional parameters

The correct answer is: A function that can take other functions as arguments or return a function

◄ Lecture 5 : 29th November 2 024 - Introduction to Dart

Jump to...

SECTION -B ▶

[Data retention summary](#)