Flutter Essentials Workshop

November 4, 2019

PRETEST

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Score: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Instructions: Read the following questions carefully and encircle the letter that best describes the answer.

1. Flutter is Google’s UI toolkit for building beautiful, natively compiled applications for mobile, web, and desktop from a single codebase.
2. Flutter C. React Native
3. Apache Cordova D. NativeScript
4. What is the Programming Language used when creating Apps using Flutter?
5. In Flutter, we say everything is a \_\_\_\_\_\_!
6. A widget that does not require mutable state.
7. Column Widget C. Stateful Widget
8. Stateless Widget D. Inherited Widget
9. The framework calls this method when this widget is inserted into the tree in a given BuildContext and when the dependencies of this widget change (e.g., an InheritedWidget referenced by this widget changes).
10. snapshot method C. context method
11. build method D. update method
12. In Flutter, this is the term used for information that (1) can be read synchronously when the widget is built and (2) might change during the lifetime of the widget.
13. State C. AsyncSnapshot
14. Data D. BuildContext
15. These widgets are useful when the part of the user interface you are describing can change dynamically, e.g. due to having an internal clock-driven state, or depending on some system state.
16. Column Widget C. Stateful Widget
17. Stateless Widget D. Inherited Widget
18. A Backend-as-a-Service (BaaS) app development platform that provides hosted backend services such as a realtime database, cloud storage, authentication, crash reporting, machine learning, remote configuration, and hosting for your static files.
19. Firebase C. Google Developer Console
20. Cloud Firestore D. Google Play Store
21. Implements the basic material design visual layout structure. This class provides APIs for showing drawers, snack bars, and bottom sheets.
22. Material class C. AppBar class
23. Scaffold class D. Container class
24. A \_\_\_\_\_\_ represents the result of an asynchronous operation, and can have two states: uncompleted or completed.
25. Stream C. future
26. Sink D. Future
27. A \_\_\_\_\_\_ provides a way to receive a sequence of events. Each event is either a data event, also called an element of the \_\_\_\_\_\_, or an error event, which is a notification that something has failed. When it has emitted all its event, a single "done" event will notify the listener that the end has been reached.
28. Future C. Stream
29. future D. Sink
30. A \_\_\_\_\_\_ is used to represent a potential value, or error, that will be available at some time in the future. Receivers of a \_\_\_\_\_\_ can register callbacks that handle the value or error once it is available.
31. Future C. Stream
32. future D. Sink
33. What Flutter package is useful when fetching data from the internet (ex. JSON formatted Data from an API)?
34. http C. bloc
35. provider D. json
36. By using widgets for state management, this Flutter package can guarantee:

* maintainability, through a forced uni-directional data-flow
* testability/composability, since it is always possible to mock/override a value
* robustness, as it is harder to forget to handle the update scenario of a model/widget

1. http C. bloc
2. provider D. json
3. Every pub package needs some metadata so it can specify its dependencies. Pub packages that are shared with others also need to provide some other information so users can discover them. All of this metadata goes in the package’s pubspec: a file named pubspec.yaml that’s written in the YAML language.
4. pubdart.yaml C. dartspec.yaml
5. pubflutter.yaml D. pubspec.yaml

Answer Key:

1. A.
2. Dart
3. Widget
4. B. Stateless widget
5. B. build method
6. A. State
7. C. Stateful Widget
8. A. Firebase
9. B. Scaffold class
10. C. future
11. C. Stream
12. A. Future
13. A. http
14. B. provider
15. D. pubspec.yaml