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Next item →

1. In an Android application, which of the following is created first?

1 / 1 point

- ☐ Composable
- ☐ Fragment
- ☒ **Activity**
- ☐ View

 ✓ **Correct**

 Correct! **Activity** is one of the most important components of an Android application and it serves as the program entry point. An **Activity** is created before Fragments, Views and Composables.

2. How is a Compose UI element represented?

1 / 1 point

- ☐ **View** Object
- ☒ Special function
- ☐ **AppCompatActivity**
- ☐ Tag in the **XML** file

 ✓ **Correct**

 Correct! The function is called **composable** and it is annotated with an **@Composable** annotation.

3. What can a layout contain? Select all that apply.

1 / 1 point

- ☐ Screens
- ☐ Activities
- ☒ Other layouts

 ✓ **Correct**

Correct! Layouts may contain other layouts.

- ☒ UI Elements

 ✓ **Correct**

Correct! Layouts may contain simple UI elements.

 4. True or False: Applying modifiers to a **composable** in different order may produce a different result.

1 / 1 point

- ☒ True
- ☐ False

 ✓ **Correct**

Correct! Changing the order may have a different effect on the overall arrangement, positioning, size or even behavior of the elements.

 5. In the code below, what is the reason behind usage of the **remember** function and **mutableStateOf** observable?

1 / 1 point

```
val value = remember { mutableStateOf(/*some value*/) }
```

- ☐ Reset of the variable value during function call.
- ☒ Prevent reset of the variable value during recomposition.
- ☐ Reset of the variable value during recomposition.

 ✓ **Correct**

 Correct! To retain the value, you have to use the **remember** function and **mutableStateOf** observable. Otherwise, the function would reset the variable to its initial value.

6. Which of the following are part of Jetpack navigation?

1 / 1 point

Select all that apply.

☒ NavGraph

✓ Correct

Correct! Every screen display in an Android application is a destination in navigation.

☒ NavController

✓ Correct

Correct! **NavController** is responsible for navigating between destinations while keeping track and manipulating the back state.

☒ NavHost

✓ Correct

Correct! **NavHost** is a container for displaying the current destination.

☐ NavCompose

7. Which lazy composable is not included in Jetpack compose?

1 / 1 point

☐ LazyRow

☐ LazyColumn

☒ LazyButton

☐ LazyGrid


✓ Correct

Correct! Lazy composables deal with a large number of items or items of unknown length, because they can cause performance issues. **Button** does not deal with lists of items, so it doesn't have to be lazy.

8. What do the last two characters of the hexadecimal ARGB colors represent?

0 / 1 point

0x 00 00 00 00



`alt=0x00000000`

`0x00000000`

☐ The value of red color.

☐ The value of Black color.

☐ The value of blue color.

☒ The value of alpha channel.

☐ The value of the green color.

✗ Incorrect

Not quite. Please review the video [Defining colors](#).

9. True or False: The main difference between **dp** (density independent pixel) and **sp** (scalable pixel) is that **sp** takes the text size setting of the user device into consideration when deciding what text size should be displayed.

1 / 1 point

☒ True

☐ False

✓ Correct

Correct! The user may modify this setting in the Android system preferences and the text size is scaled accordingly in the application.

10. What is the output of the following code?

0 / 1 point


```
1 var visible by remember {  
2     mutableStateOf(true)
```

```

3     } Column {
4         AnimatedVisibility(visible = visible) {
5             Text(text = "Hello, world!")
6         } Button(onClick = { visible = !visible }) {
7             Text("Button ")
8         }
9     }
10 }

```


- ☐ The first **Button** click will instantly show the **Text** and the following **Button** click will have no effect.
- ☐ The first **Button** click will instantly hide the **Text** and the following **Button** click will instantly show the Text.
- ☐ The first **Button** click will start the fade in animation of the **Text** and following **Button** click will start the fade out animation of the **Text**.
- ☒ The first **Button** click will start the fade out animation of the **Text** and the following **Button** click will start fade in animation of the **Text**.

 **Incorrect**  
Not quite. Please review the video [Animated visibility](#).

11. Which of the following best describes what an **Activity** is?

1 / 1 point


- ☐ The first screen that appears after an app has launched.
- ☒ The app component that contains the user interface.
- ☐ The business logic present within the **main()** method.
- ☐ Information registered in the manifest.

 **Correct**  
Correct! An **Activity** contains part of an app's user interface and represents the app screen.

12. Which of the following is the parent class for all types of views?

1 / 1 point


- ☐ **ViewGroup**
- ☒ **View**
- ☐ **TextView**
- ☐ **ImageView**

 **Correct**  
Correct! **View** defines the basic building block for any user interface, component or element.

13. Which of the following refers to the states an **Activity** goes through from the moment an app starts until it exits?

1 / 1 point

- ☒ activity lifecycle
- ☐ lifecycle methods
- ☐ callbacks
- ☐ state

 **Correct**  
Correct! The **Activity** class provides a number of callback functions which are called during different stages of the lifecycle.

14. Which of the following classes are all UI elements subclasses of?

1 / 1 point

- ☐ **Activity**
- ☐ **ViewGroup**
- ☐ XML
- ☒ **View**

 **Correct**  
Correct! Since all UI elements are subclasses of **View**, they share some properties.

15. Which of the following is a disadvantage of using XML to create a User Interface in Android Studio?

1 / 1 point

- ☒ XML can be difficult to debug.

- ☐ XML cannot be transferred over networks.
- ☐ XML can only run on devices of specific screen sizes and resolutions.
- ☐ XML is an inflexible language.

✓ **Correct**

Correct! It can be difficult to find and fix errors as well as time consuming to maintain XML code.

16. Which of the following is the process of initially generating the hierarchy of UI elements?

1 / 1 point

- ☐ composable
- ☐ initialization
- ☐ recomposition
- ☒ composition

✓ **Correct**

Correct! Jetpack Compose can be used to build a hierarchical UI consisting of composable functions.

17. Which of the following is an annotation that allows developers to easily create components that are modular and reusable?

1 / 1 point

- ☒ `@Composable`
- ☐ `@Kotlin`
- ☐ `@Annotation`
- ☐ `@Component`

✓ **Correct**

Correct! Jetpack Compose can be used to build a hierarchical UI consisting of composable functions.

18. Which of the following built-in layouts in Compose places composables vertically?

1 / 1 point

- ☐ layout
- ☐ box
- ☒ column
- ☐ row

✓ **Correct**

Correct! For a row the main axis is the horizontal axis, so you can set the horizontal alignment.

19. Which of the following built-in layouts in Compose places composables horizontally?

1 / 1 point

- ☐ box
- ☒ column
- ☐ row
- ☐ layout

✓ **Correct**

Correct! For a row the main axis is the horizontal axis, so you can set the horizontal alignment.

20. Which of the following modifiers is used to set the background color of a composable?

1 / 1 point

- ☐ `layoutColor`
- ☐ `color`
- ☒ `background`
- ☐ `backgroundColor`

✓ **Correct**

Correct! The `background` modifier accepts a color object as an argument.

21. Imagine you have an `Image` composable displaying a cat with a height of `300 dp`. Which of the following is the correct way to add rounded corners of `30 dp` to the image?

1 / 1 point

- ☒

```
1 Image(
2     painter = painterResource(id = R.drawable.cat),
3     contentDescription = "an image of a cat",
```

```

3   contentDescription = "an image of a cat",
4   Modifier.height(300.dp).clip(RoundedCornerShape(30.dp))
5 )

```

☐

```

1 Image(
2   painter = painterResource(id = R.drawable.cat),
3   contentDescription = "an image of a cat",
4   Modifier.height(300.dp).roundedCornerShape(30.dp)
5 )

```

☐

```

1 Column(
2   painter = painterResource(id = R.drawable.cat),
3   contentDescription = "an image of a cat",
4   Modifier.height(300.dp).clip(RoundedCornerShape(30.dp))
5 )

```

☒ **Correct**

Correct! The `clip` modifier can be used with a supplied argument of the desired amount of the rounded shape.

22. What are tapping or clicking a button, scrolling a list, swiping across the screen, dragging an icon and long pressing a thumbnail all examples of?

0 / 1 point

- ☐ user actions
- ☐ event listeners
- ☒ event handlers
- ☐ user events

☒ **Incorrect**

Not quite. Please review the video [Event handling with callbacks](#).

23. Which of the following can be used to implement interaction handling in Jetpack Compose?

1 / 1 point

- ☒ event modifiers
- ☐ long presses
- ☐ events
- ☐ clicks

☒ **Correct**

Correct! Event modifiers are a powerful tool for enhancing the user experience and providing a more dynamic and interactive UI.

24. Which of the following best describes what state is in programming?

1 / 1 point

- ☐ Data saved in memory.
- ☐ The location of data within a program.
- ☒ Data of a program that changes over time.
- ☐ Data used to recreate an activity.

☒ **Correct**

Correct! State can also be described as the current condition of a program.

25. Which of the following is a component provided by Jetpack Compose that makes it convenient to implement the Material Design system?

1 / 1 point

- ☐ Top App Bar
- ☐ Navigation Drawer
- ☒ Scaffold
- ☐ Material Component

☒ **Correct**

Correct! Scaffold is an easy way to combine various UI patterns and material components.

26. Which of the following keywords is used for creating an object without creating a class?

1 / 1 point

- ☐ route
- ☒ object
- ☐ interface
- ☐ override

✓ **Correct**

Correct! When implementing navigation in Jetpack Compose, destinations can be defined as objects.

27. Which of the following is used to define a horizontal **List** in Jetpack Compose?

1 / 1 point

- ☐ Grid
- ☐ Column
- ☒ Row
- ☐ Box

✓ **Correct**

Correct! A **Row** is a layout composable. A **Column** is used when you want to define a vertical List.

28. Which of the following would you use to create a vertical scrollable **List** for a large or unknown number of items?

1 / 1 point

- ☐ lazy row
- ☒ lazy column
- ☐ lazy grid
- ☐ lazy list

✓ **Correct**

Correct! Lazy column takes care of scrolling and recomposing items when required.

29. Which of the following is a mechanism for unifying and maintaining the application look and feel across all screens?

0 / 1 point

- ☐ XML
- ☒ a design system
- ☐ a theme
- ☐ a composable hierarchy

✗ **Incorrect**

Not quite. Please review the video [The Theme function](#).

30. Which of the following APIs can be used to animate a value in Jetpack Compose?

1 / 1 point

- ☐ animate API
- ☒ animate\*AsState API
- ☐ animatedVisibility API
- ☐ remember API

✓ **Correct**

Correct! the animate\*AsState API can animate several value types such as float, color and dp.