

# Mobile Applications

CSCI 448

## Lecture 32



Informing the User  
Snackbar & Dialog

# Learning Outcomes For Today



- Discuss the interactions between the Dialog and the Snackbar
- Explain a usage for each

# On Tap For Today



- UI Widgets
- Practice

# On Tap For Today



- UI Widgets
- Practice

# Scaffold Components



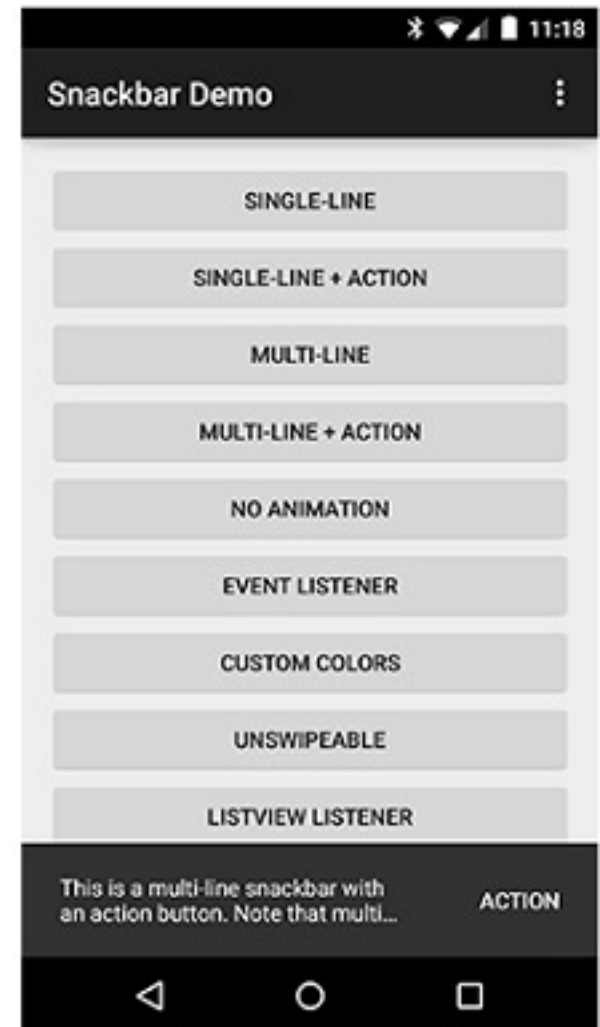
- TopBar
- Drawer
- Content
- FloatingActionButton
- Snackbar
- BottomBar



# Snackbar



- Like a Toast
  - Displays a message to the user
  - A Toast stays displayed if you leave app
- Snackbars are part of UI
- And can have an action!



# Snackbar Host State



- Need to track if snackbar is currently visible or not
  - Provide state to Scaffold

```
// in composable
```

```
val snackbarHostState = remember { SnackbarHostState() }
```

```
Scaffold(
```

```
    snackbarHost = { SnackbarHost(snackbarHostState) }
```

```
) { paddingValues ->
```

```
    // content
```

```
}
```

# Displaying the Snackbar



- Snackbar animation occurs concurrently
  - Execute in coroutine

```
// in Content composable
```

```
val coroutineScope = rememberCoroutineScope()
```

```
coroutineScope.launch {
```

```
    val snackbarResult = snackbarHostState.showSnackbar(  
        message = "Snackbar Text",  
        duration = SnackbarDuration.Short,  
        actionLabel = "Action"  
    )
```

```
}
```



# Snackbar Result



- Tells you what happened

*// in Content composable*

```
val coroutineScope = rememberCoroutineScope()

coroutineScope.launch {

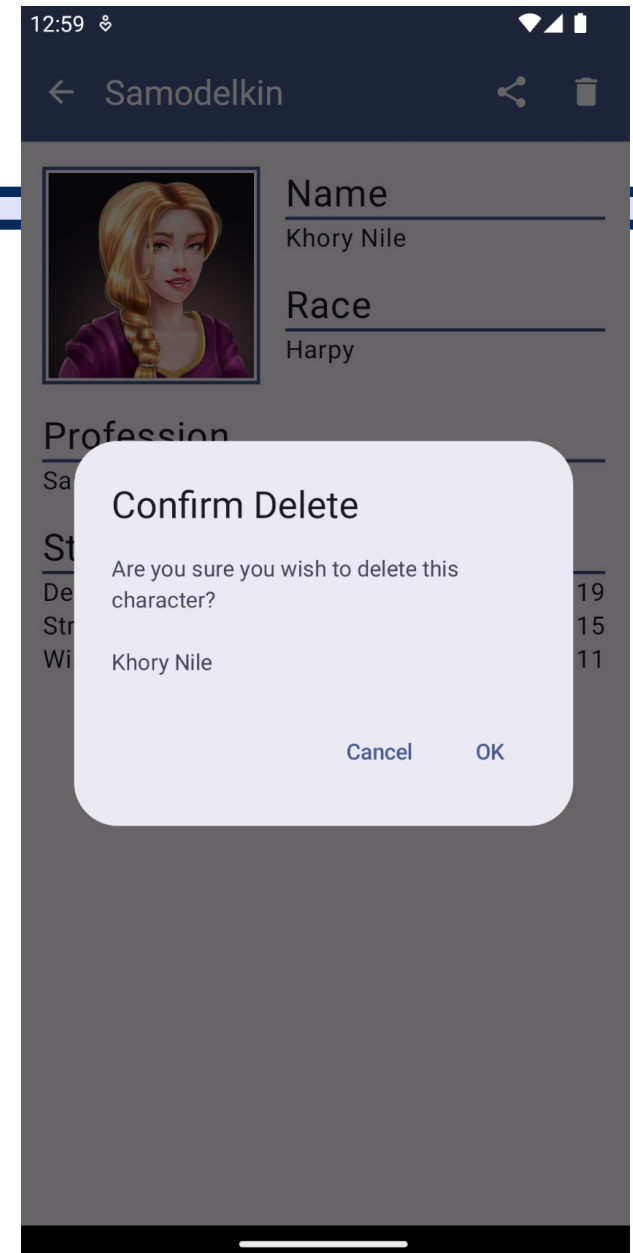
    val snackbarResult = ...

    when(snackbarResult) {
        SnackbarResult.Dismissed -> { /* dismissed */ }
        SnackbarResult.ActionPerformed -> {
            // user pressed action button, handle event
        }
    }
}
```

# AlertDialog



- Intercepts UI and prompts user for confirmation



# AlertDialog



```
val dialogVisibleState = remember { mutableStateOf(false) }
if (dialogVisibleState.value) {
    AlertDialog(
        onDismissRequest = { dialogVisibleState.value = false },
        confirmButton = {
            TextButton(
                onClick = {
                    dialogVisibleState.value = false
                    /* positive action */
                }
            ) {
                Text( text = "Yes" )
            }
        },
        dismissButton = {
            TextButton( onClick = { dialogVisibleState.value = false } {
                Text( text = "No" )
            }
        ),
        title = { Text( text = "Title" ) },
        text = { Text( text = "Message" ) }
    )
}
```

# Demo!



# On Tap For Today



- UI Widgets
- Practice

# To Do For Next Time



- Today: Exam 2 + L10 due
- Monday: Beta Release due
- Thursday: Beta Feedback due, A3 due
- Friday: No Class (E-Days)
- Monday: L11 due