

Assignment: Development Scenario 2: Event Management System

Day 1: Introduction and Setup

Task 1: Set up the Kotlin development environment and write a simple Kotlin script to validate the setup.

Step 1: Install Kotlin:

- Download and install the Kotlin compiler from official Kotlin website

Step 2: Install IntelliJ IDEA

1. Download IntelliJ IDEA:

- Go to the [JetBrains website](<https://www.jetbrains.com/idea/download/>).
- Select community version
- Download and run the installer.
- Launch IntelliJ IDEA after installation.

Step 3: Create a New Kotlin Project

1. Create a New Project:

- Open IntelliJ IDEA.
- Click New Project or go to File -> New -> Project.

2. Select Project Type:

- Select Kotlin from the sidebar.
- Choose Kotlin/JVM and click Next.

3. Configure Project Settings:

- Name your project (e.g. HelloWorld).
- Choose a location for your project.
- Click on Finish.

Step 4: Write and Run "Hello World" Program

1. Create a Kotlin File:

- In the Project Explorer, right-click the src folder.
- Select New -> Kotlin File.
- Name the file HelloWorld.

2. Write the Code:

- Open HelloWorld.kt and add:

```
fun main() {  
    println("Hello, World!")  
}
```

3. Run the Program:

- Click the green play button next to the main function.
- Or right-click HelloWorld.kt and select Run HelloWorld.main().

Task 2: Experiment with Kotlin's String Templates to Create Dynamic Welcome Messages

```
fun main() {  
    val userName = "Rohit"  
    val welcomeMessage = "Welcome, $userName"
```

```
println(welcomeMessage)
val event = "Kotlin Workshop"
println("You have successfully registered for the $event.")
}
```

Task 3: Define Data Types to Represent Event Details such as Name, Date, and Attendee Count

1. Create a Kotlin File:

- In the Project Explorer, right-click the src folder.
- Select New -> Kotlin File.
- Name the file Event.

2. Write the Code:

- Open Event.kt and add:

```
data class Event(
    val name: String,
    val date: String,
    val attendeeCount: Int
)
fun main() {
    val event = Event("Kotlin Workshop", "July 20, 2024", 50)
    println("Event Details:")
    println("Name: ${event.name}")
    println("Date: ${event.date}")
    println("Attendee Count: ${event.attendeeCount}")
}
```

3. Run the Program:

- Click the green play button next to the main function.
- Or right-click Event.kt and select Run Event.main().

Task 4: Implement a Basic User Input Flow to Create New Events Using if and when Statements

1. Create a Kotlin File:

- In the Project Explorer, right-click the src folder.
- Select New -> Kotlin File.
- Name the file Event.

2. Write the Code:

- Open Event.kt and add:

```
import java.util.Scanner
```

```
data class Event(
    val name: String,
```

```

val date: String,
val attendeeCount: Int
)
fun main() {
    val scanner = Scanner(System.`in`)

    println("Enter event name:")
    val name = scanner.nextLine()

    println("Enter event date:")
    val date = scanner.nextLine()

    println("Enter attendee count:")
    val attendeeCount = try { scanner.nextInt()
    }
    catch (e: Exception)
    {
        println("Invalid input for attendee count. Defaulting to 0.")
        0
    }

    val event = Event(name, date, attendeeCount)

    val category = when {
        attendeeCount > 100 -> "Large"
        attendeeCount > 50 -> "Medium"
        else -> "Small"
    }

    println("Event Created:")
    println("Name: ${event.name}")
    println("Date: ${event.date}")
    println("Attendee Count: ${event.attendeeCount}")
    println("Category: $category")
}

```

3. Run the Program:

- Click the green play button next to the main function.
- Or right-click Event.kt and select Run Event.main().