Introduction

Android Development

Digital Kultur *Ændring*

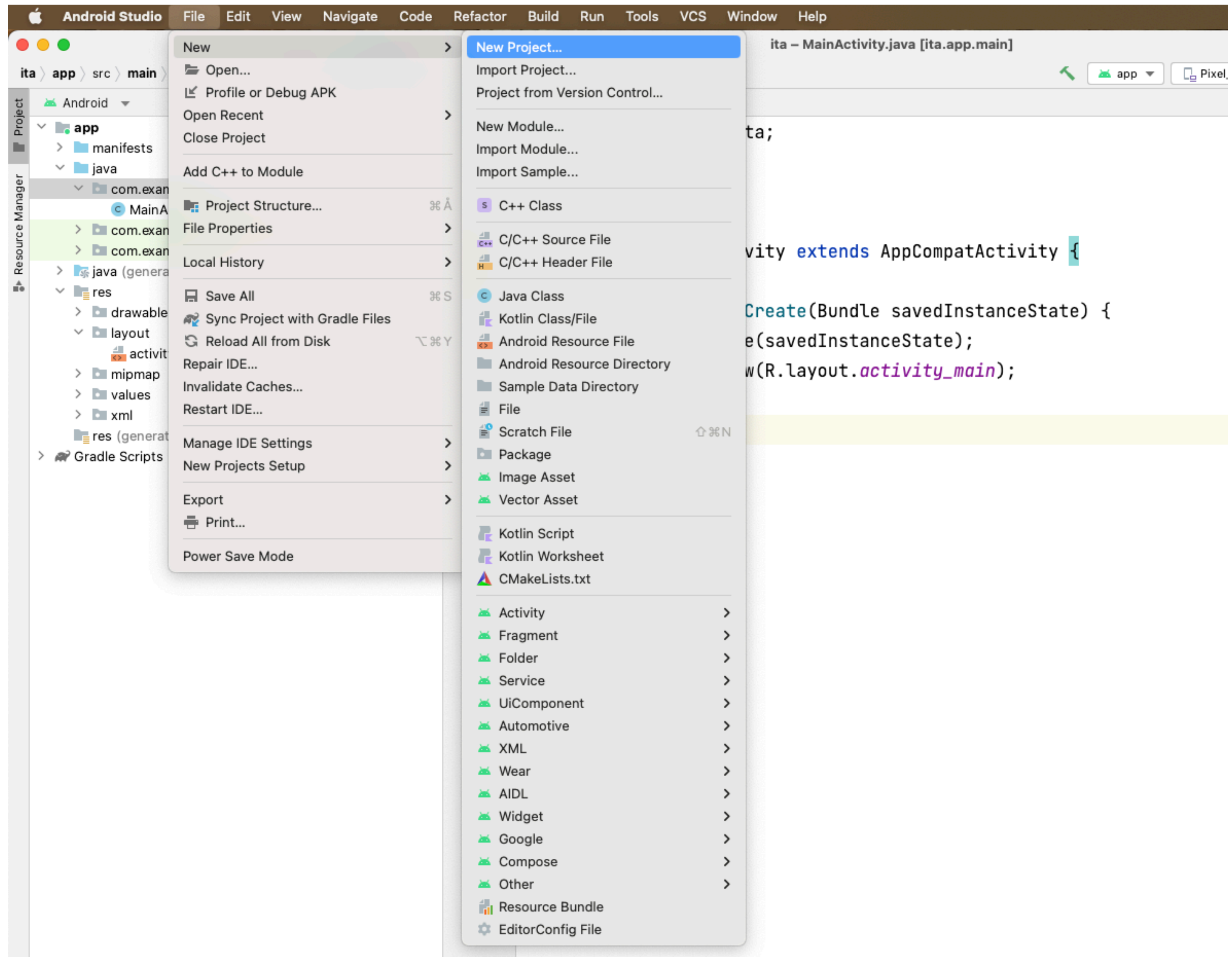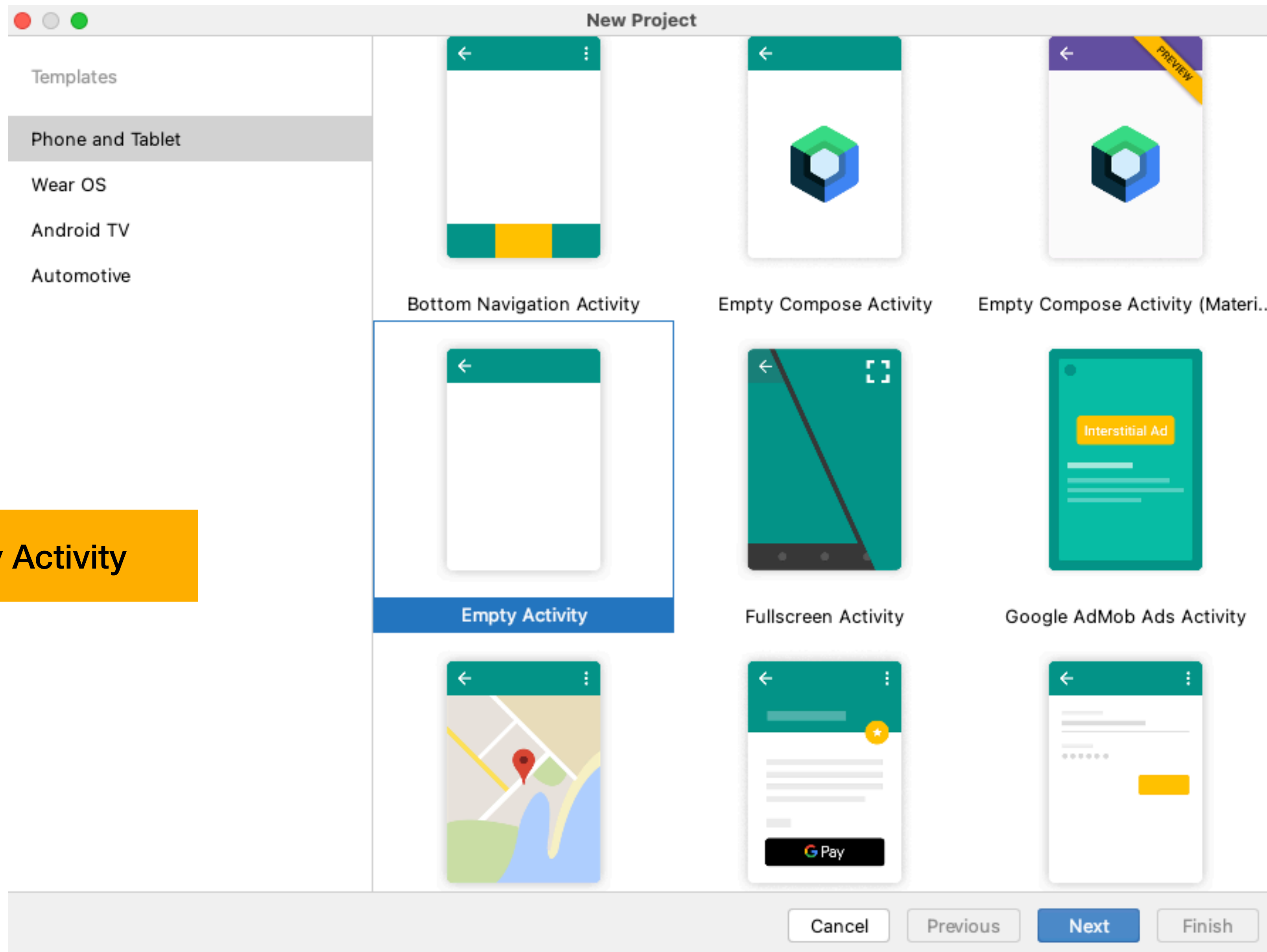|			
10/2	Understanding Digital Media & Culture	NIFR	Grupper
21/2	Artificial Intelligence	BEHU	
3/3	Digital Identity & Promotion of self	NIFR	Have valgt et emne
16/3	Privacy, Politics & Crime	NIFR / XHEK	Vejledning
30/3	Guest Lecturer: Meme Culture, Shitstorms & Lovestorms	NIFR / ANAC	Vejledning
30/4	Ingen forelæsning		Aflevering
4/5	Studenderseminar: Elevatorpitch & Feedback	ITA-22	

Agenda
Application Development

- Getting started: First Project

- Development Environment: Emulator

- Pushing an application to Github

- Working in a framework

- MainActivity

- Getting Log Data

- Activity Lifecycle: onCreate

  - SavedInstanceState

The Integrated Development Environment

Android Studio: First project

ita — MainActivity.java [ita.app.main]

ita > app > src > main >

File menu:

New	>
Open...	
Profile or Debug APK	
Open Recent	>
Close Project	
Add C++ to Module	
Project Structure...	⌘Å
File Properties	>
Local History	>
Save All	⌘S
Sync Project with Gradle Files	
Reload All from Disk	⌥⌘Y
Repair IDE...	
Invalidate Caches...	
Restart IDE...	
Manage IDE Settings	>
New Projects Setup	>
Export	>
Print...	
Power Save Mode	

New submenu:

- New Project...
- Import Project...
- Project from Version Control...
- New Module...
- Import Module...
- Import Sample...
- C++ Class
- C/C++ Source File
- C/C++ Header File
- Java Class
- Kotlin Class/File
- Android Resource File
- Android Resource Directory
- Sample Data Directory
- File
- Scratch File   ⇧⌘N
- Package
- Image Asset
- Vector Asset
- Kotlin Script
- Kotlin Worksheet
- CMakeLists.txt
- Activity   >
- Fragment   >
- Folder   >
- Service   >
- UiComponent   >
- Automotive   >
- XML   >
- Wear   >
- AIDL   >
- Widget   >
- Google   >
- Compose   >
- Other   >
- Resource Bundle
- EditorConfig File

Project panel:

- app
  - manifests
  - java
    - com.exan
      - MainA
    - com.exan
    - com.exan
  - java (genera
  - res
    - drawable
    - layout
      - activit
    - mipmap
    - values
    - xml
  - res (generat
- Gradle Scripts

Code editor:

```
ta;

vity extends AppCompatActivity {

Create(Bundle savedInstanceState) {
e(savedInstanceState);
w(R.layout.activity_main);
```

app ▼   Pixel

New Project

Templates

Phone and Tablet

Wear OS

Android TV

Automotive

Bottom Navigation Activity

Empty Compose Activity

Empty Compose Activity (Materi...

Empty Activity

Empty Activity

Fullscreen Activity

Google AdMob Ads Activity

Cancel   Previous   **Next**   Finish

Working in a framework
Android Studio

"main" method

```java
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
}
}
```

The Android emulator

# The res folders: Layout

Getting started: Del 1

Beskrivelse

A) Change the text in your MainLayout to write: Hello + Your name

B) Change your Application Name to a real "app" name

C) Push your result to a Github Repository

Logging with Logcat
Dynamic logging

Life Cycle
Activities

- Activities consists of changing states

- Overriden methods are used to control the flow of action

- onCreate controls what happens when an Activity is created

```java
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
}
```


Figure 1. A simplified illustration of the activity lifecycle.
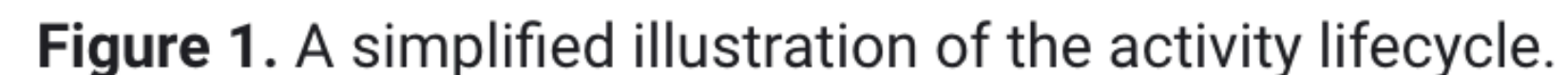
Overriding onPause activity state