

App Programmierung (ZAPP)

Andreas Eckner
Head of App Development
Continental Automotive GmbH

andreas.eckner@extern.oth-regensburg.de
andreas.eckner@continental.com

SoSe 2019

1. Hello World

Hello World

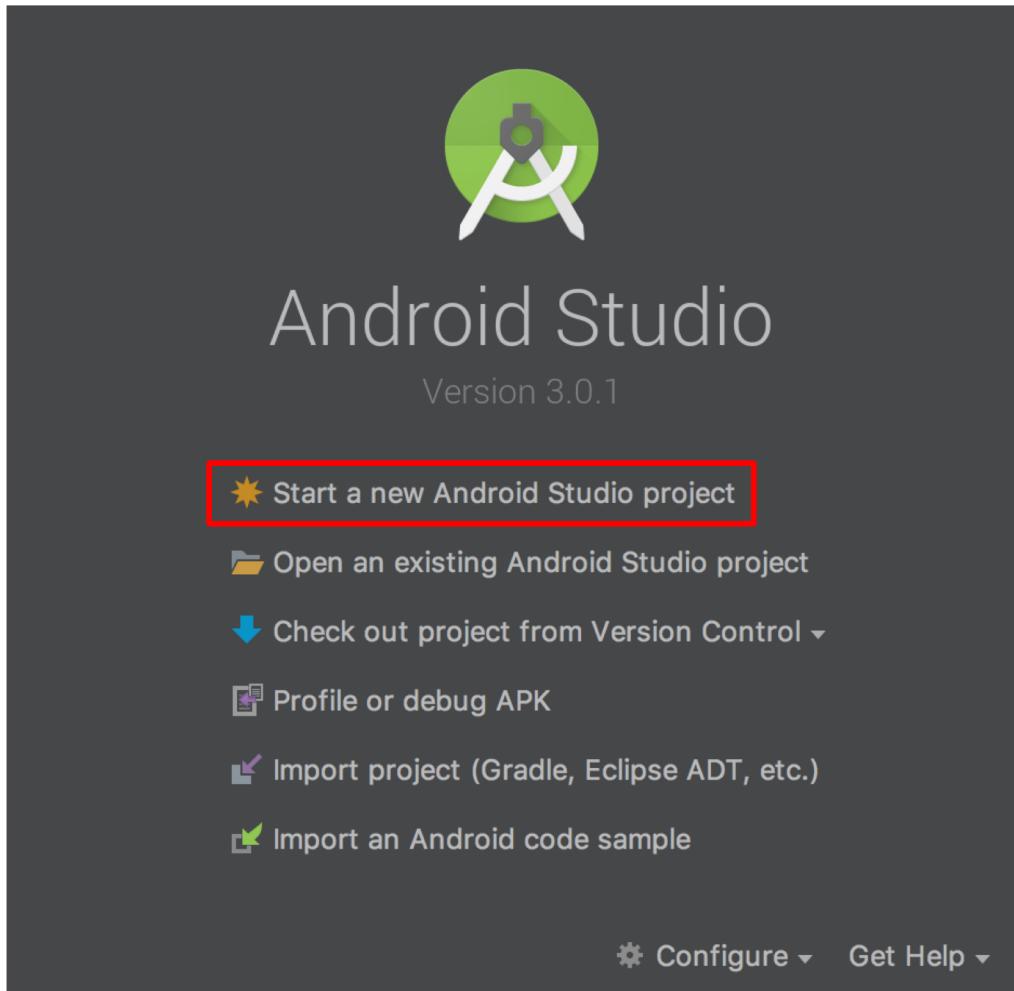
- Kennenlernen von Android Studio
- Erstellung einer ersten App
- Erste Erfahrung mit dem Entwicklungsprozess
- Installieren der App auf einem virtuellen Gerät

1. Hello World

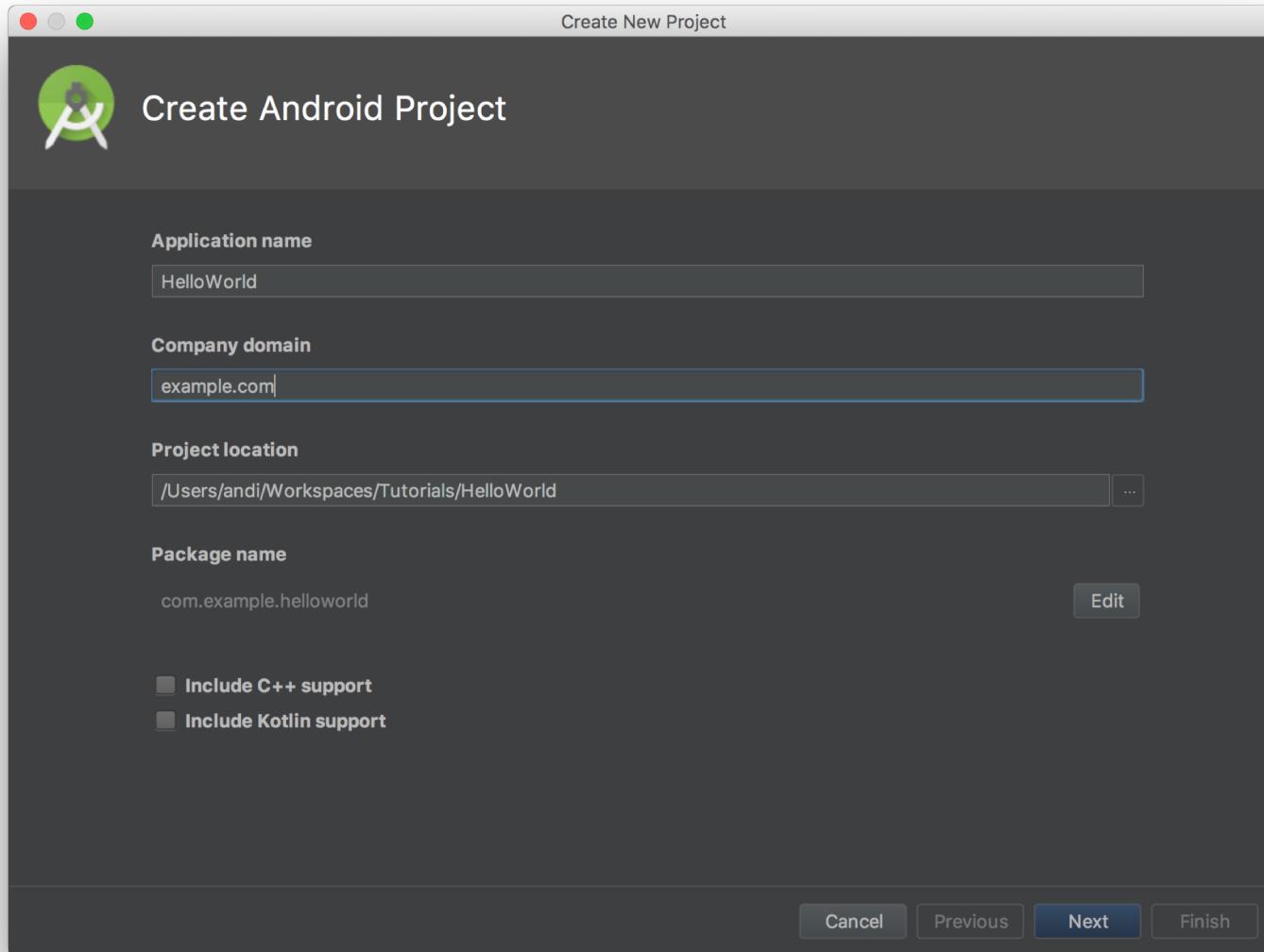
Android Studio

- Projektstruktur
- Templates
- Layout Editor
- Test-Tools
- Gradle
- Log-Konsole
- Emulatoren

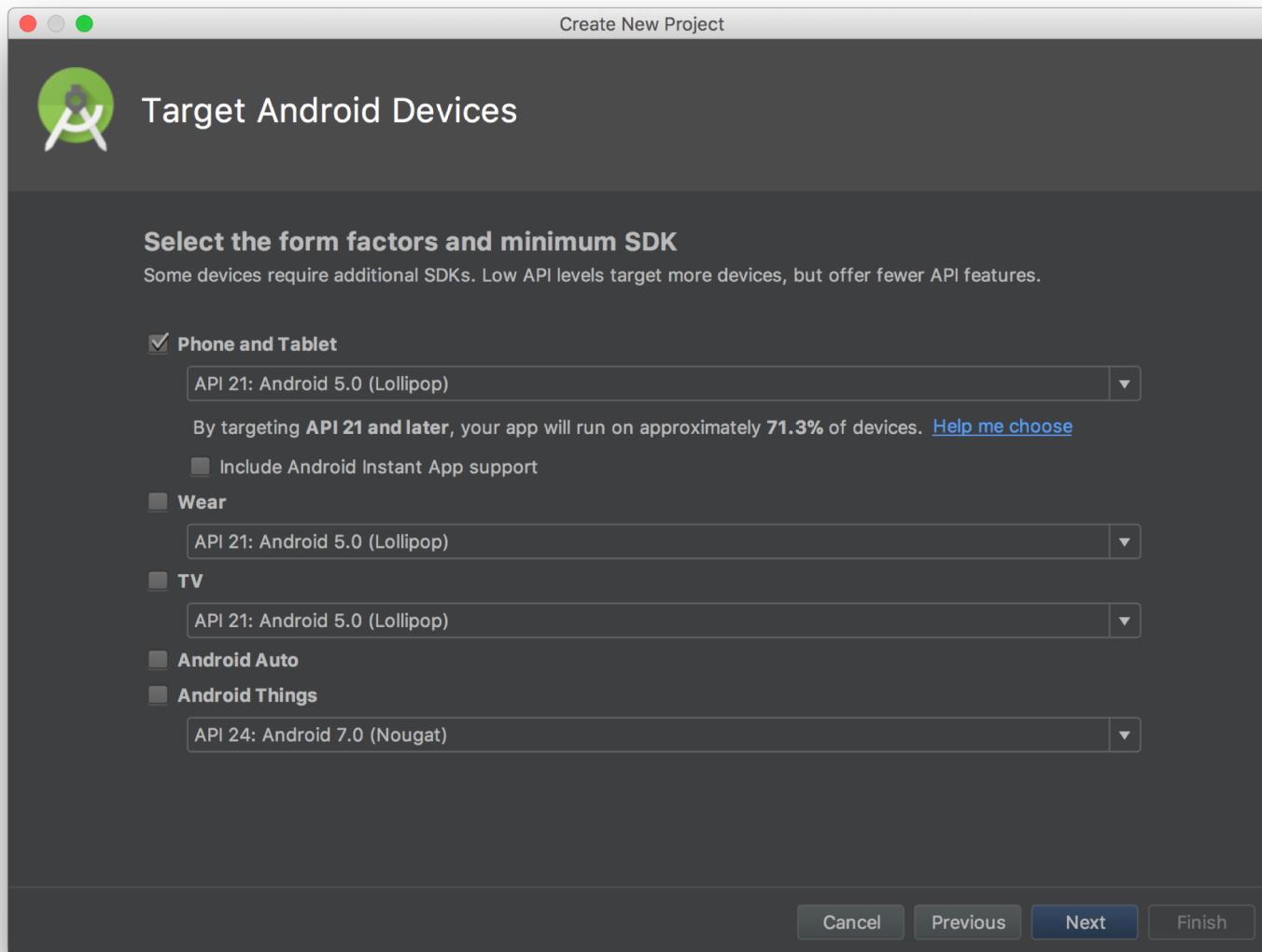
1. Hello World



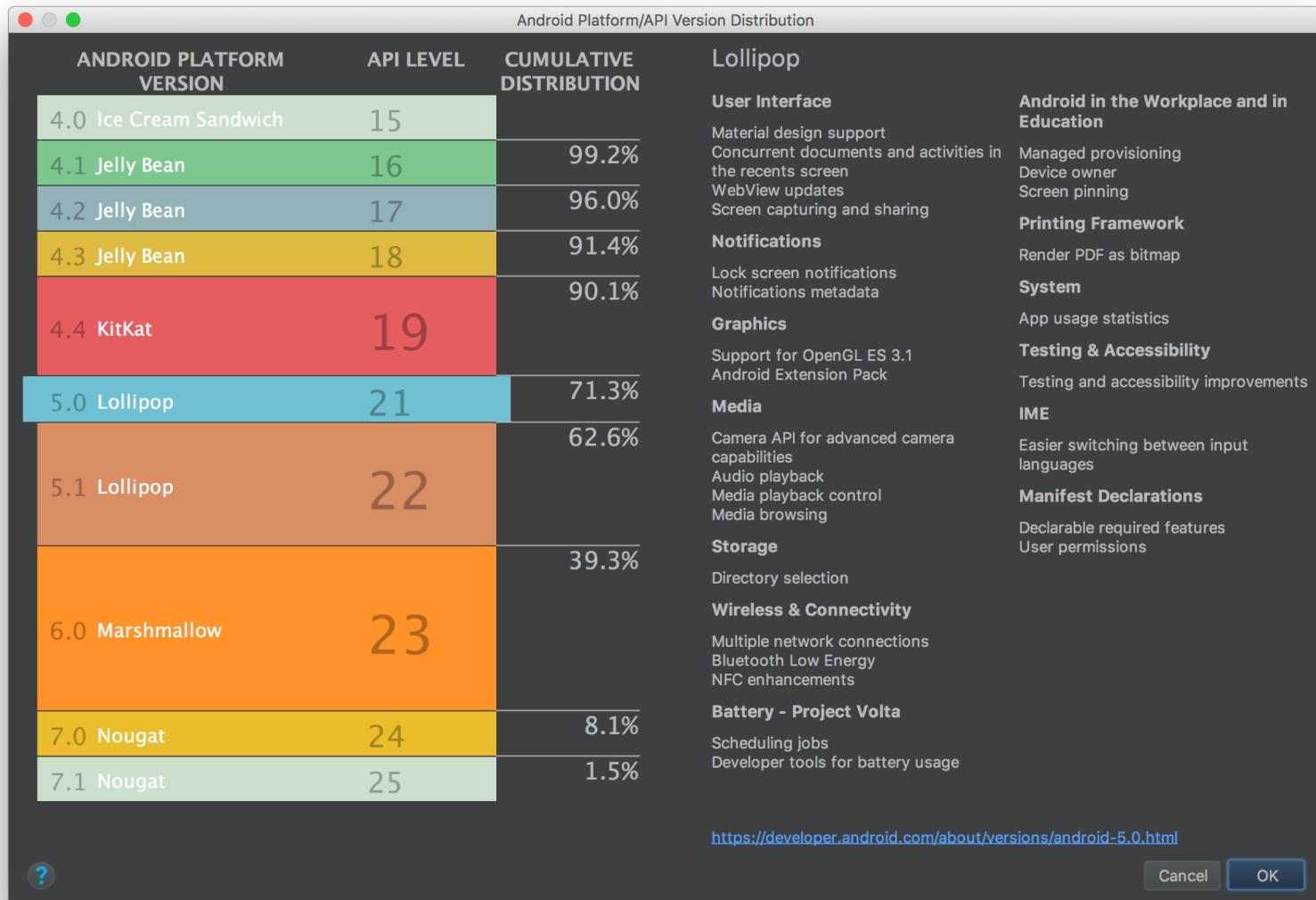
1. Hello World



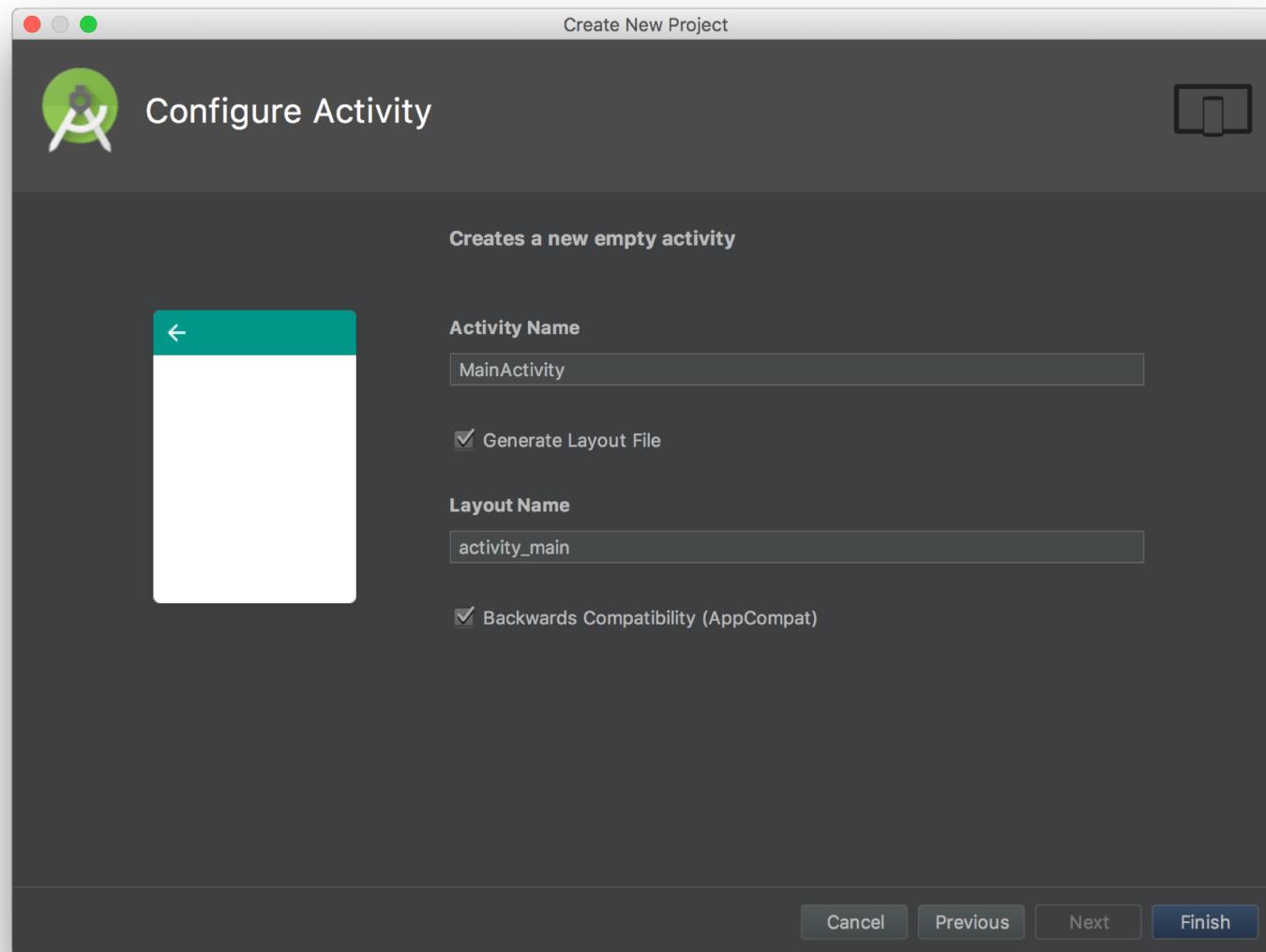
1. Hello World



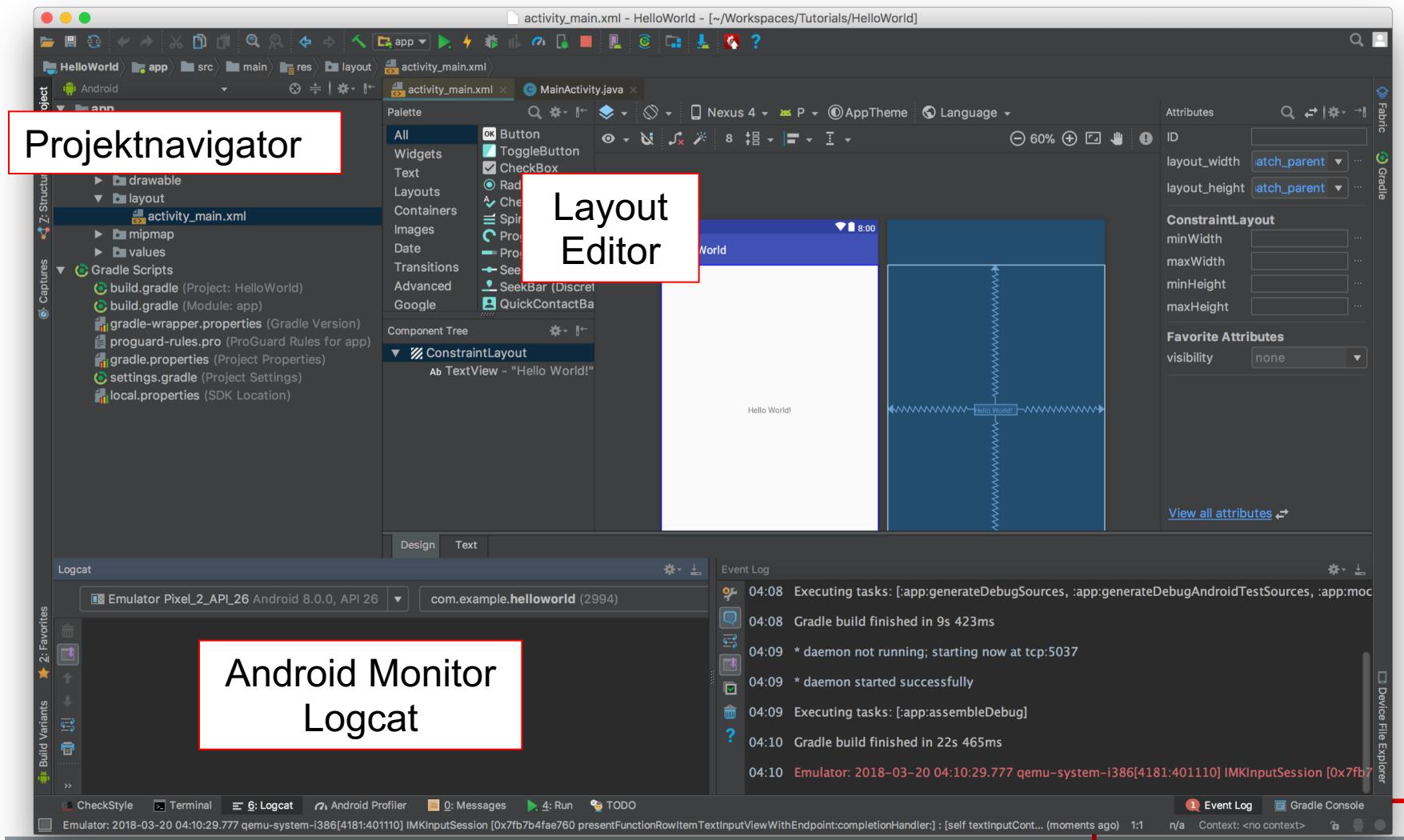
1. Hello World



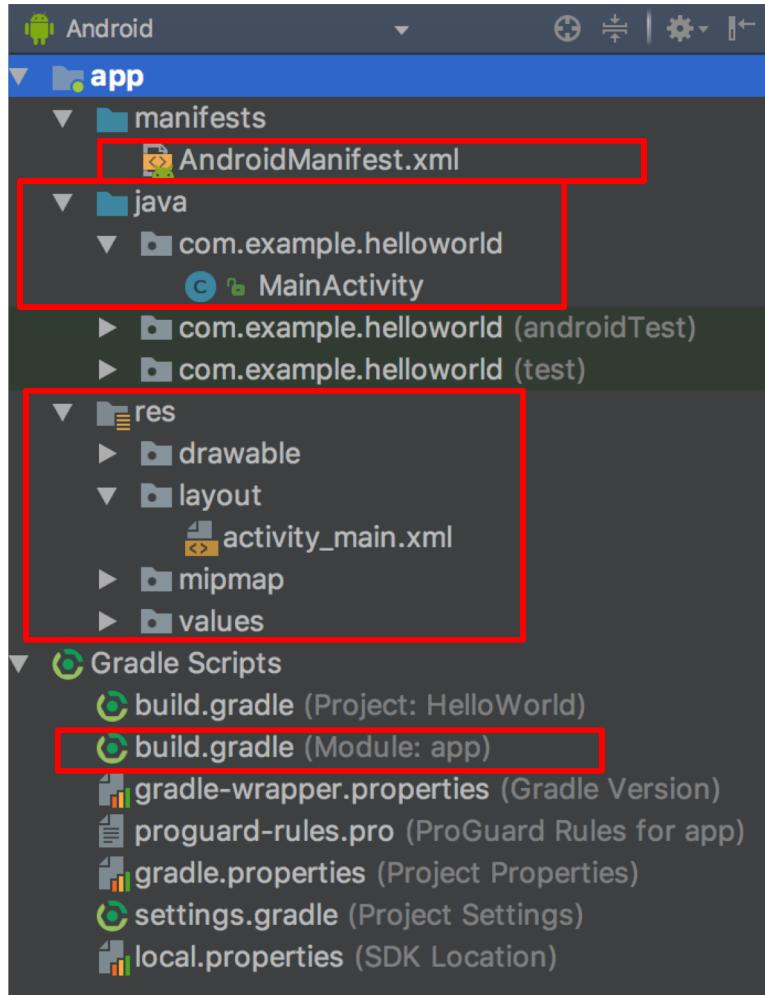
1. Hello World



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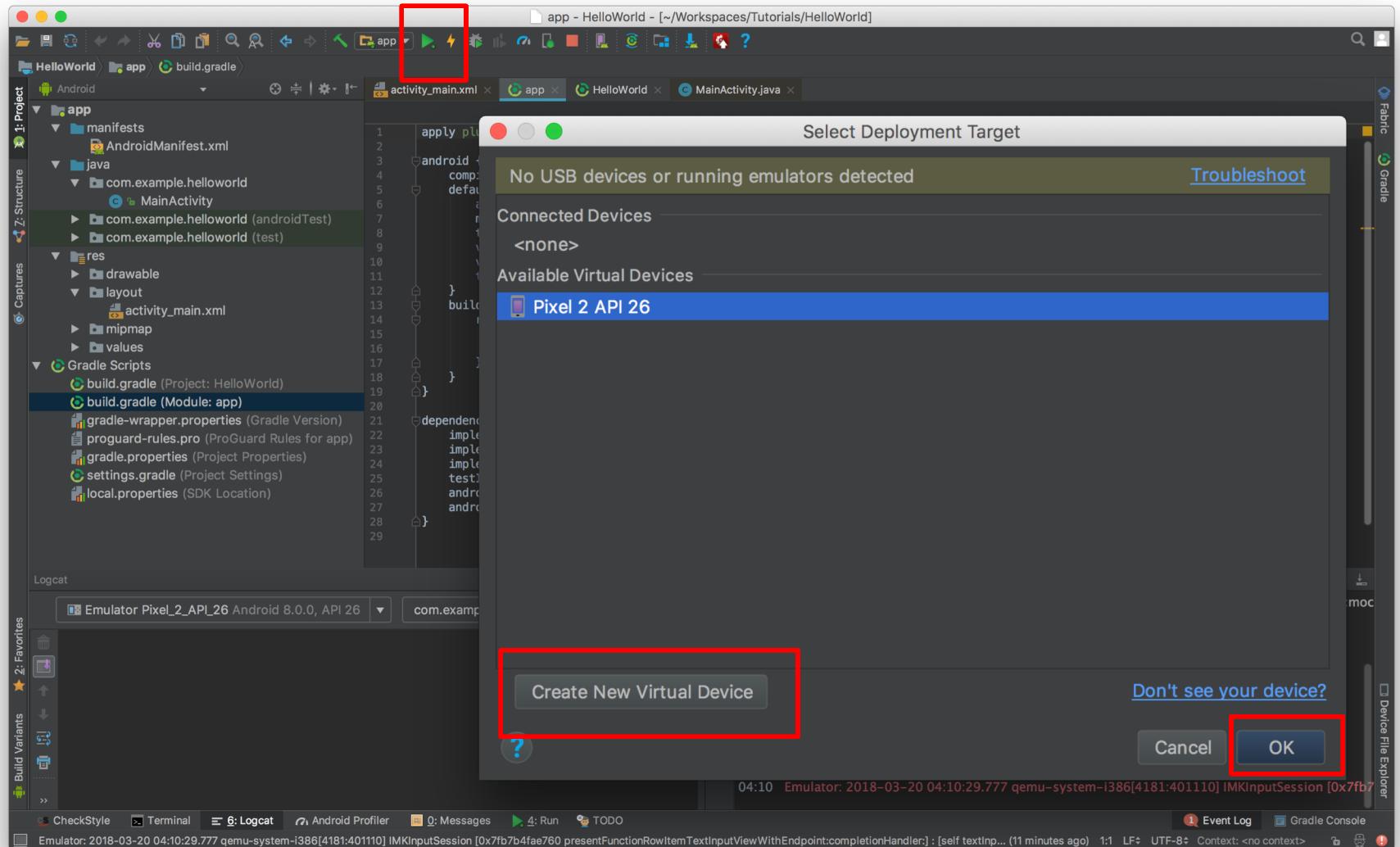
Android Manifest

Java Source Code

Ressourcen (XML) wie Layout, String, Bilder, Farben, etc.

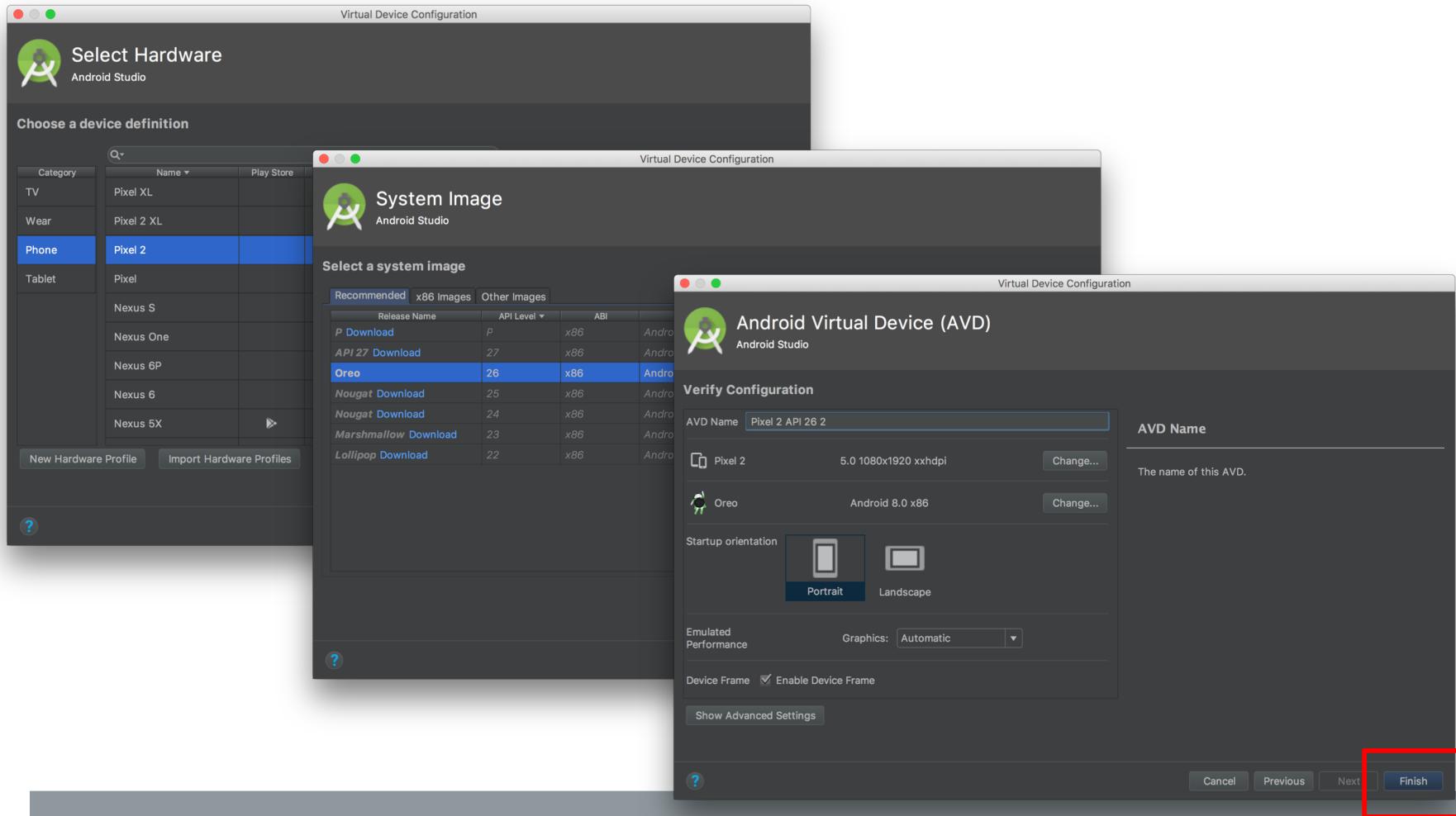
Grade Build Datei

1. Hello World

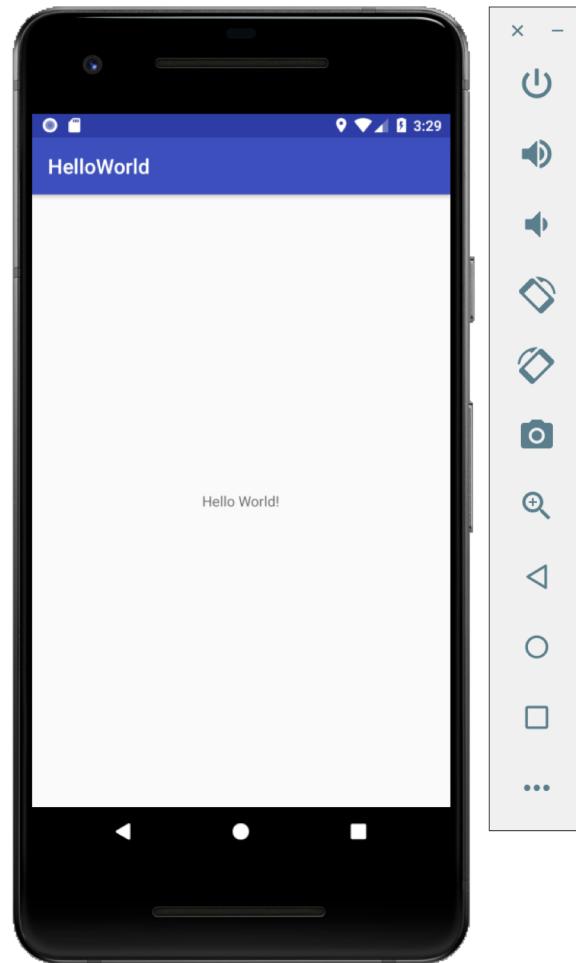


1. Hello World

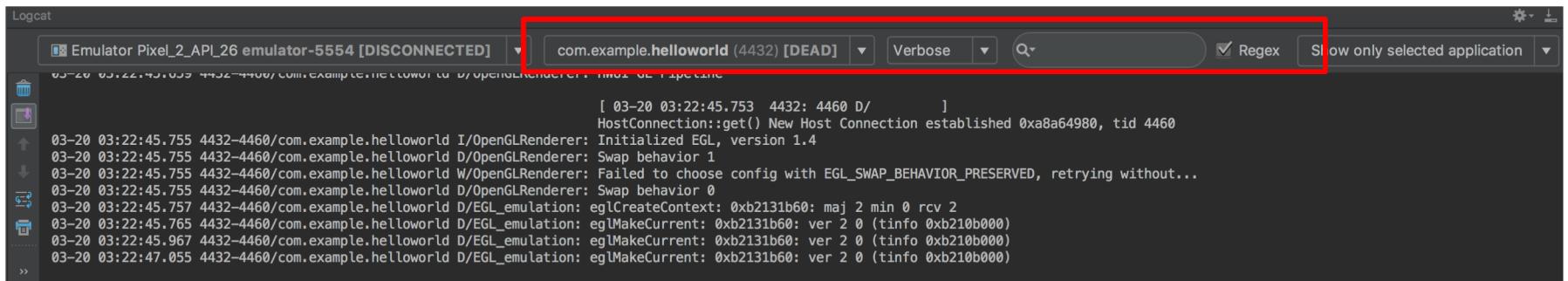
-> Tools > Android > AVD Manager



1. Hello World



1. Hello World



The screenshot shows the Android Logcat interface. A red box highlights the search bar and filter options. The search bar contains the text "com.example.helloworld". The filter dropdown shows "Verbose" and "Regex" is checked. The log output below shows several entries related to OpenGL rendering and host connections.

```
[ 03-20 03:22:45.753 4432: 4460 D/        ] HostConnection::get() New Host Connection established 0xa8a64980, tid 4460
03-20 03:22:45.755 4432-4460/com.example.helloworld I/OpenGLRenderer: Initialized EGL, version 1.4
03-20 03:22:45.755 4432-4460/com.example.helloworld D/OpenGLRenderer: Swap behavior 1
03-20 03:22:45.755 4432-4460/com.example.helloworld W/OpenGLRenderer: Failed to choose config with EGL_SWAP_BEHAVIOR_PRESERVED, retrying without...
03-20 03:22:45.755 4432-4460/com.example.helloworld D/OpenGLRenderer: Swap behavior 0
03-20 03:22:45.757 4432-4460/com.example.helloworld D/EGL_emulation: eglCreateContext: 0xb2131b60: maj 2 min 0 rcv 2
03-20 03:22:45.765 4432-4460/com.example.helloworld D/EGL_emulation: eglMakeCurrent: 0xb2131b60: ver 2 0 (tinfo 0xb210b000)
03-20 03:22:45.967 4432-4460/com.example.helloworld D/EGL_emulation: eglMakeCurrent: 0xb2131b60: ver 2 0 (tinfo 0xb210b000)
03-20 03:22:47.055 4432-4460/com.example.helloworld D/EGL_emulation: eglMakeCurrent: 0xb2131b60: ver 2 0 (tinfo 0xb210b000)
```

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Logging

```
import android.util.Log;  
  
private static final String TAG =  
    MainActivity.class.getSimpleName();  
  
Log.d(TAG, "Log Message");
```

1. Hello World

```
package com.example.helloworld;

import ...

public class MainActivity extends AppCompatActivity {

    private static final String TAG = MainActivity.class.getSimpleName();

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

        Log.d(TAG, "msg: "log message");
    }
}
```

Logcat

Emulator Pixel_2_API_26 Android 8.0.0, API 26 com.example.helloworld (4282)

03-20 03:37:02.751 4282-4282/? D/MainActivity: log message

trash, refresh, scroll