**Bijlage B**

Mijn groepje bestaat uit 6 leden met de volgende functies:

Wouter(BIM) (projectleider)

Max(BIM)

Tony(SNE)

Maarten(TI)

Pim(SIE)

Ik(SIE)

De samenwerking is tot nu toe prima en dat verwacht ik ook tijdens de projectweken. Conflicten zal ik dan ook niet verwachten. Communiceren doen we in een gezellig en informele manier. WhatsApp wordt ook gebruikt buitenschool. We spreken ook af om op school het project te maken.

Ik verwacht dat ons resultaat de minimum eisen aan voldoen en als er genoeg tijd is maken we er wat moois van. Het cijfer wat we voor gaan is een dan een voldoende.

Creating an Android Project

This lesson shows you how to create a new Android project with [Android Studio](https://developer.android.com/studio/index.html) and describes some of the files in the project.

1. In Android Studio, create a new project:
   * If you don't have a project opened, in the **Welcome to Android Studio** window, click **Start a new Android Studio project**.
   * If you have a project opened, select **File > New Project**.
2. In the **New Project** screen, enter the following values:
   * **Application Name**: "My First App"
   * **Company Domain**: "example.com"

Android Studio fills in the package name and project location for you, but you can edit these if you'd like.

1. Click **Next**.
2. In the **Target Android Devices** screen, keep the default values and click **Next**.

The **Minimum Required SDK** is the earliest version of Android that your app supports, which is indicated by the [API level](https://developer.android.com/guide/topics/manifest/uses-sdk-element.html#ApiLevels). To support as many devices as possible, you should set this to the lowest version available that allows your app to provide its core feature set. If any feature of your app is possible only on newer versions of Android and it's not critical to the core feature set, enable that feature only when running on the versions that support it (see [Supporting Different Platform Versions](https://developer.android.com/training/basics/supporting-devices/platforms.html)).

1. In the **Add an Activity to Mobile** screen, select **Empty Activity** and click **Next**.
2. In the **Customize the Activity** screen, keep the default values and click **Finish**.

After some processing, Android Studio opens and displays a "Hello World" app with default files. You will add functionality to some of these files in the following lessons.

Now take a moment to review the most important files. First, be sure that the **Project** window is open (select **View > Tool Windows > Project**) and the **Android** view is selected from the drop-down list at the top. You can then see the following files:

**app > java > com.example.myfirstapp > MainActivity.java**

This file appears in Android Studio after the New Project wizard finishes. It contains the class definition for the activity you created earlier. When you build and run the app, the [Activity](https://developer.android.com/reference/android/app/Activity.html) starts and loads the layout file that says "Hello World!"

**app > res > layout > activity\_main.xml**

This XML file defines the layout of the activity. It contains a TextView element with the text "Hello world!".

**app > manifests > AndroidManifest.xml**

The [manifest file](https://developer.android.com/guide/topics/manifest/manifest-intro.html) describes the fundamental characteristics of the app and defines each of its components. You'll revisit this file as you follow these lessons and add more components to your app.

**Gradle Scripts > build.gradle**

Android Studio uses Gradle to compile and build your app. There is a build.gradle file for each module of your project, as well as a build.gradle file for the entire project. Usually, you're only interested in the build.gradle file for the module. in this case the app or application module. For more information about this file, see [Building Your Project with Gradle](https://developer.android.com/studio/build/index.html).

To run the app, continue to the [next lesson](https://developer.android.com/training/basics/firstapp/running-app.html).

**Android project maken**

Om een Android te beginnen moet je eerst het programma Android Studio downloaden

1. Creëer een nieuw project via het menu File>New project
2. Vul de ‘application name’ en ‘company name’ in en klik dan op next
3. Zet de instellingen in de standaardinstellingen en klik dan op next
4. Selecteer ‘empty activity’ bij het ‘add an acivity to mobile’ scherm en klik dan op next
5. Bij het scherm ‘customize the activity’ gebruik je de standaardinstellingen en klik dan op finish

Zorg nu dat het project venster open is en selecteer view>tool windows>project. Nu zie je de volgende files:[[1]](#footnote-1)

# Running Your App

In the [previous lesson](https://developer.android.com/training/basics/firstapp/creating-project.html), you created an Android project that displays "Hello World." You can now run the app on a real device or on an emulator. If you don't have a real device available, skip to [Run on an Emulator](https://developer.android.com/training/basics/firstapp/running-app.html#Emulator).

## **Run on a Real Device**

Set up your device as follows:

1. Connect your device to your development machine with a USB cable. If you're developing on Windows, you might need to install the appropriate USB driver for your device. For help installing drivers, see the [OEM USB Drivers](https://developer.android.com/studio/run/oem-usb.html) document.
2. Enable **USB debugging** on your device by going to **Settings > Developer options**.

**Note:** On Android 4.2 and newer, **Developer options** is hidden by default. To make it available, go to **Settings > About phone** and tap **Build number** seven times. Return to the previous screen to find **Developer options**.

Run the app from Android Studio as follows:

1. In Android Studio, select your project and click **Run** https://developer.android.com/images/tools/as-run.png from the toolbar.
2. In the **Select Deployment Target** window, select your device, and click **OK**.

Android Studio installs the app on your connected device and starts it.

## **Run on an Emulator**

Before you run your app on an emulator, you need to create an [Android Virtual Device](https://developer.android.com/tools/devices/index.html) (AVD) definition. An AVD definition defines the characteristics of an Android phone, tablet, Android Wear, or Android TV device that you want to simulate in the Android Emulator.

Create an AVD Definition as follows:

1. Launch the Android Virtual Device Manager by selecting **Tools > Android > AVD Manager**, or by clicking the AVD Manager icon https://developer.android.com/images/tools/avd-manager-studio.png in the toolbar.
2. In the **Your Virtual Devices** screen, click **Create Virtual Device**.
3. In the **Select Hardware** screen, select a phone device, such as Nexus 6, and then click **Next**.
4. In the **System Image** screen, choose the desired system image for the AVD and click **Next**.

If you don't have a particular system image installed, you can get it by clicking the **download** link.

1. Verify the configuration settings (for your first AVD, leave all the settings as they are), and then click **Finish**.

For more information about using AVDs, see [Create and Manage Virtual Devices](https://developer.android.com/studio/run/managing-avds.html).

Run the app from Android Studio as follows:

1. In **Android Studio**, select your project and click **Run** https://developer.android.com/images/tools/as-run.png from the toolbar.
2. In the **Select Deployment Target** window, select your emulator and click **OK**.

It can take a few minutes for the emulator to start. You may have to unlock the screen. When you do, My First App appears on the emulator screen.

That's how you build and run your Android app on the emulator! To start developing, continue to the [next lesson](https://developer.android.com/training/basics/firstapp/building-ui.html).

**App uitvoeren**

**App uitvoeren(als je een device hebt)**

1. Verbindt jouw mobiel of tablet met het apparaat waar je Android Studio op hebt staan via een USB kabel
2. via jouw device
3. Schakel USB debugging in via settings>developer options Voer jouw app uit door op de play-knop te klikken bij de toolbar
4. Bij Select deployment target venster, selecteer je het apparaat waarin de app wil uitvoeren en klik dan op OK

Nu wordt jouw app geïnstalleerd op jouw mobiel/tablet.

**Emulator uitvoeren(als je geen device hebt)**

Voordat je de app kan uitvoeren heb je een android virtual device(AVD) nodig. Dat doe je door:

1. Start AVD managar via tools>android>AVD manager
2. In het scherm your virtual devices, klik je op create virtual device
3. In het scherm select hardware, selecteer je jouw mobiel. Klik dan op next
4. In het scherm system image, kies jouw systeem voor de AVD. Klik dan op next. Heb je dat niet dan kan je op de aangewezen link het systeem downloaden
5. Verifieer de configuratie instellingen, klik dan op finish

Om jouw app nu te starten:

1. In android studio selecteer je jouw project en voer je het uit vanuit de toolbar
2. Bij de select deployment venster selecteer je jouw emulator, dan klik je op OK

Nu verschijnt jouw app in de emulator scherm.[[2]](#footnote-2)

1. Android,2016, creating an Android Project, geraadpleegd op 8-12-2016 <https://developer.android.com/training/basics/firstapp/creating-project.html> [↑](#footnote-ref-1)
2. Android,2016, running your app, geraadpleegd op 8-12-2016 <https://developer.android.com/training/basics/firstapp/running-app.html> [↑](#footnote-ref-2)