



# Exercise session1

# Are you set up?

Do you have android studio installed?

Have you created and ran your first project?

If not yet, please do exercise 0 first, to set up your environment

Install Android Studio and Have “Hello world” running on your phone:

<https://goo.gl/KeJPSo>

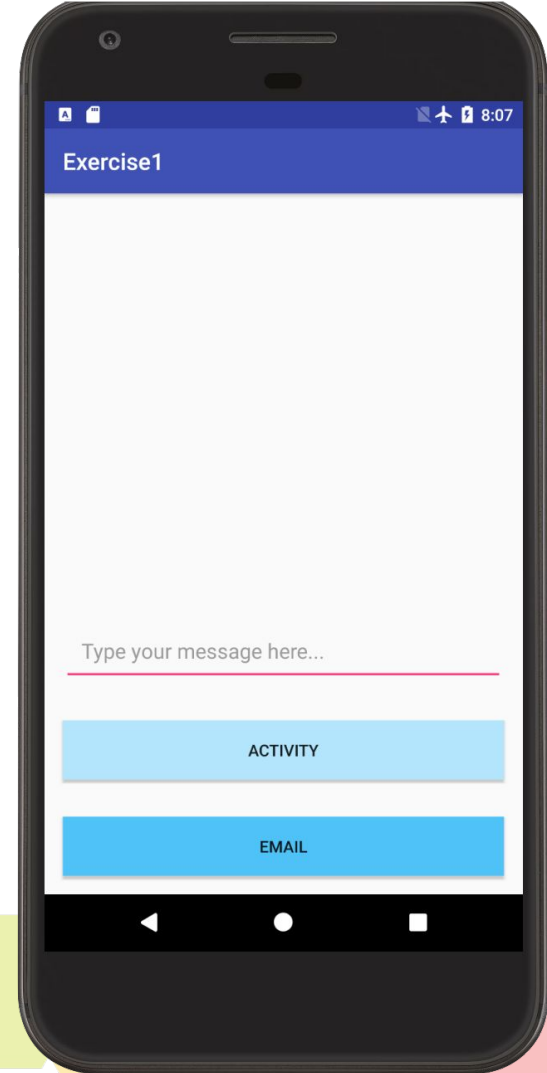


# Overview

We'll create a simple app

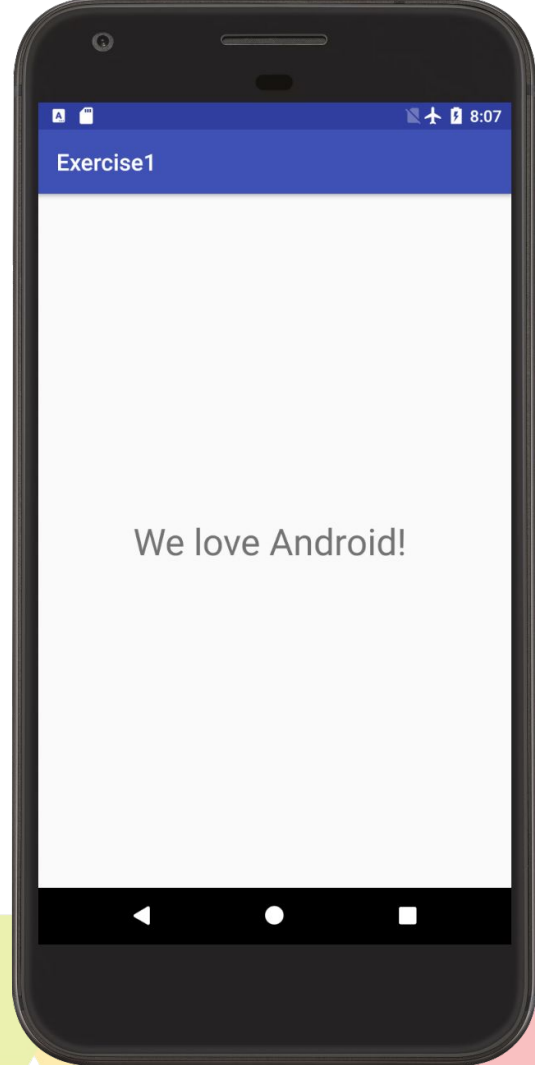
With an EditText View and 2 buttons: "Activity" and "Email".

The user inserts a message to the edittext:



# Overview

Clicking on the “Activity” button  
opens a new activity that displays the message.



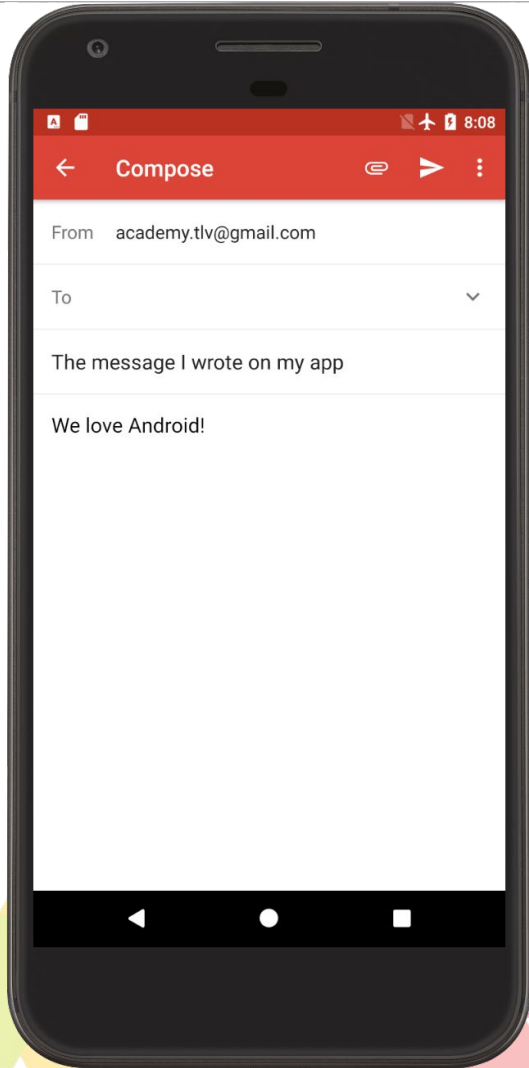
# Overview

Clicking on the “Email” button

opens a the email app which is installed on the device

(e.g. gmail)

with the message as the email's content.



# Step1- Create a new project

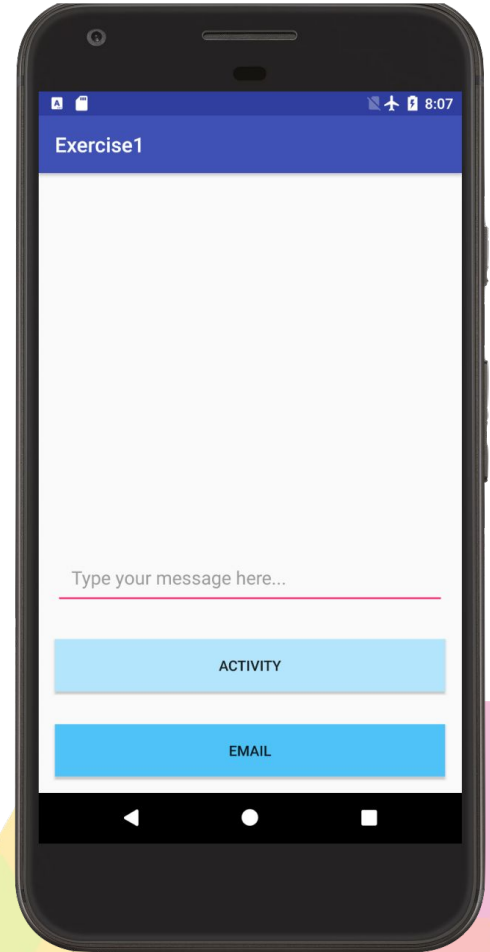
For help go to the lecture slides



# Step2

Create the main activity layout

See next slide for more info



# About EditText

EditText is a view that allows the user to insert text.

When the user clicks on it, the keyboard opens.

- Using view attribute view's `inputType`, can indicate which keyboard should pop (only numbers, all caps, email etc...)

Documentation:

<https://developer.android.com/reference/android/widget/EditText.html>



# About Edittext

“hint” attribute is the text that will show when no text is inserted.

To get the inserted text dynamically at runtime, use `getText().toString()`.



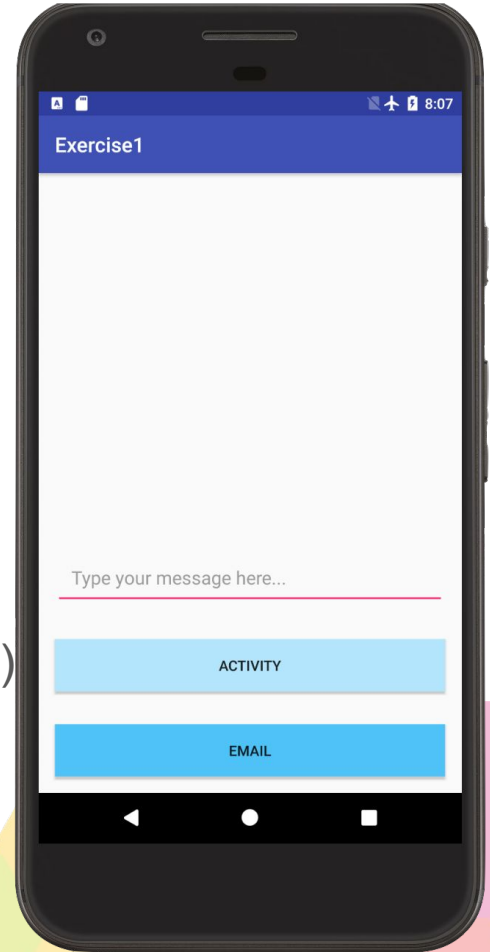
## Step2 - Now you:

Create the main activity layout.

Feel free to edit the design

with what we learned in class

(don't waste too much time on it , we have more stuff to do :) )



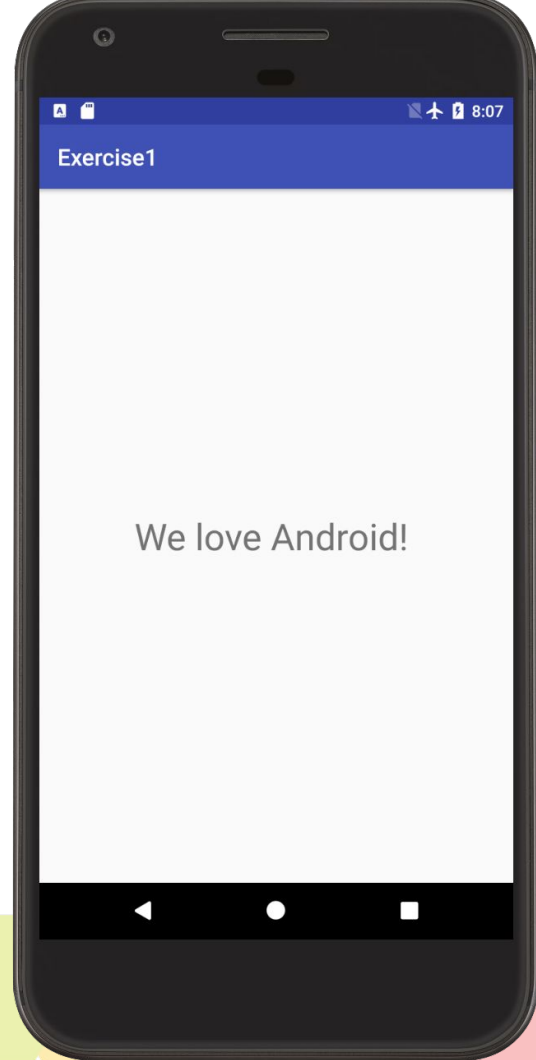
## Step 3

On click on **Activity** button:

Open a new activity,

with a TextView which says the message you typed in  
on the previous activity.

[want more guidance? See steps 1-3 on next slides]



## Step 3 - steps[1/3]

1. Create a new Activity class (Empty Activity)
2. Edit the activity's layout as needed
3. Add onClick attribute to xml



## Step 3 - steps[2/3]

4. Implement the `onClick` method on the `MainActivity` :

Create an intent that starts the new activity and passes the text from the `EditText` on the intent's extras.



## Step 3 - steps[3/3]

5. On the second activity: get the message from the intent's extras
6. On the second activity: present the message on the activity's TextView

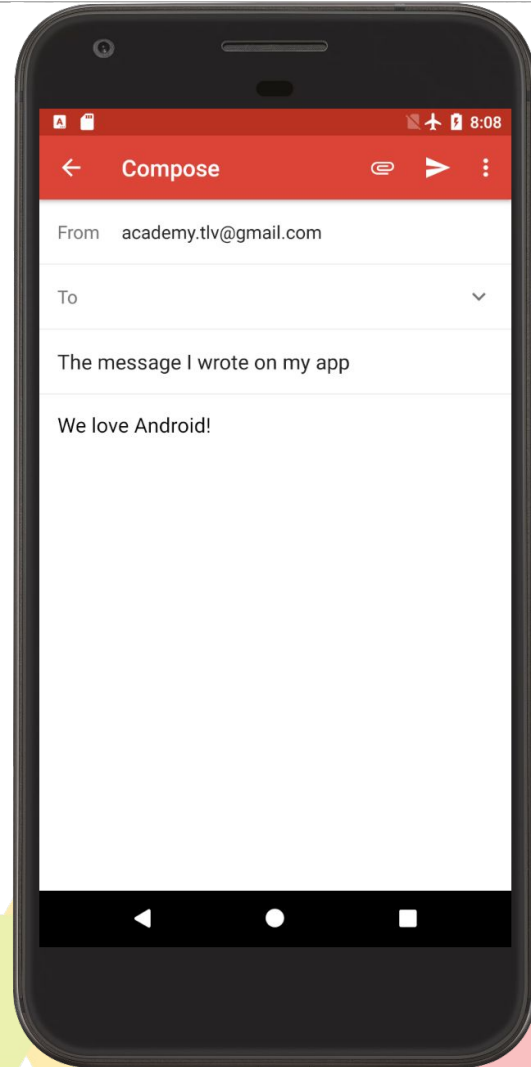


# Step 4

On click on Email button:

- Open a new email activity
- Pre-fill the email “to” with your email address
- Pre-fill the email subject :
  - “The message I wrote on my app”
- Pre-fill the email body with your message

See next slide for more info



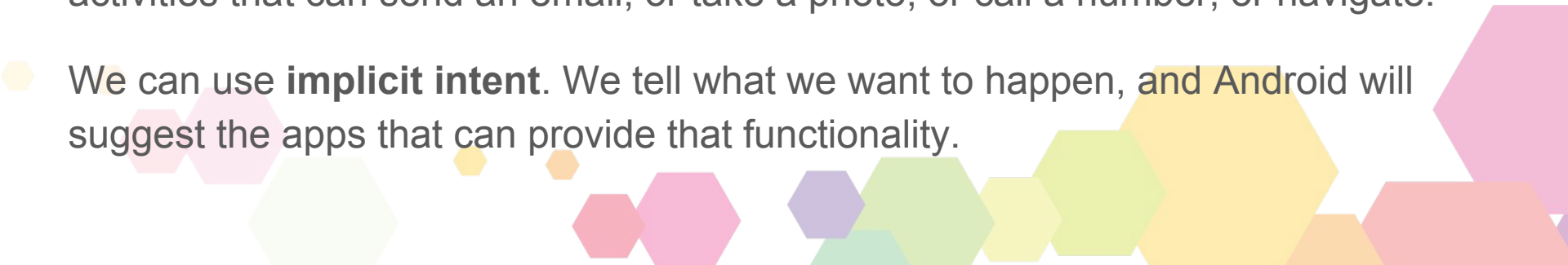
# Open an Email App

On the lecture we used **explicit intent** to open a specific activity which we created, and we have an access to.

What happens when we want to start an activity which doesn't belong to our app?

And if we want to open any activity which does a certain type of action, i.e, all activities that can send an email, or take a photo, or call a number, or navigate.

We can use **implicit intent**. We tell what we want to happen, and Android will suggest the apps that can provide that functionality.

A decorative pattern of overlapping hexagons in various colors (pink, yellow, green, purple, orange) is located at the bottom of the slide, partially overlapping the text area.



# Implicit Intent

Use this:

<https://developer.android.com/guide/components/intents-common.html>

To find out how to create an email implicit intent.

and which keys to add to the intent bundle.



# DONE?

That's amazing! Good for you!!

We have some bonus tasks if you want try.

If you have even a small question- don't forget to ask the mentors:

At the class or on Slack.



# Bonus

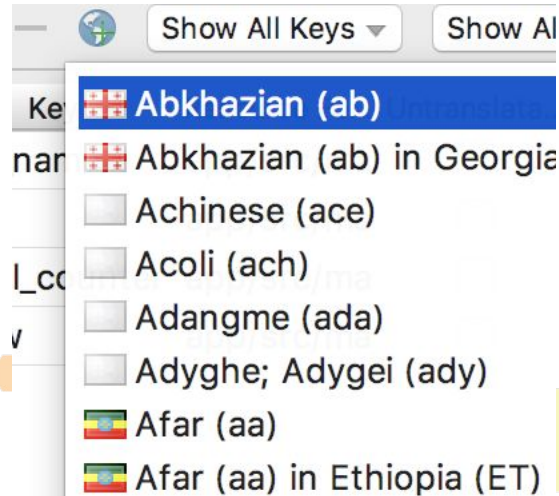
1. Make sure your all of your string ,dimensions and colors are not hard coded on xml files, but rather on the corresponding resource xml file (strings.xml, dimen.xml, colors.xml)
2. Create a different layout for landscape, as we saw on the lecture.
3. Make your app Hebrew (or other language) compatible. See next slide for details.



# Localization [1/2]

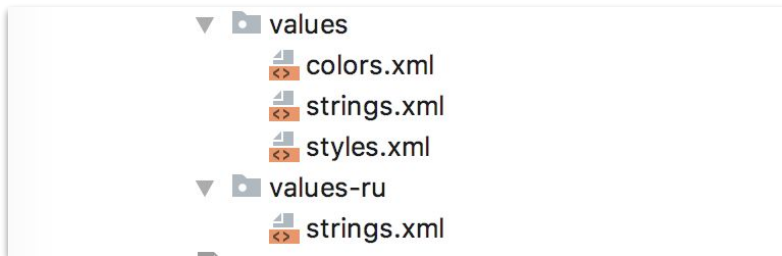
To create other language compatibility (localization):

- Open strings.xml
- On the top right : “open editor”
- On the top left: click the globe icon and select the language you want.



# Localization [2/2]

- Fill in the translation on the editor
- On the left hand files menu, find the new strings.xml that was created with the new locale. Click on it to explore the xml.



- Change your device's language settings (if not Hebrew yet)
- Run and watch your Hebrew app!

**Congratulations!!**

You're all done with  
exercise 1!

See you next time!

