



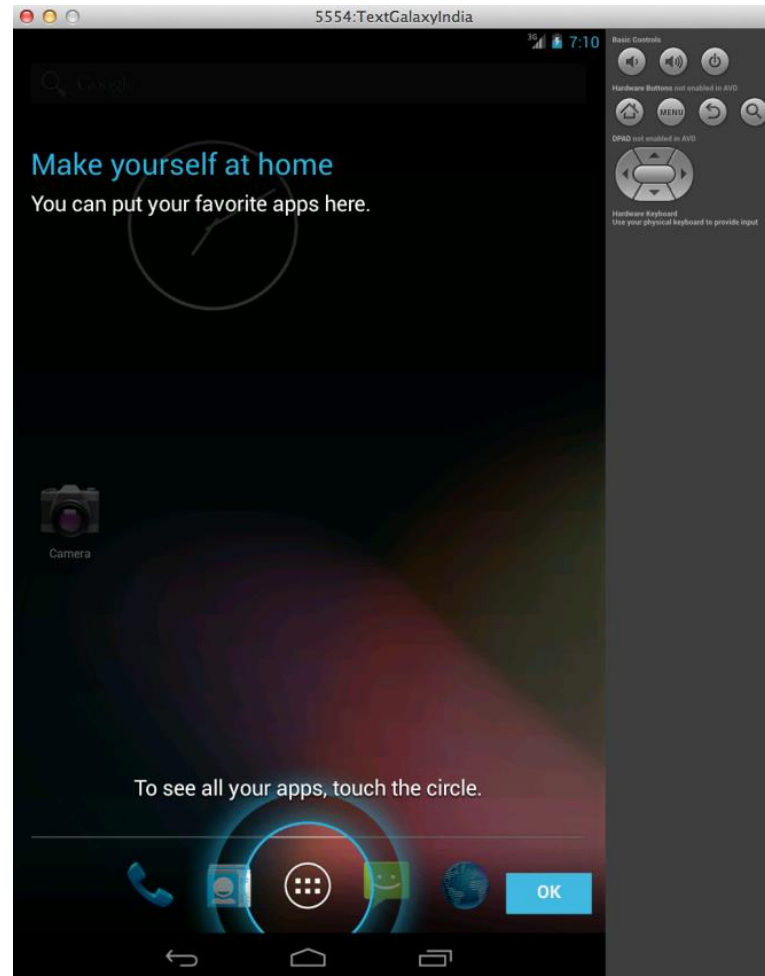
Welcome, இது
வெள்ளிக்கிழமை

AITI IIT Bombay Class 2013

Lecture 4

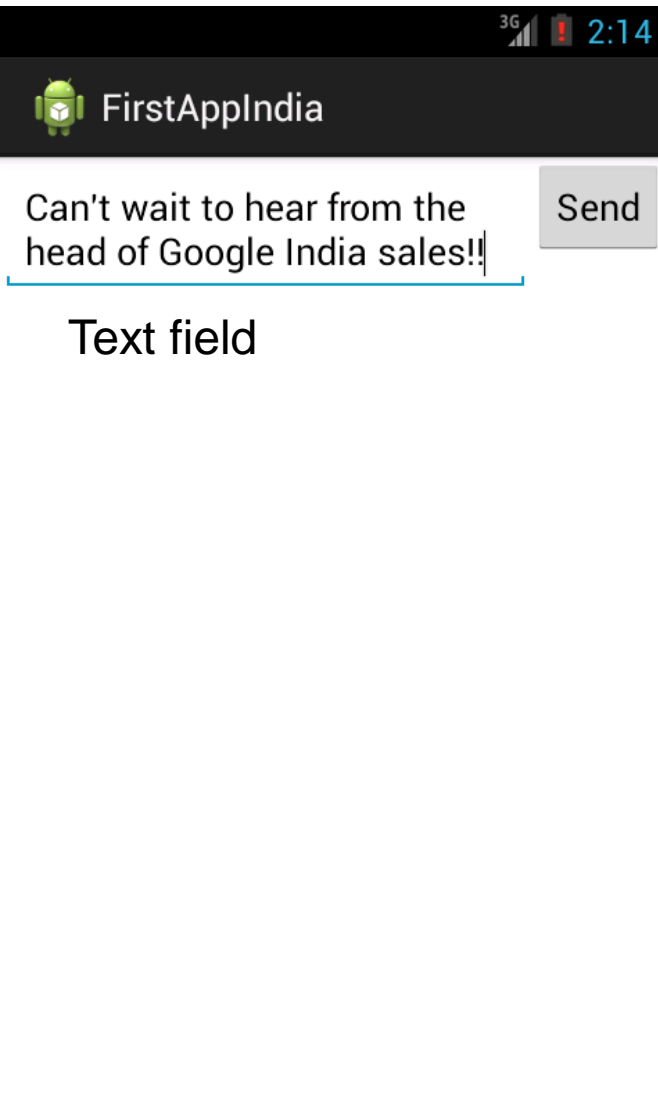


Start your AVD <stretch>

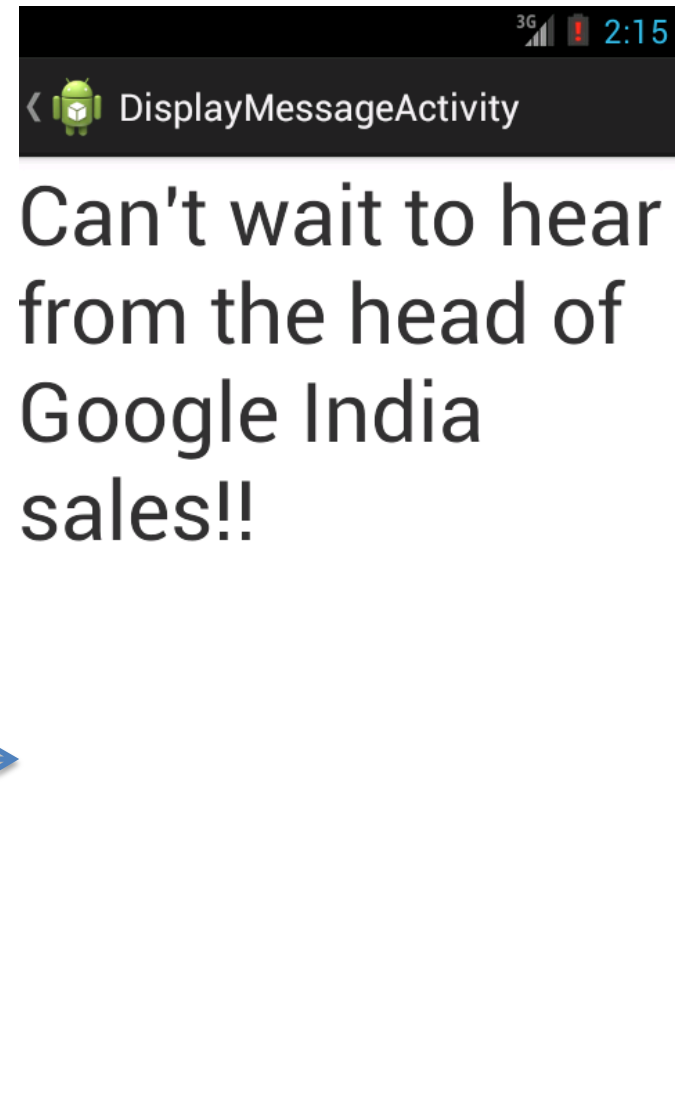


Tutorial Recap

Activity 1



Activity 2



Button

Click Event

Intent

(Contains message object)

Troubleshooting

R object error

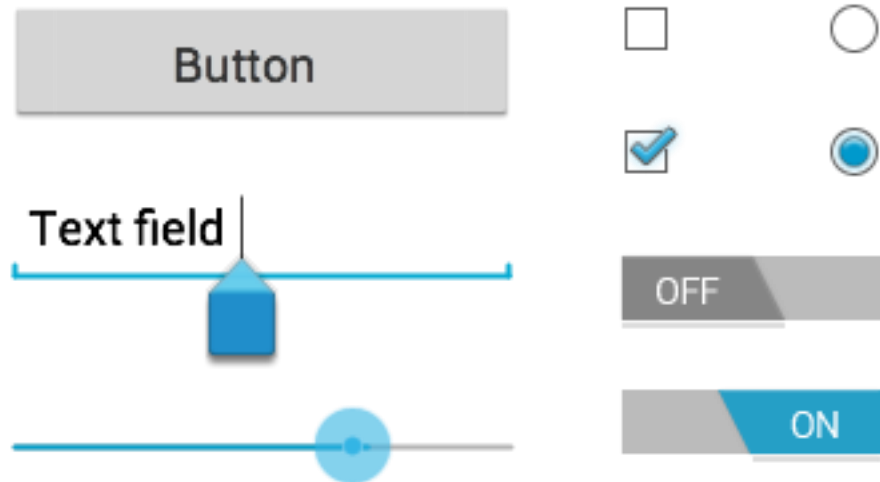
- Most likely a typo in the strings.xml file

Crash on send button

- We're working on it,
- Check for typos in the intent constructors

Additional GUI Elements

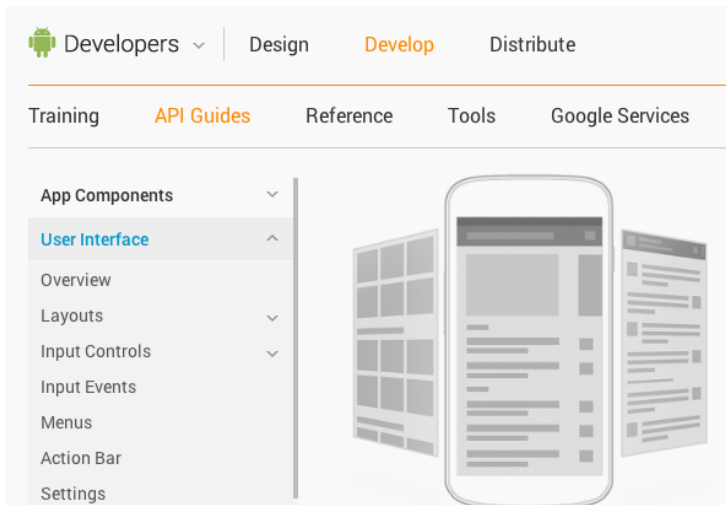
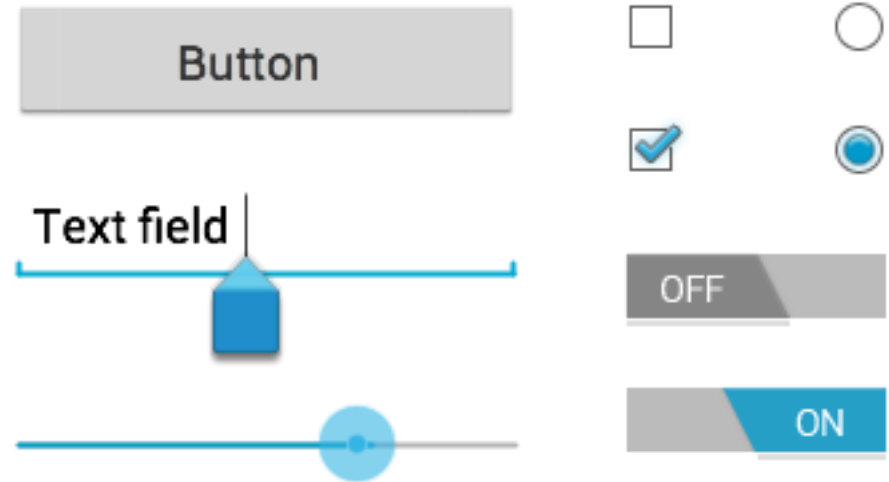
- Buttons
- Text fields
- Checkbox
- Radio Button
- Toggle Button
- SeekBar



Additional GUI Elements

- References for implementation are in the **API Guides** and **Reference section** on the android developer website:

developer.android.com



Layouts

- Android has various layouts built in to maintain the look/feel/symmetry in your app on difference screen sizes
- Refer to the layouts section in the API Guides

List View
Displays a scrolling single column list.

Grid View
Displays a scrolling grid of columns and rows.

Linear Layout
A layout that organizes its children into a single horizontal or vertical row. It creates a scrollbar if the length of the window exceeds the length of the screen.

Relative Layout
Enables you to specify the location of child objects relative to each other (child A to the left of child B) or to the parent (aligned to the top of the parent).

Web View
Displays web pages.

```
<html>
  <!-- web page -->
</html>
```

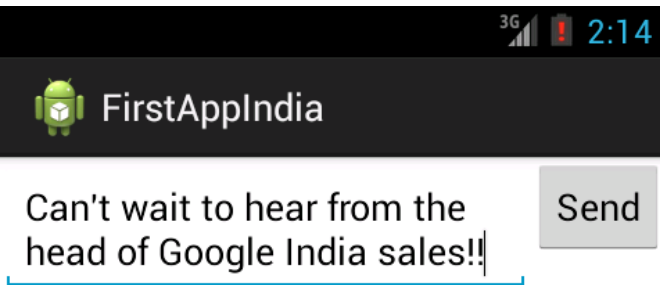
Lets Hack it!

- Add a button on the second activity to go back to the first screen
 - Use the graphical layout of the .xml file
- Put the send button under text box in the first activity
 - Modify the Layout appropriately
 - Refer to layouts section in the API guide
- Commit changes!

Who wants to demo?

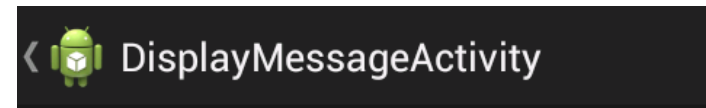
What went wrong?

Activity 1



Text field

Activity 2



Hello world!

Overriding the TextView

```
//Create the text view
```

```
TextView textView = new TextView(this);  
textView.setTextSize(40);  
textView.setText(message);
```

```
//Put the text in the activity  
setContentView(textView);
```



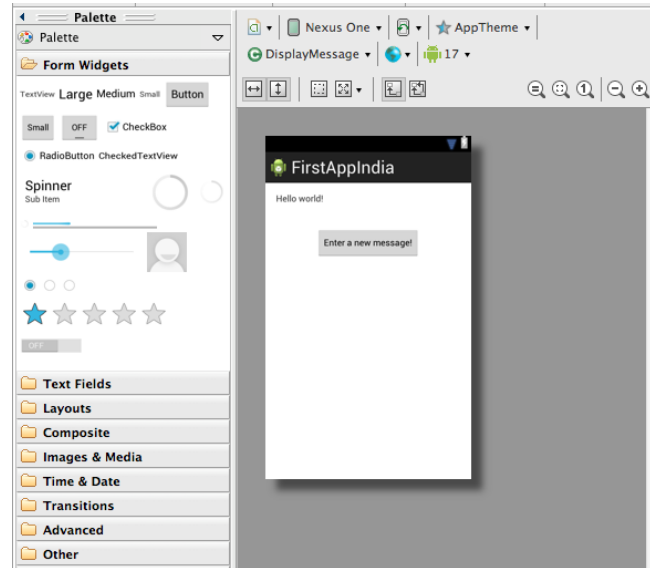
- Now we need to remove this line!!
- Replace helloworld with textview in activity 2.xml!

Recap

- Remove the setContentView method in activity2.java's onCreate method & Replace the hello world string with the textview string
- Add a button and an an onClick object in the XML file
- The onClick method in activity 2 should have an intent object that points to activity 1
- Lastly, start activity 1 in the onClick method

Creating GUI Elements

- You can drag gui elements into your activity with the graphical layout in the activity.xml file



India Votes!!

- Create an app that allows the user to vote on various pop culture topics
- You will need a title activity that lets the user choose which topic (ie sports, movies) they would like to vote on, and enter their name, age, and gender. (use text fields, spinners, and radio buttons!)
- A voting activity that displays a random question (you can hard code these but there should be at least 4 per topic) and allows the user to vote yes/no, agree/disagree. You must also store the users vote.
- A confirmation activity that shows the user has voted and the results of other users (you can make up the data)

User Interface design

- Make sketches of each activity **BEFORE** coding
- Make sure the sketches include buttons and directional arrows that show how to navigate between each activity

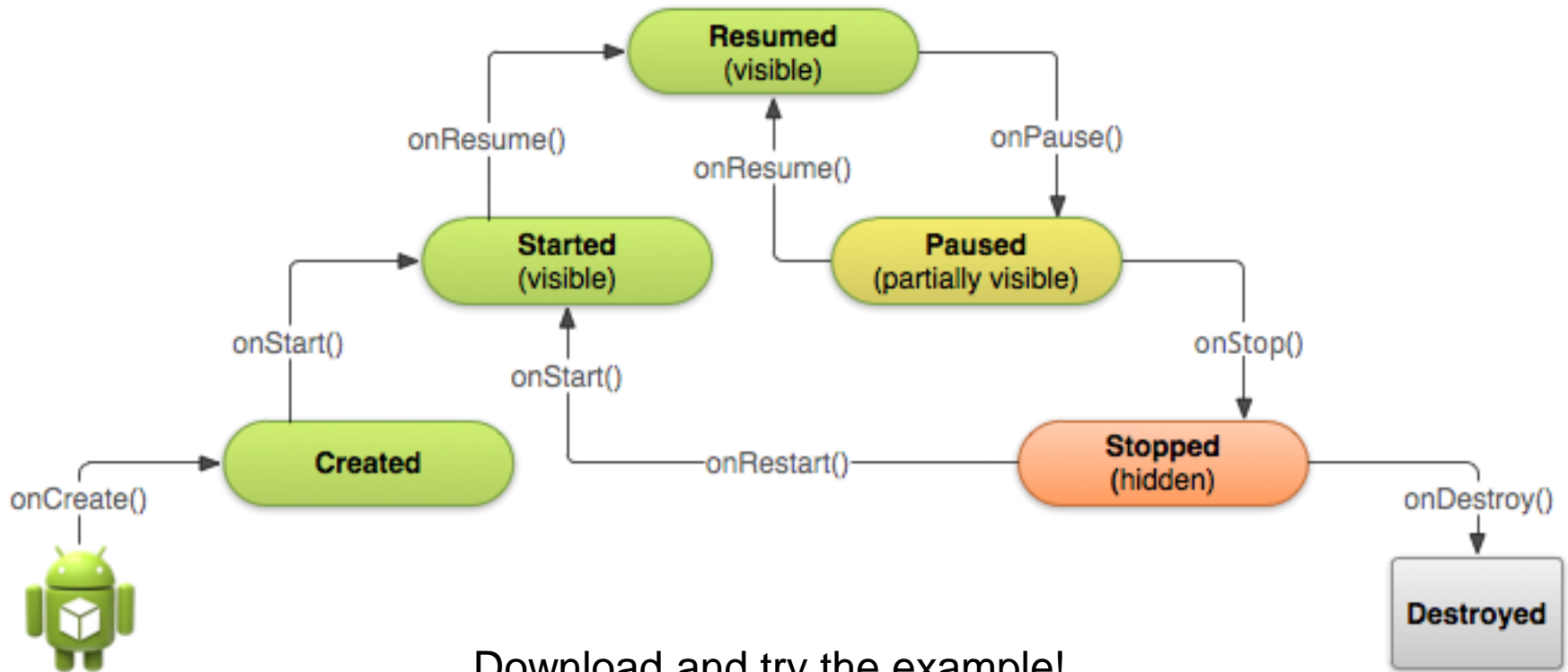
Be Creative!

- This should be fun for the user
- Use gui elements that are fun and intuitive to interact with

What you need to know

- Managing the Activity Lifecycle
- Building a Dynamic UI with Fragments
- Saving Data

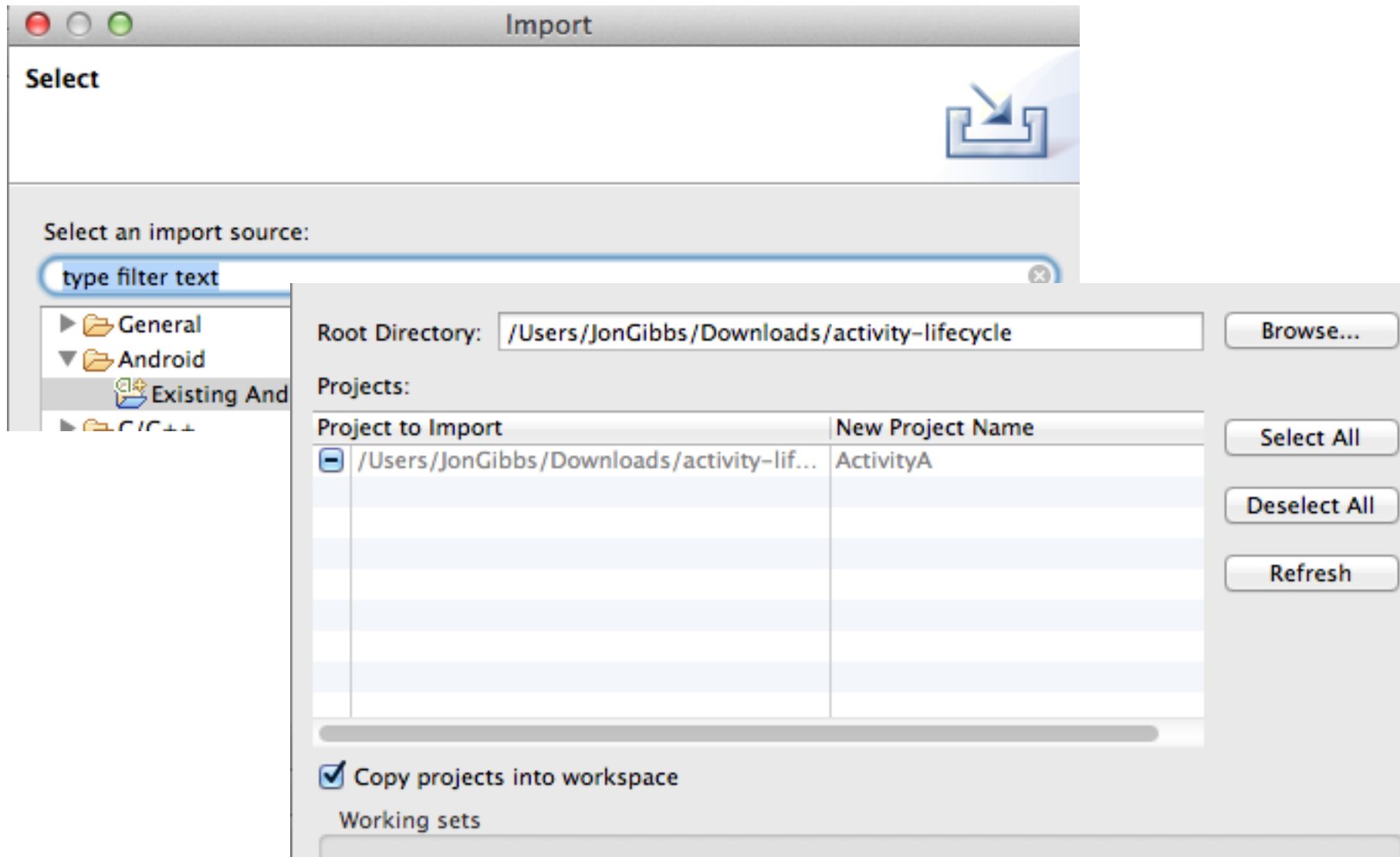
Activity Lifecycle



Importing tutorial downloads

- Download the zip file from the tutorial website
- File -> Import
- Select “Import an existing Android project”
- Find the folder
- *Make sure to check Copy projects into workspace*

Importing tutorial downloads



Using the Piazza forum Effectively

The Site

← → ↻ <https://piazza.com> ☆ ☰

piazza Log in

The (Free) Efficient Way to Manage Class Q&A

How is this better than email, newsgroups, and discussion forums?
Students actually use Piazza, they love it. This difference stems from how we built Piazza. We've personally met with and spoken to thousands of students and instructors. The result is a beautifully intuitive and simple product that students love and use.

Student? Search your classes

Instructor? Create or Join your class

[View a Demo Class](#)

question
Finding normal vector for surface

S the students' answer, where students collectively can
The normal vector $\vec{N} = \frac{\partial \vec{r}}{\partial u} \times \frac{\partial \vec{r}}{\partial v}$.

It's basic **I** the instructors' answer, where instructor:
A conservative vector field is always the grad
simplify things like this: if the curl is known to
when you integrate the field around a surface
It is not enough to know that the vector field
 F is not nice at $(0, 0)$.

good answer 0 more

Classes being created on Piazza:

Forum

The screenshot displays the Piazza forum interface. At the top, the 'piazza' logo is on the left, and navigation tabs for 'AITI', 'Q & A', 'Course Page', and 'Manage Class' are in the center. The user 'Yuta Kato' is logged in, as shown in the top right. The main content area shows a post titled 'How to Use Piazza' with 24 views. The post text explains the forum's purpose and provides instructions on how to post questions, including the use of folders and tags. Below the main text, there are sections for '#Piazza' and 'notes'. At the bottom of the post, there are options to 'edit', 'save to favorites', and 'good note', along with a 'more' dropdown. A section for 'followup discussions' is also visible, with a button to 'Click to start a new followup discussion'.

How to Use Piazza 24 views

We would like to use this forum for students to ask questions and answer each others questions. To post a question, simply click on the "+ New Post" button on the left , select a "Folder" , write a "Summary" (title), and write up your question. When selecting a Folder, if you have a technical question, choose the approximate lecture that it applies to. Please also add a "Tag" (like #Egit or #Android) to help clarify the topic of your question.

HOWEVER, look through other posts on piazza to see if your question has already been asked. We do not want to flood this forum with repeated questions.

To prevent frequent digest emails, go to "Account/Email Settings" in the options drop down menu in the upper right hand of the page. Go to "Class & Email Settings" and click on "Edit Email Notifications" to choose your desired email notification frequency.

#Piazza

notes

edit save to favorites 0 good note 0 more 4 hours ago by Yuta Kato 2 edits

followup discussions, for lingering questions and comments

Click to start a new followup discussion

Key Components

+ New Post

- TODAY

- Instr Entrepreneurship Lectures 1, ...** 2:01PM
Links to Jason's first three lectures have been posted at <http://aiti.mit.edu/materials/india-iitb-summer-2013/>.
- Instr Technical Lecture 1 Posted** 9:34AM
A link to technical Lecture 1 has been posted at <http://aiti.mit.edu/materials/india-iitb-summer-2013/>, where we will be
- Instr How to Use Piazza** 9:28AM
We would like to use this forum for students to ask questions and answer each others questions. To post a question, simp

note 24 views

How to Use Piazza **Subject**

We would like to use this forum for students to ask questions and answer each others questions. To post a question, simply click on the "+ New Post" button on the left , select a "Folder" , write a "Summary" (title), and write up your question. When selecting a Folder, if you have a technical question, choose the approximate lecture that it applies to. Please also add a "Tag" (like #Egit or #Android) to help clarify the topic of your question.

HOWEVER, look through other posts on piazza to see if your question has already been asked. We do not want to flood this forum with repeated questions.

To prevent frequent digest emails, go to "Account/Email Settings" in the options drop down menu in the upper right hand of the page. Go to "Class & Email Settings" and click on "Edit Email Notifications" to choose your desired email notification frequency.

#Piazza **tags**

notes

edit save to favorites 0 good note 0 more 4 hours ago by Yuta Kato 2 edits

followup discussions, for lingering questions and comments

Click to start a new followup discussion

Asking a question

Post Type Question *if you need an answer* Note *if you don't need an answer*

Select Folder(s) **pick one**

Summary

Details **B** *I* U `pre`

Formatting Help
Use Plain Text Editor

My question is ...

```
StringError: this is an example error.  
what is the problem?
```

click "pre" to format code in questions

Add Tags (optional) **pick one**
Or prepend any word with # to create a tag

Attachments You can attach files up to 20mb.

click to post question

America Votes??



Will the Spurs win??

Yes

No