

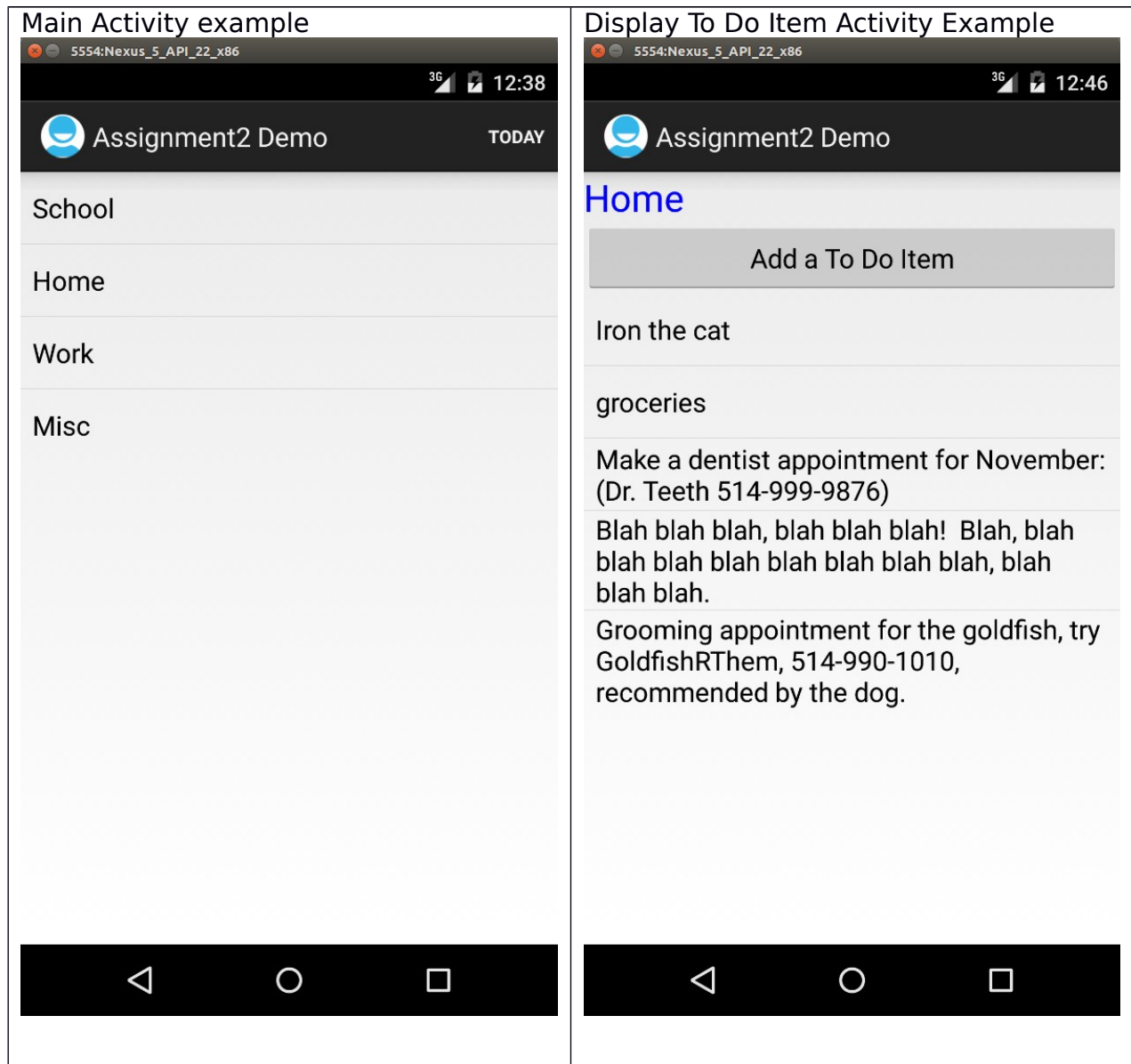
The goal of this assignment is to create an To Do List app that allows you to keep ToDo lists (SQLiteDatabase.) The user is presented with the default categories (School, Home, Work, Misc) as a list or grid of (RecyclerView/ListView/GridView....)

When they click on a category item the app will display all to do items associated with this category (second Activity.) When they long click on a to todo list item the app will display a message asking if they want to delete the item or not (Dialogue.) When they short click on an item they will be shown an edit screen with the text (third Activity)

The app is to keep track of the last todo list item displayed if it has been deleted that information should be kept (SharedPreferences.)

On first run there will be one menu item, "To Do Today" when clicked it will pick a random to do item from the database, and display it (third Activity.) If there exists a last quote from a previous runtime there will be a second menu item "Last To Do Item" .

When you start this we will not have covered SQLite3 databases so implement first with static text or stub methods.



Specification

1. App name in the Launcher must be **ToDo** followed by your team initials.  
Example, me and Denis Ritchie app name: **ToDoDRPC**
2. Implement the logic to create and access the database (you can use an ArrayList to start with, until we cover SQLite3 next week)
3. Main Activity
  - a. Implement the logic to populate a List with the category strings then populate the main Activity using an AdapterView and a ArrayAdapter.
  - b. Implement the logic and listeners, anything involved in the short clicks on the AdapterView items
  - c. Implement the logic for the Menu, anything involved in responding to the menu clicks.
  - d. Implement the logic, at the correct point in the lifecycle, to save the current todo item for the next runtime. (Save the necessary information to do a look up in the database, or the actual text.)
4. Todo List for Category Activity
  - a. Recieve info about the Category selected
  - b. Display the name of the Category
  - c. Implement the logic to query the database for the category and populate the main Activity using an AdapterView and a CursorAdapter.
  - d. Implement the logic and listeners, anything involved in the long and short clicks on the AdapterView items
    - i. long click, edit the item
    - ii. short click, confirm delete with a dialogue (see Dialogue)
  - e. Implement a button that will allow the user to add a new entry, update the database with the new entry.
5. Today Todo Item Activity
  - a. Implement the logic to select a random todo item and display it.
6. Edit Todo Item Activity
  - a. Implement the logic to display the selected item in an EditText,
  - b. Implement a save button which will update the database
  - c. on back button discard the edit
7. Last ToDo Item Activity
  - a. Use the saved information to look up the database to display the last todo from the last runtime in a similar fashion to Today Todo Item
  - b. Implement code that will notify the user if the database lookup fails or if the item was deleted
8. Dialogue
  - a. Implement an Alert Dialogue with one button to dismiss it, and one button to confirm the delete.
  - b. Implement the code necessary to delete the item from the database.
9. Be sure to properly comment your java
10. All of your UI strings must be in strings.xml.
11. Make your UIs look nicer than my examples.

Database

<b><i>ToDo Table</i></b>	
<b>Column</b>	<b>Datatype</b>
_id	INTEGER, Primary key, auto increment
Category	School, Home, Work, Misc
To Do Text	Alphanumeric

Assignment Submission Requirements

1. Do this assignment with your assigned team.
2. Be sure to comment your methods and all code thoroughly, use Javadoc format, do not print it.
3. Due in two weeks, submit a zip file on Lea.

Learning Objectives

- SQLiteDatabase, SQLiteHelper
- AdapterView (ListView , GridView, etc.)
- CursorAdapter / ArrayAdapter
- Dialogue
- UI layouts, widgets
- SharedPreferences
- Activity lifecycle
- String resources
- Explicit Intents