Trường Đại học Bách Khoa Hà Nội
Hanoi University of Science and Technology

Chapter 4. Graphical User Interfaces

Hanoi University of Science and Technology

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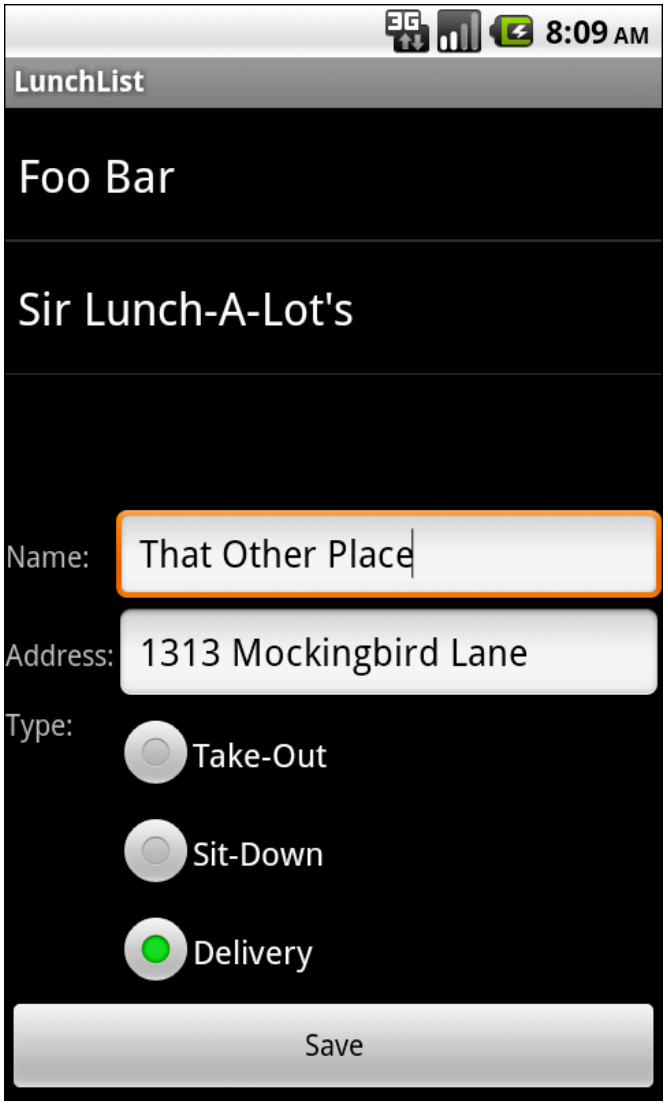
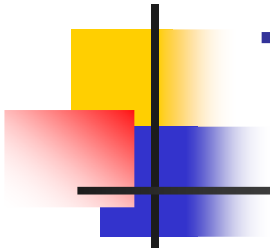
Tutorial 4. Adding a List

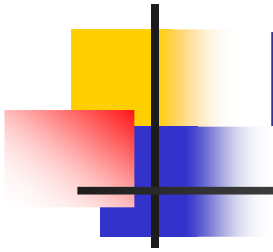




Tutorial 4. Adding a List

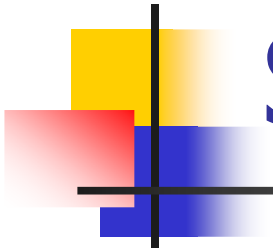
- Step #1: Hold a List of Restaurants
- Step #2: Save Adds to List
- Step #3: Implement toString()
- Step #4: Add a ListView Widget
- Step #5: Build and Attach the Adapter

Step #1: Hold a List of Restaurants



- We need a list of restaurants as our model. In LunchList:
- List<Restaurant> model=new ArrayList<Restaurant>();

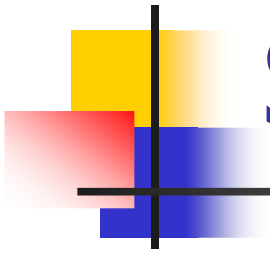
need to import java.util.List and java.util.ArrayList as well



Step #2: Save Adds to List

- Change onClick() method:

- Restaurant r=new **Restaurant();**
- **...**
- adapter.**add(r);**

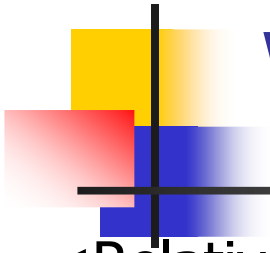


Step #3: Implement toString()

- Need to have our restaurant class respond intelligently to toString().
- That will be called on each restaurant as it is displayed in our list.

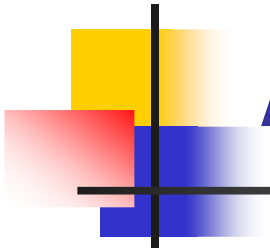
```
public String toString() {
   return(getName());
}
```

Step #4: Add a ListView Widget

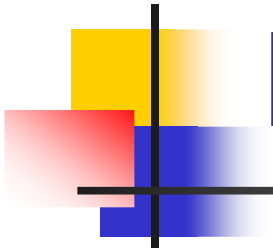


```
<RelativeLayout>
    <TableLayout android:id="@+id/details"
        android:layout_alignParentBottom="true"
        android:stretchColumns="1" >
        <TableRow> <TextView><EditText> "@+id/name"
        <TableRow> <TextView><EditText> "@+id/addr"
        <TableRow> <RadioGroup android:id="@+id/types">
    <Button android:id="@+id/save">
    <ListView android:id="@+id/restaurants"
        android:layout_alignParentTop="true"
        android:layout_above="@id/details"
    />
</RelativeLayout>
```

Step #5: Build and Attach the Adapter



- Add a restaurant, we need to add it to the ArrayAdapter via add() – the adapter will, in turn, put it in the ArrayList.
- Otherwise, if we add it straight to the ArrayList, the adapter will not know about the added restaurant and therefore will not display it.



Exercises

- See what the activity looks like if you use a Spinner instead of a ListView.
- Make the address field, presently an EditText widget, into an AutoCompleteTextView, using the other addresses as values to possibly reuse (e.g., for multiple restaurants in one place, such as a food court or mall).

End of Lecture

Q&A