
Mobile Application Development

Contextual actual bar - deletion

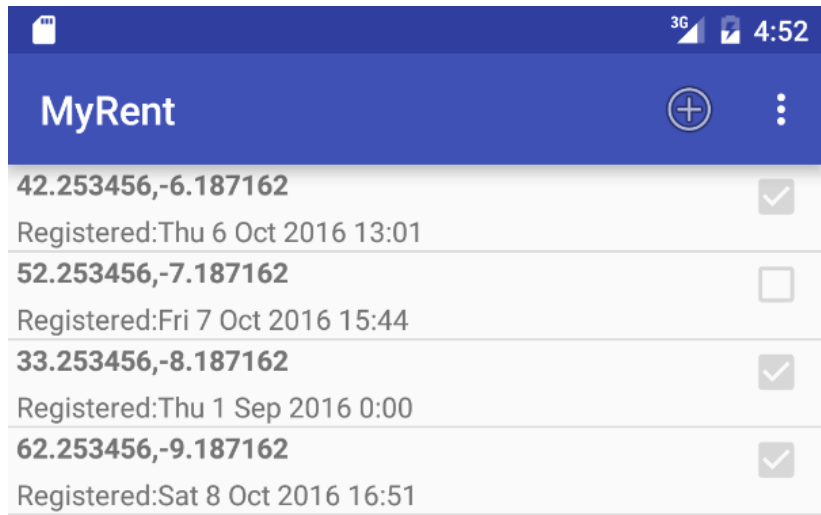
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Contextual Menu

List items

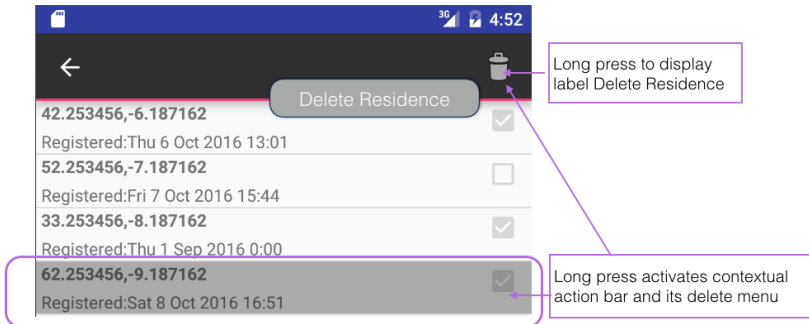


The screenshot shows a mobile application interface with a dark blue header bar. The header contains the text "MyRent" on the left, a plus sign icon in a circle in the center, and a vertical ellipsis icon on the right. Below the header is a list of five items, each with a registration date and time on the right. The items are separated by horizontal lines. The first item is checked, the second is unchecked, and the last three are checked.

Item ID	Registration Date/Time	Status
42.253456,-6.187162	Registered:Thu 6 Oct 2016 13:01	Checked
52.253456,-7.187162	Registered:Fri 7 Oct 2016 15:44	Unchecked
33.253456,-8.187162	Registered:Thu 1 Sep 2016 0:00	Checked
62.253456,-9.187162	Registered:Sat 8 Oct 2016 16:51	Checked

Contextual Menu

Long press reveals contextual action bar



Contextual Menu

Two items marked for deletion

The screenshot shows a mobile application interface with a dark blue header bar. On the left is a white back arrow icon. On the right is a white trash can icon. Below the header is a list of four items, each with a registration date and time. The second and fourth items are shaded gray, indicating they are selected for deletion. A purple box with an arrow points to the trash can icon, and another purple box with an arrow points to the shaded items.

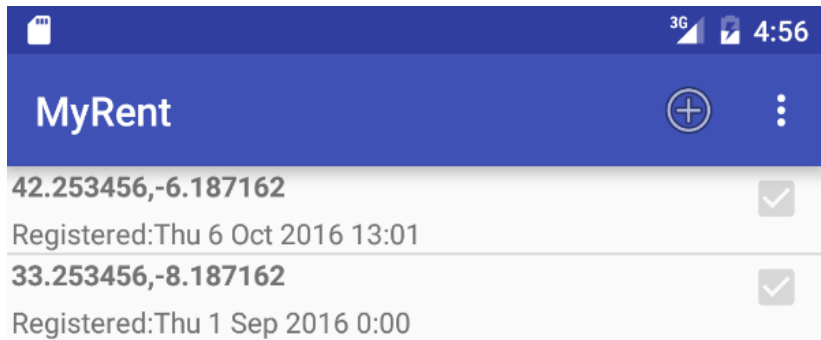
Item ID	Registration Date/Time	Selection Status
42.253456,-6.187162	Registered:Thu 6 Oct 2016 13:01	Not Selected
52.253456,-7.187162	Registered:Fri 7 Oct 2016 15:44	Selected (Shaded)
33.253456,-8.187162	Registered:Thu 1 Sep 2016 0:00	Not Selected
62.253456,-9.187162	Registered:Sat 8 Oct 2016 16:51	Selected (Shaded)

Click menu icon to delete

Select set of list items to delete (shaded)

Contextual Menu

Original action bar restored on deletion



Context Menu

Long-press delete list selection - implementation

- Create a context menu.
- Android `ListView` instance used to track long-press items.
- Implement `AbsListView.MultiChoiceModeListener`.
- Long press overlays actionbar with contextual actionbar.
- This contains context menu.

Context Menu

Long-press delete list selection - user

- Long-press list item reveals context menu.
- Contextual action bar overlays the (original) action bar.
- Optionally select select other list items for deletion.
- Click on trash can icon to trigger delete.
- Original action bar restored.

ListView

`android.R.id.list` retrieves residence list

```
private ListView listView;  
  
listView = (ListView) v.findViewById(android.R.id.list);  
listView.setChoiceMode(ListView.CHOICE_MODE_MULTIPLE_MODAL);  
listView.setMultiChoiceModeListener(this);
```


Context Menu

Trash can icon: ic_menu_delete

```
// residence_list_context.xml
<menu
  xmlns:android="http://schemas.android.com/apk/res/android">
  <item android:id="@+id/menu_item_delete_residence"
    android:icon="@android:drawable/ic_menu_delete"
    android:title="@string/delete_residence" />
</menu>
```

Context Menu

Highlight selected list item

```
// res/drawable/background_activated.xml
```

```
<selector xmlns:android="http://schemas.android.com/apk/res/android" >  
  <item  
    android:state_activated="true"  
    android:drawable="@android:color/darker_gray"  
  />  
</selector>
```

Context Menu

Add attribute to activate highlighting

```
// res/layout/list_item_residence.xml attribute  
// necessary to persist highlighting until deletion complete  
  
android:background="@drawable/background_activated"
```

AbsListView.MultiChoiceModeListener

MultiChoiceModeListener methods default implementations

```
@Override  
public void onItemCheckedStateChanged(ActionMode actionMode, int i, long l,  
    boolean b) {}
```

```
@Override  
public boolean onCreateActionMode(ActionMode mode, Menu menu)  
{return false;}
```

```
@Override  
public boolean onPrepareActionMode(ActionMode mode, Menu menu)  
{return false;}
```

```
@Override  
public boolean onActionItemClicked(ActionMode mode, MenuItem item)  
{return false;}
```

```
@Override  
public void onDestroyActionMode(ActionMode mode) {}
```

Context Menu

MultiChoiceModeListener method inflates context menu

```
public boolean onCreateActionMode(ActionMode actionMode, Menu menu)
{
    MenuInflater inflater = actionMode.getMenuInflater();

    inflater.inflate(R.menu.residence_list_context, menu);

    return true;
}
```

Context Menu

MultiChoiceModeListener method implements deletion

```
public boolean onActionItemClicked(ActionMode actionMode, MenuItem menuItem)
{
    switch (menuItem.getItemId())
    {
        case R.id.menu_item_delete_residence:

            deleteResidence(actionMode);

            return true;
        ...
    }
}
```

Context Menu

MultiChoiceModeListener method implements deletion

```
private void deleteResidence(ActionMode actionMode)
{
    for (int i = adapter.getCount() - 1; i >= 0; i--)
    {
        if (listView.isItemChecked(i))
        {
            portfolio.deleteResidence(adapter.getItem(i));
        }
    }
    actionMode.finish();
    adapter.notifyDataSetChanged();
}
```

Referenced Material

1. ListView

`https://developer.android.com/reference/android/widget/ListView.html`

[Accessed 2016-10-08]

2. AbsListView

`https://developer.android.com/reference/android/widget/AbsListView.html`

[Accessed 2016-10-08]

3. AbsListView.MultiChoiceModeListener

`https://developer.android.com/reference/android/widget/AbsListView.MultiChoiceModeListener.html`

[Accessed 2016-10-08]

Referenced Material

4. ActionMode.Callback

<https://developer.android.com/reference/android/view/ActionMode.Callback.html>

[Accessed 2016-10-08]



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