CPSC 475/575

Project5

An Overview

Egg

Add 1 Egg

Add 2 eggs

Subtract 1 Egg

Make breakfast

Egg Count:
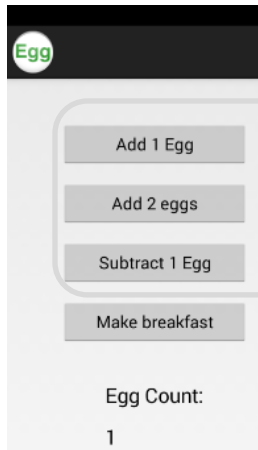
1
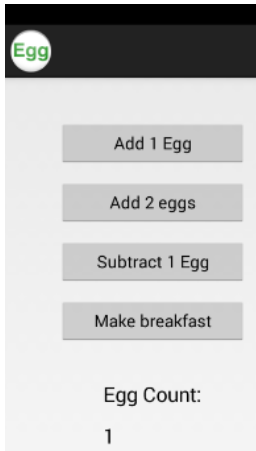
User clicks one of the top 3 buttons
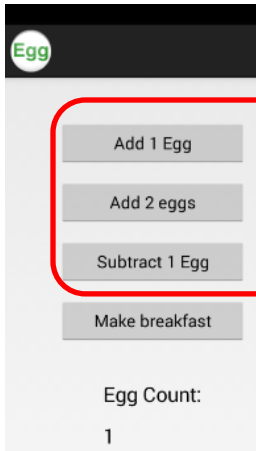
Button handler Creates
EGG_ACTION intent
Use putExtra to add/sub eggs
Then Broadcast it

Egg

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Egg Count:

1

Button handler Creates
EGG_ACTION intent
Use putExtra to add/sub eggs
Then Broadcast it

Android OS receives broadcast . Consults
Registration List to See who wants it.
(List Built from manifests and dynamically)

Androids Broadcast Receiver Registration List
:
:
EGG_ACTION
    MyApp
    YourApp
    MyBroadcastReceiver
:

android.intent.action.PROVIDER_CHANGED
    Gmail
    AnotherBR
    Hotmail
:

Egg

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Egg Count:

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Android OS receives broadcast . Consults
Registration List to See who wants it.
(List Built from manifests and dynamically)

Android OS sends intent to all Broadcast
Receivers that registered for EGG_ACTION intent

**Androids Broadcast Receiver
Registration List**

:
EGG_ACTION
   MyApp
   YourApp
   MyBroadcastReceiver
:

android.intent.action.PROVIDER_CHANGED
    Gmail
    AnotherBR
    Hotmail
:

Egg

Add 1 Egg

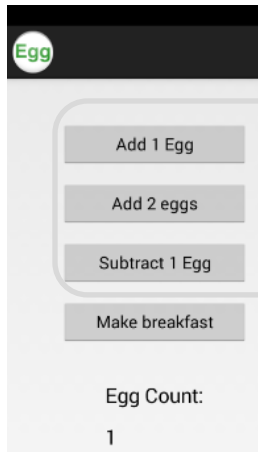Add 2 eggs

Subtract 1 Egg

Make breakfast

Egg Count:

1

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Registration List**
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    Gmail
    AnotherBR
    Hotmail
:

MyBroadcastReceiver

10 sec

Receiver starts MyService
Passes intent and returns

Egg

Add 1 Egg

Add 2 eggs

Subtract 1 Egg

Make breakfast

Egg Count:
1

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Android OS receives broadcast . Consults
Registration List to See who wants it.
(List Built from manifests and dynamically)

Android OS sends intent to all Broadcast
Receivers that registered for EGG_ACTION intent

MyBroadcastReceiver

Receiver starts MyService
Passes intent and returns

MyService

MyService gets info from intent
About eggs

Egg

| Add 1 Egg |
| Add 2 eggs |
| Subtract 1 Egg |
| Make breakfast |

Egg Count:

1

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Android OS receives broadcast . Consults
Registration List to See who wants it.
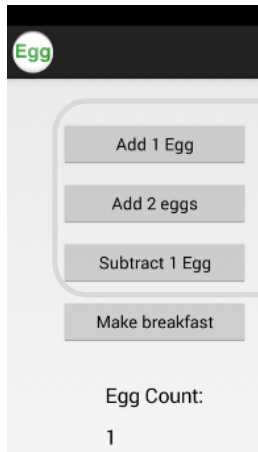(List Built from manifests and dynamically)

Android OS sends intent to all Broadcast
Receivers that registered for EGG_ACTION intent

No UI
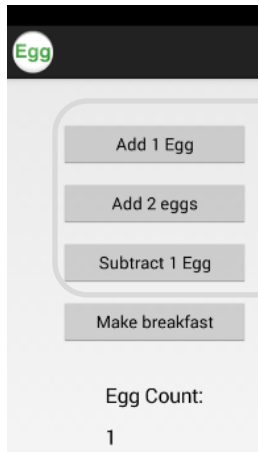
MyBroadcastReceiver

Receiver starts MyService
Passes intent and returns

MyService

MyService gets info from intent
About eggs

Androids Broadcast Receiver Registration List

:
EGG_ACTION
   MyApp
   YourApp
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:

android.intent.action.PROVIDER_CHANGED
   Gmail
   AnotherBR
   Hotmail
:

Service algorithm

```
onStartCommand
      │
      ▼
Gets info from intent about
eggs(+-n)  and action
      │
      ▼
┌──────────────┐    Y
│ Action=      │─────────► Add/Sub n Eggs ──────► "Add/Sub N eggs"
│ Add/Sub Eggs │                                          │
└──────────────┘                                          │
      │ N                                                  ▼
      ▼                                           ┌──────────────────┐
┌──────────────┐    N                             │ Send String      │
│ Action=      │─────────► StopSelf ◄─────────────│ Notification     │
│ Make         │                                  └──────────────────┘
│ Breakfast    │                                           ▲      ▲
└──────────────┘                                           │      │
      │ Y                                                   │      │
      ▼                                                     │      │
┌──────────────┐    Y      NumbEggs=                        │      │
│ Number       │─────────► NumbEggs-6 ──────► "Omelets" ────┘      │
│ Eggs >6      │                                                   │
└──────────────┘                                                   │
      │ N                                                          │
      │                                        "Gruel" ───────────┘
      └──────────────────────────────────────────►
```