

```
package com.example.covid_19alertapp.extras;
```

```
import android.app.Activity;
```

```
import android.content.Intent;
```

```
import android.location.Location;
```

```
import android.os.Bundle;
```

```
import android.os.Handler;
```

```
import android.os.ResultReceiver;
```

```
import android.util.Log;
```

```
import com.example.covid_19alertapp.activities.ShowMatchedLocationsActivity;
```

```
public class AddressReceiver extends ResultReceiver {
```

```
    // for interface
```

```
    private AddressView view;
```

```
    private static final String GEO_ADDRESS = "geo_address";
```

```
    private static final String GEO_LOCATION = "geo_location";
```

```
    private static final String GEO_RECEIVER = "geo_receiver";
```

```
    private static final String LIST_POSITION = "position@list";
```

```
    public AddressReceiver(Handler handler, AddressView view) {
```

```
super(handler);  
  
this.view = view;  
  
}
```

```
@Override
```

```
protected void onReceiveResult(int resultCode, Bundle resultData) {  
  
    if(resultData==null){  
  
        Log.d(LogTags.Address_TAG, "onReceiveResult: null resultData");  
  
        return;  
  
    }  
  
}
```

```
// receive data from the FetchAddress
```

```
String addressOutput = resultData.getString(GEO_ADDRESS);
```

```
int listPosition = resultData.getInt(LIST_POSITION);
```

```
if(addressOutput==null || resultCode==FetchAddress.getGeoFailure())
```

```
    addressOutput = "no address available (tap to see in map)";
```

```
Log.d(LogTags.Address_TAG,"onReceiveResult: address received = "+addressOutput);
```

```
view.updateAddress(addressOutput, listPosition);
```

```
}
```

```
public void startAddressFetchService(Activity activity, double latitude, double longitude, int
listPosition){

    Location location = new Location("dummy-provider");

    location.setLatitude(latitude);

    location.setLongitude(longitude);

    Intent intent = new Intent(activity.getApplicationContext(), FetchAddress.class);

    intent.putExtra(GEO_LOCATION, location);

    intent.putExtra(GEO_RECEIVER, this);

    intent.putExtra(LIST_POSITION, listPosition);

    Log.d(LogTags.Address_TAG, "startAddressFetchService: starting address service for position =
"+listPosition);

    activity.startService(intent);
}

public interface AddressView{

    void updateAddress(String address, int listPosition);

}

}
```