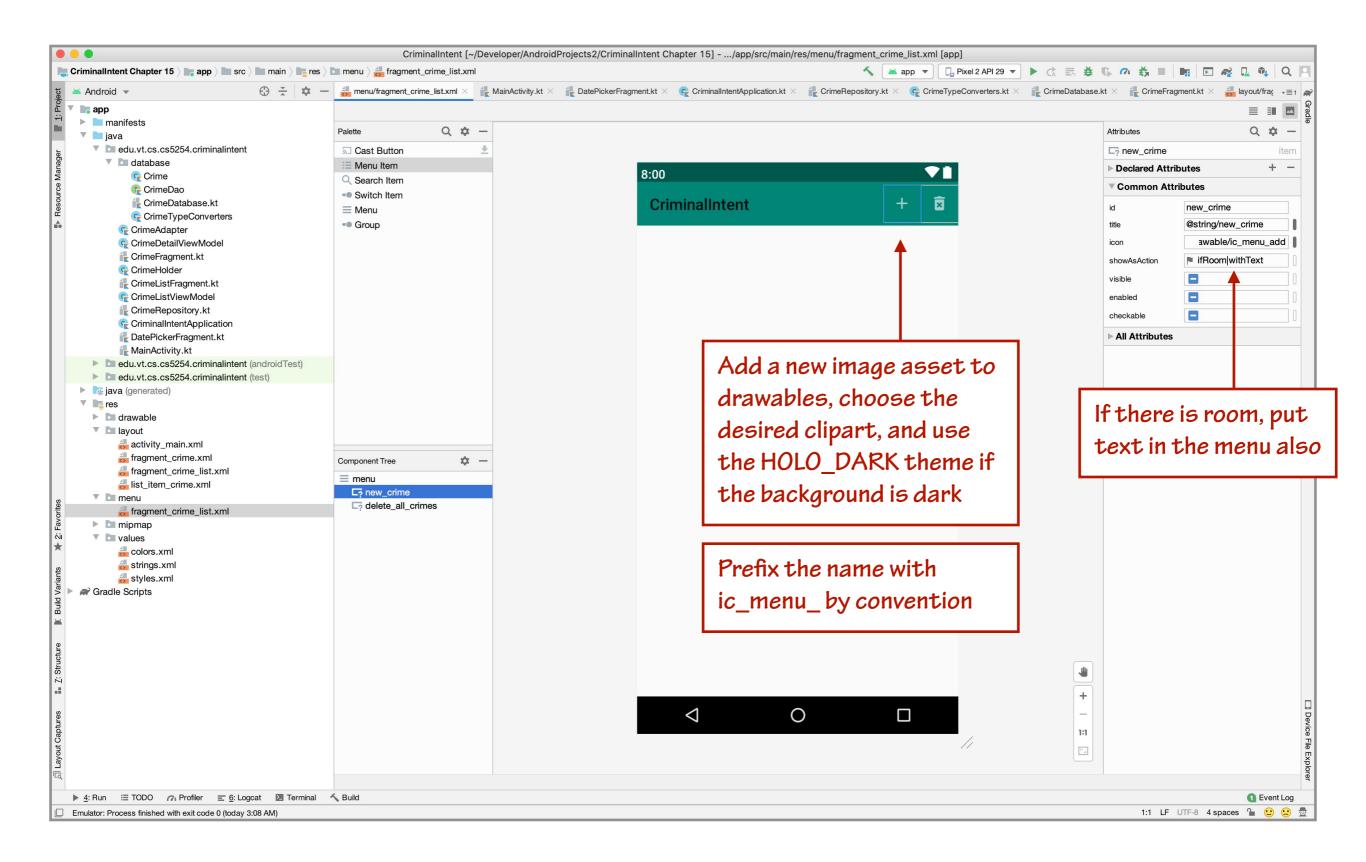# App Bar and Menus

based on Chapter 14 of
Android Programming: A Big Nerd Ranch Guide (4th edition)

BNR

Adding a Crime

- fragment_crime_list.xml (menu)
- CrimeListFragment

CriminalIntent Chapter 15 › app › src › main › res › menu › fragment_crime_list.xml

app ▸ Pixel 2 API 29

menu/fragment_crime_list.xml • MainActivity.kt • DatePickerFragment.kt • CriminalIntentApplication.kt • CrimeRepository.kt • CrimeTypeConverters.kt • CrimeDatabase.kt • CrimeFragment.kt • layout/frag

Project — Android

- **app**
  - ▸ manifests
  - ▾ java
    - ▾ edu.vt.cs.cs5254.criminalintent
      - ▾ database
        - Crime
        - CrimeDao
        - CrimeDatabase.kt
        - CrimeTypeConverters
      - CrimeAdapter
      - CrimeDetailViewModel
      - CrimeFragment.kt
      - CrimeHolder
      - CrimeListFragment.kt
      - CrimeListViewModel
      - CrimeRepository.kt
      - CriminalIntentApplication
      - DatePickerFragment.kt
      - MainActivity.kt
    - ▸ edu.vt.cs.cs5254.criminalintent (androidTest)
    - ▸ edu.vt.cs.cs5254.criminalintent (test)
  - ▸ java (generated)
  - ▾ res
    - ▸ drawable
    - ▾ layout
      - activity_main.xml
      - fragment_crime.xml
      - fragment_crime_list.xml
      - list_item_crime.xml
    - ▾ menu
      - fragment_crime_list.xml
    - ▸ mipmap
    - ▾ values
      - colors.xml
      - strings.xml
      - styles.xml
  - ▸ Gradle Scripts

Palette
- Cast Button
- Menu Item
- Search Item
- Switch Item
- Menu
- Group

Component Tree
- menu
  - new_crime
  - delete_all_crimes

Emulator display
8:00
CriminalIntent
+ ☒

Attributes
new_crime — item

▾ Declared Attributes

▾ Common Attributes

id	new_crime
title	@string/new_crime
icon	awable/ic_menu_add
showAsAction	ifRoom|withText
visible	
enabled	
checkable	

▸ All Attributes

Add a new image asset to drawables, choose the desired clipart, and use the HOLO_DARK theme if the background is dark

If there is room, put text in the menu also

Prefix the name with ic_menu_ by convention

```kotlin
class CrimeListFragment : Fragment() {

    ...

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setHasOptionsMenu(true)
    }

    ...

    override fun onCreateOptionsMenu(menu: Menu, inflater: MenuInflater) {
        super.onCreateOptionsMenu(menu, inflater)
        inflater.inflate(R.menu.fragment_crime_list, menu)
    }

    override fun onOptionsItemSelected(item: MenuItem): Boolean {
        return when (item.itemId) {
            R.id.new_crime -> {
                val crime = Crime()
                crimeListViewModel.addCrime(crime)
                callbacks?.onCrimeSelected(crime.id)
                true
            }
            R.id.delete_all_crimes -> {
                crimeListViewModel.deleteAllCrimes()
                true
            }
            else -> return super.onOptionsItemSelected(item)
        }
    }
}
```

If menu does not appear, you likely forgot this

Create the options menu

Add addCrime to ViewModel

Define response when an item is selected

Return true to stop processing response

Add deleteAllCrimes to ViewModel