# Using Options Menus

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# What to Expect from This Module

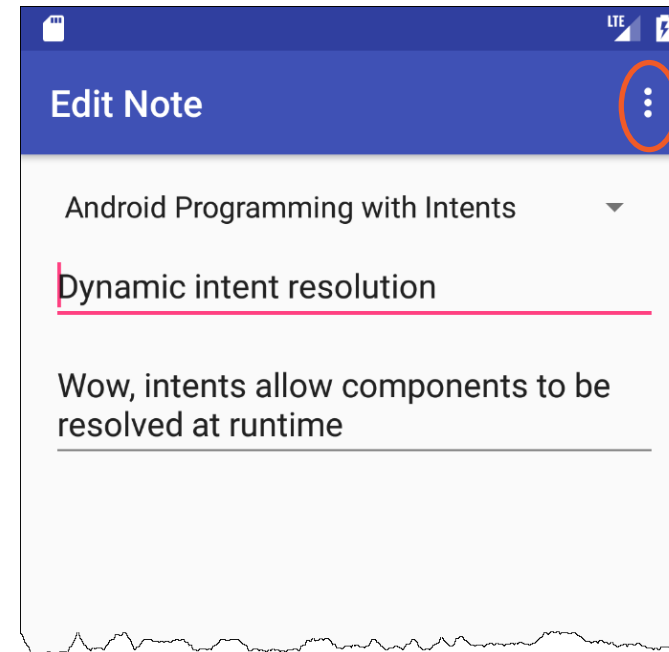**Options Menu Basics**

**Menu Items as App Bar Actions**

**Changing Menu Items at Runtime**

# Options Menus

**Provide actions for an Activity**

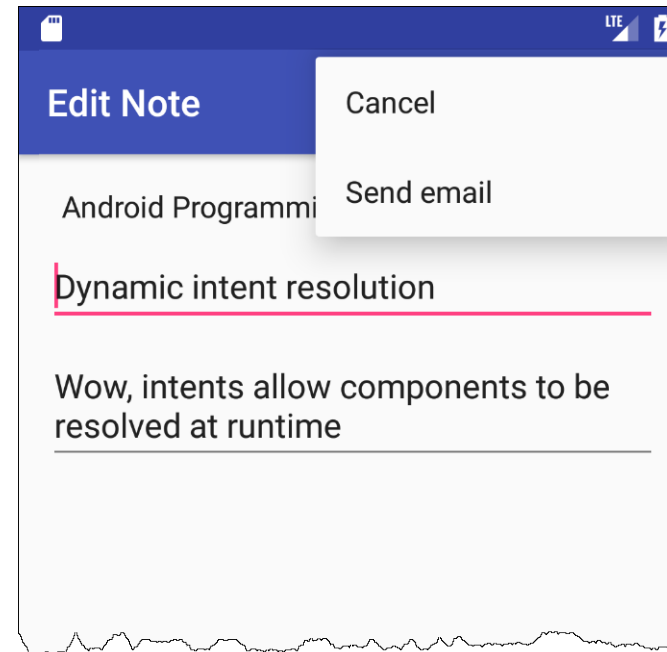- Actions available in app bar

- Appear under action overflow by default

# Options Menus

## Provide actions for an Activity

- Actions available in app bar
- Appear under action overflow by default

# Options Menus

**Defined in menu resource**
- Root of component tree is menu

**Each action defined as a menu item**
- Has unique ID within menu
- Has a text title

# Associating an Options Menu with an Activity

**onCreateOptionsMenu**

- Receives a menu reference

- Attach menu items to menu

- Inflate menu resource with menu inflater

  • Access with getMenuInflater method

# Handling Options Menu Item Selections

**onOptionsItemSelected**

- Receives MenuItem reference
- Retrieve MenuItem ID value
  - Access with MenuItem.getItemId
- Perform work based on ID value

# Menu Items as App Bar Actions

## Action overflow menu item challenges
- Not immediately discoverable
- Access takes multiple steps

## App bar actions
- Menu items visible on app bar
- Improve access to common menu items
- Normally have icon associated

## Making menu item an app bar action
- Use showAsAction property

# Common ShowAsAction Values

**ifRoom**

- Display as action when space allows
- Given preference in top-to-bottom order

**always**

- Always display as action
- Use very sparingly

**withText**

- Show text with action when space allows
- Can be combined with ifRoom or always

# Changing Menu Items at Runtime

**Application state can change menu options**

- May need to add/remove menu items
- May need to enable/disable menu items

# Changing Menu Items at Runtime

**onPrepareOptionsMenu**

- Override to modify menu state
- Receives reference to current menu
- Initially called before menu displayed

**invalidateOptionsMenu**

- Call when menu state may need to change
- Schedules call to onPrepareOptionsMenu

# Summary

**Creating an options menu**

- Normally defined as menu resource
- Composed of menu items
  - ID property provides unique identifier
  - Title property provides display text

**Associating menu with activity**

- Override onCreateOptionsMenu
- Inflate menu resource

# Summary

## Handling menu item selection
- Override onOptionsItemSelected
- Receives MenuItem reference
- Access ID value with getItemId

## App bar actions
- Menu items visible on app bar
- Use showAsAction Property
- Normally have icon associated

# Summary

**Setting menu state**

- Override onPrepareOptionsMenu
- Receives Menu reference
- Can access individual menu items

**Triggering change to menu state**

- Call invalidateOptionsMenu