# Creating More Complete Automated UI Tests



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# What to Expect from This Module



Testing AdapterViews
Interacting with the back button
Verifying test behavior
Espresso test recorder



# Testing Views That Use Adapters



AdapterView derived classes

Load data from Adapter classes

Examples include ListView & Spinner



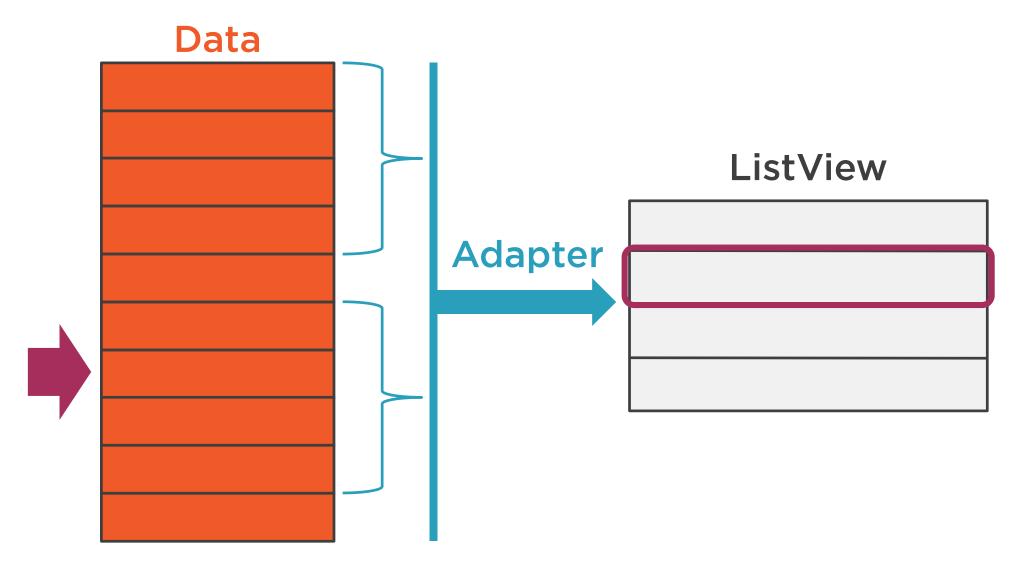
These views display multiple items

Only a subset may be loaded

Test selection based on target data



# Testing Views that Use Adapters



# Testing Views That Use Adapters



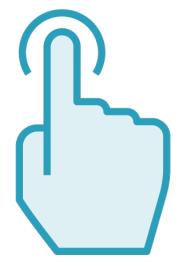
Espresso.onData method



Accepts Matcher

Specify matcher based on target data

Tend to use general purpose matchers



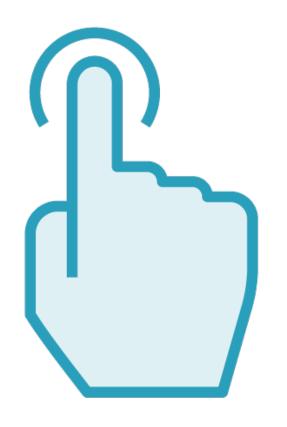
**Returns DataInteraction** 

Methods for interacting with match

Methods for narrowing match



# Testing Views That Use Adapters

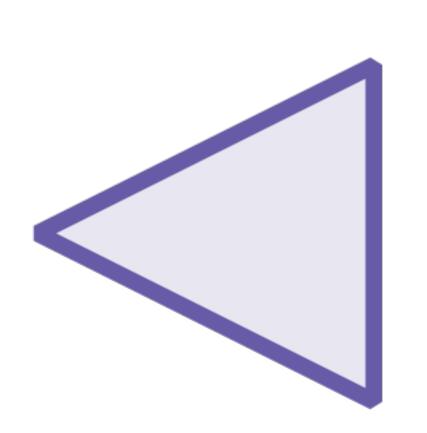


#### Interacting with matching selection

- Use DataInteraction.perform method
- Accepts a ViewAction
- Action performed on matching data item's top-level view



# Back Button



## Espresso.pushback

- Performs action of pressing back button
- No reference to a view needed



# Verifying Behavior



Testing is meant to confirm behavior



**UI Behavior** 



**Logic Behavior** 



# Verifying UI Behavior



#### ViewInteraction.check method

- Confirms some aspect of a view

#### **ViewAssertions class**

- Provides view assertion methods



## Common ViewAssertions Methods



#### matches

- Confirms view matches passed matcher
- Commonly used with ViewMatchers
- Also confirms that view exists

#### doesNotExist

- Confirms that view does not exist



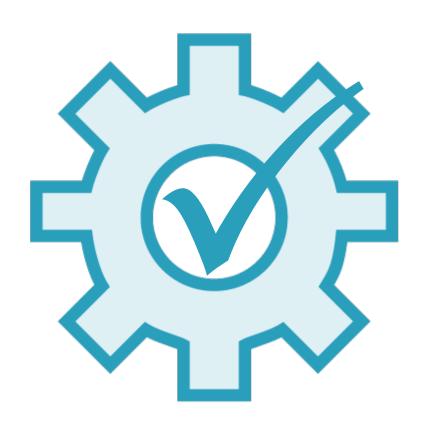
# Verifying Logic Behavior



### Assert methods still important

- Main way we confirm logic behavior





### **Assert class**

- Use to indicate expected results
- Fails test when expectation not met



# Summary



#### Espresso.onData method

- Used with AdapterViews
- Locates view based on data criteria
- Returns a DataInteraction reference

#### DataInteraction.perform method

- Interacts with top-level view corresponding to data match



# Summary



#### Verifying UI behavior

- ViewInteraction.check method
- DataInteraction.check method
- ViewAssertions class

## Verifying Logic behavior

- Assert class

