



Debug Tools

Upon completion of this module, a student will be able to

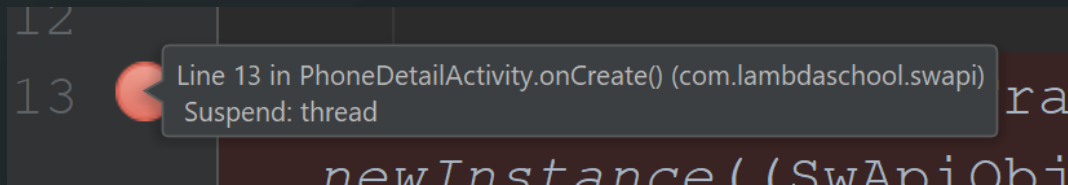
- set and manage breakpoints in code
- debug exceptions using an exception breakpoint
- use the Android Studio debugger's controls to move through code being debugged
- use Android Studio's variables view to inspect the current value of variables
- debug a physical device wirelessly on a local network
- use watchers to show information without modifying source code





A Student Can
set and manage breakpoints in code

Setting a Breakpoint

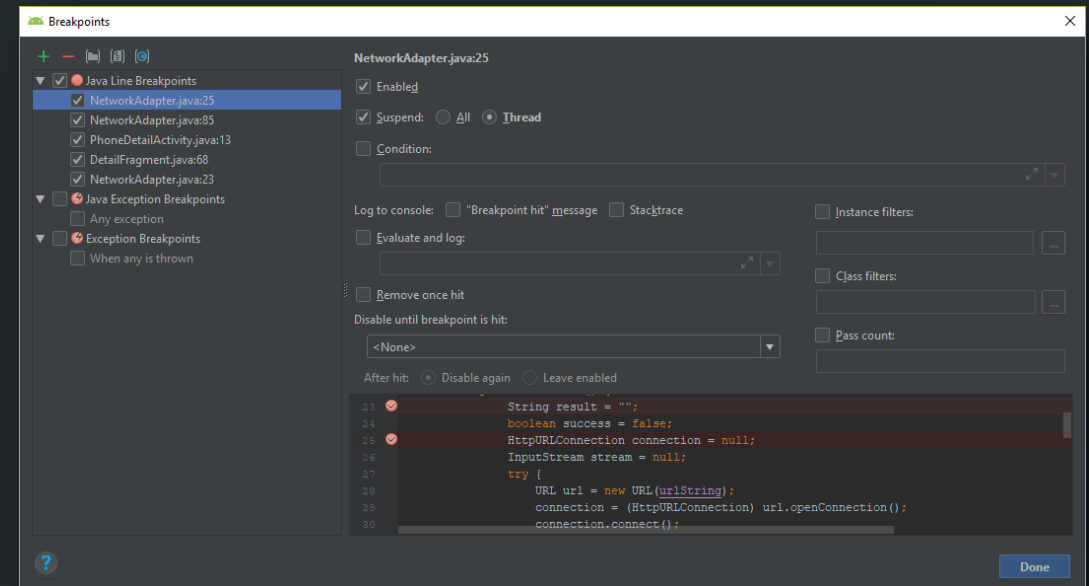


- Pauses code execution
- Opens up other debug tools at that point



Managing Breakpoints

- Ctrl + Shift + F8
- Manage All breakpoints in project

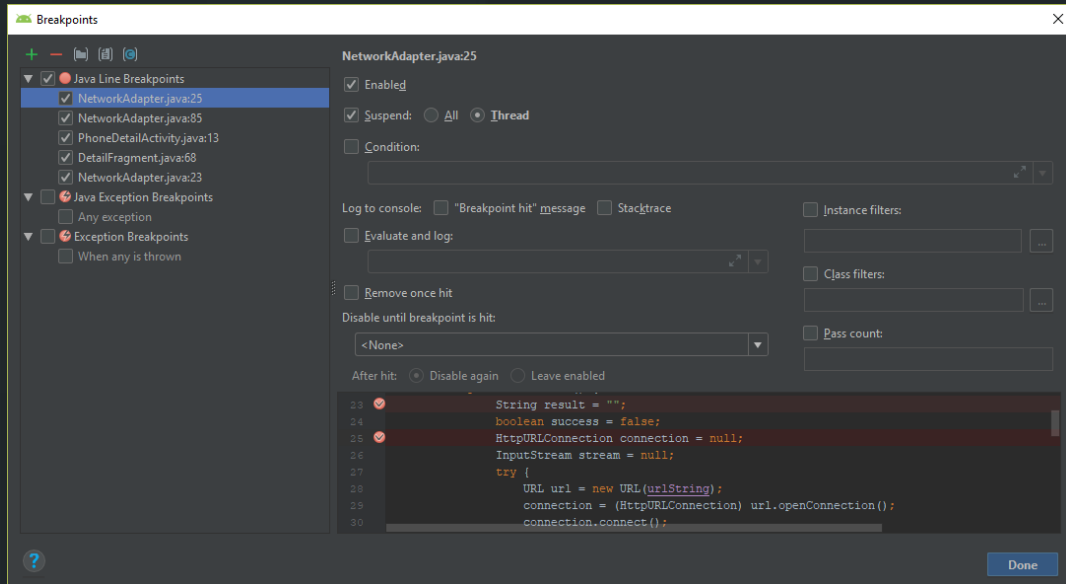




A Student Can

debug exceptions using an exception
breakpoint

Exception Breakpoint



- Automatically break on exceptions



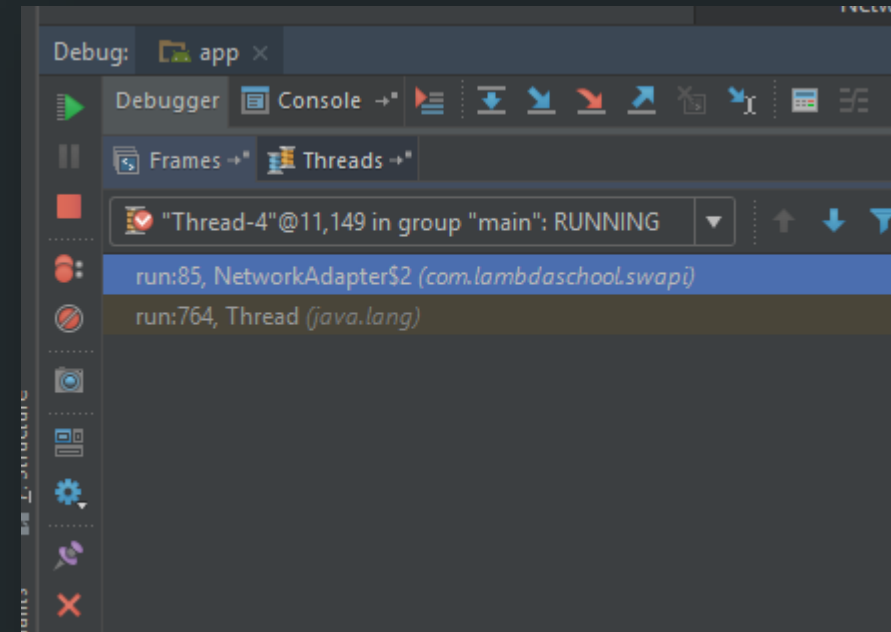


A Student Can

use the Android Studio debugger's controls to
move through code being debugged

Debugger Controls

- Control the movement of the paused point
- Step into or out of methods
- Execute to cursor





A Student Can

use Android Studio's variables view to inspect
the current value of variables

Variables View



- Lists prominent variables in current scope



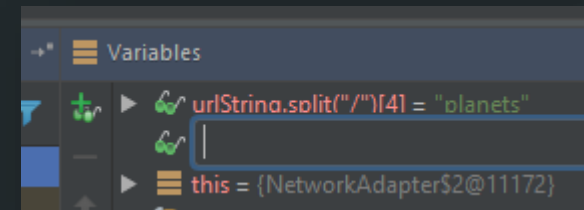


A Student Can

use watchers to show information without
modifying source code

Watches

- Add custom variables or expressions to variables view
- Executes that expression at that point of execution





A Student Can

debug a physical device wirelessly on a
local network

Wireless Debugging

```
C:\Users\Chance\Documents\Temp\SWAPI>"C:\Users\Chance\AppData\Local\Android\Sdk\platform-tools\adb.exe" tcpip 5555
restarting in TCP mode port: 5555

C:\Users\Chance\Documents\Temp\SWAPI>"C:\Users\Chance\AppData\Local\Android\Sdk\platform-tools\adb.exe" connect 192.168.1.3:5555
connected to 192.168.1.3:5555

C:\Users\Chance\Documents\Temp\SWAPI>"C:\Users\Chance\AppData\Local\Android\Sdk\platform-tools\adb.exe" -s 192.168.1.3:5555 usb
restarting in USB mode
```

- Connect device with USB
- `adb tcpip 5555` // enables wireless debugging
- `adb ip_address:5555` // connects to device
- `adb -s ip_address:5555` // disconnects and disables wireless debugging

