Nested Class Summary

4 Types of Nested Classes

- Static Nested Classes (aka: Static Inner Classes)
- Inner Classes
- Local Inner Classes
- Anonymous Inner Classes

Static Nested Classes

- Declared and defined inside another class for convenience. Usually because the containing class is the only one that uses it.
- Does not have access to outer class members
- Static Nested Class Example

Inner Classes

- Like static nested class, but has implicit access to outer class members
- Declared and defined like a Static Nested Class but without the static modifier
- 'this.' refers to the inner class members, not the outer class (leave off the 'this.' to refer to outer class members)
- To refer to an outer class member with the same name as an inner class member, use 'OuterClassName.this.'
- Inner Class Example

Local Inner Class

- A special kind of inner class
- Declared and defined inside an instance method or constructor
- Has access to outer class members (like a regular inner class)
- Also has access to final or 'effectively final' local variables (including parameters) of the containing method
 - Effectively final variables are variables that are not set or changed from within the containing method or the local inner class
- Local Inner Class Example

Anonymous Inner Class

- A special kind of local inner class
- Declared and defined inside a statement
- Commonly used for UI event handlers
- Anonymous Inner Class Example