

Class `java.util.Observable`

```
java.lang.Object
|
+----java.util.Observable
```

public class **Observable**
extends [Object](#)

This class should be subclassed by observable object, or "data" in the Model-View paradigm. An Observable object may have any number of Observers. Whenever the Observable instance changes, it notifies all of its observers. Notification is done by calling the `update()` method on all observers.

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Notifies all observers if an observable change occurs.

o **notifyObservers(Object)**

Notifies all observers of the specified observable change which occurred.

o **setChanged()**

Sets a flag to note an observable change.

Constructors

o **Observable**

```
public Observable()
```

Methods

o **addObserver**

```
public synchronized void addObserver(Observer o)
```

Adds an observer to the observer list.

Parameters:

o – the observer to be added

o **deleteObserver**

```
public synchronized void deleteObserver(Observer o)
```

Deletes an observer from the observer list.

Parameters:

o – the observer to be deleted

o **notifyObservers**

```
public void notifyObservers()
```

Notifies all observers if an observable change occurs.

o **notifyObservers**

```
public synchronized void notifyObservers(Object arg)
```

Notifies all observers of the specified observable change which occurred.

Parameters:

arg – what is being notified

o **deleteObservers**

```
public synchronized void deleteObservers()
```

Deletes observers from the observer list.

o setChanged

```
protected synchronized void setChanged()
```

Sets a flag to note an observable change.

o clearChanged

```
protected synchronized void clearChanged()
```

Clears an observable change.

o hasChanged

```
public synchronized boolean hasChanged()
```

Returns a true boolean if an observable change has occurred.

o countObservers

```
public synchronized int countObservers()
```

Counts the number of observers.