



# Multithreading

**Creating Threads By Extending  
Thread Class**



# Agenda

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## **Creating Threads By Extending Thread Class**

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# Objectives

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At the end of this module, you will be able to:

- How to create threads by extending Thread class

# Creating Threads By Extending Thread Class



# Extending Thread

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- We can also create Threads by **extending the Thread class**:
  - Instantiate the class that extends Thread
  - This class **must** override run() method
  - The code that should run as a thread will be part of this run() method
  - We **must** call the start() method on this thread
  - start( ) in turn calls the thread's run( ) method

# Extending Thread Example

**A very simple demo for creating threads by extending Thread class:-**

```
public class ThreadDemo1 extends Thread{
    public void run() {
        System.out.println("thread is running...");
    }
    public static void main(String args[]){
        ThreadDemo1 threadDemo=new ThreadDemo1();
        threadDemo.start();
    }
}
```

# Extending Thread Example (Contd.).

One More Demo to show that thread is Running:-

```
public class ThreadDemo extends Thread{
    public void run() {
        for(int counter=1;counter<=100;counter++){
            System.out.println("thread is running..." + counter);
        }
    }
    public static void main(String args[]){
        ThreadDemo threadDemo=new ThreadDemo();
        threadDemo.start();
    }
}
```

# The main Thread

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- When a Java program starts executing:
  - the main thread begins running
  - the main thread is immediately created when **main()** commences execution
- Information about the main or any thread can be accessed by obtaining a reference to the thread using a public, static method in the **Thread** class called **currentThread( )**



# Obtaining Thread-Specific Information

```
public class ThreadInfo {  
    public static void main(String args[]) {  
        Thread t = Thread.currentThread( );  
        System.out.println("Current Thread :" + t);  
        t.setName("Demo Thread");  
        System.out.println("New name of the thread :" +  
t);  
        try {  
            Thread.sleep(1000);  
        }  
        catch (InterruptedException e) {  
            System.out.println("Main Thread Interrupted");  
        }  
    }  
}
```

# Obtaining Thread-Specific Information (Contd.).

```
public static void main(String args[]) {  
    Thread t = Thread.currentThread( );  
    System.out.println("Current Thread :" + t);  
    t.setName("Demo Thread");  
    System.out.println("New name of the thread :"  
+ t);  
    try {  
        Thread.sleep(1000);  
    }  
    catch (InterruptedException e) {  
        System.out.println("Main Thread  
Interrupted");  
    }  
}
```

# Assignment

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# Summary

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- Creating threads by extending Thread class



**Thank You**

