



MASTER ISI :
INGENIEURIE DES SYSTEMES D'INFORMATION

RAPPORT DE TP 6 JAVA AVANCEE :

RMI

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2022-2023

L'INTERFACE HELLOINTERFACE :

```
import java.rmi.*;

public interface HelloInterface extends Remote {

    public String sayHello() throws RemoteException;

}
```

LA CLASS HELLOIMPL :

```
import java.rmi.server.*;
import java.rmi.*;

public class HelloImpl extends UnicastRemoteObject implements HelloInterface {

    private String message;

    /* le constructeur */
    public HelloImpl(String s) throws RemoteException {
        super();
        message = s;
    }

    /* l'implémentation de la méthode */
    public String sayHello() throws RemoteException {
        return message;
    }

}
```

LA CLASS HELLOSERVER :

```
import java.rmi.registry.*;
import java.rmi.*;

public class HelloServer {

    public static void main(String[] argv) {
        try {
            /* Lance un registry localement sur le port d'écoute passé en
paramètre : 1099*/
            Registry reg = LocateRegistry.createRegistry(1099);

            /* créer une instance de la classe Hello et l'enregistrer
dans le serveur de noms */
            HelloInterface od = new HelloImpl("Hello word !");
            reg.rebind("HelloWord", od);
            System.out.println("Serveur prêt");
        } catch (RemoteException e) {
            System.out.println("Erreur serveur : " + e);
        }
    }

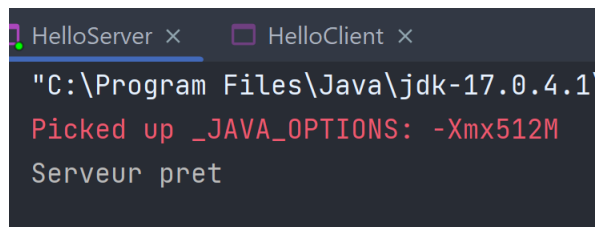
}
```

```
}  
}
```

LA CLASS HELLOCLIENT :

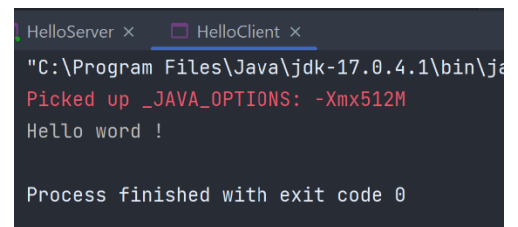
```
import java.rmi.*;  
import java.rmi.registry.LocateRegistry;  
import java.rmi.registry.Registry;  
  
class HelloClient {  
  
    public static void main(String[] argv) {  
        try {  
            /* trouver une référence vers l'objet distant */  
            Registry reg = LocateRegistry.getRegistry("localhost", 1099);  
            HelloInterface hello = (HelloInterface) reg.lookup("HelloWord");  
            /* appel de méthode à distance */  
            System.out.println(hello.sayHello());  
  
        } catch (NotBoundException | RemoteException e) {  
            System.out.println("Erreur client : " + e);  
        }  
    }  
}
```

ON RUN LE CLASS SERVEUR PUIS LA CLASS CLIENT :



The screenshot shows a Java IDE with two tabs: 'HelloServer' and 'HelloClient'. The 'HelloServer' tab is active, displaying the following console output:

```
"C:\Program Files\Java\jdk-17.0.4.1\bin\java.exe" -Xmx512M -Djava.rmi.server.hostname=localhost  
Picked up _JAVA_OPTIONS: -Xmx512M  
Serveur pret
```



The screenshot shows a Java IDE with two tabs: 'HelloServer' and 'HelloClient'. The 'HelloClient' tab is active, displaying the following console output:

```
"C:\Program Files\Java\jdk-17.0.4.1\bin\java.exe" -Xmx512M -Djava.rmi.server.hostname=localhost  
Picked up _JAVA_OPTIONS: -Xmx512M  
Hello word !  
  
Process finished with exit code 0
```