

CN4001/ CD4001

Software Development

Topic 2: Java and JDoodle

Part 1

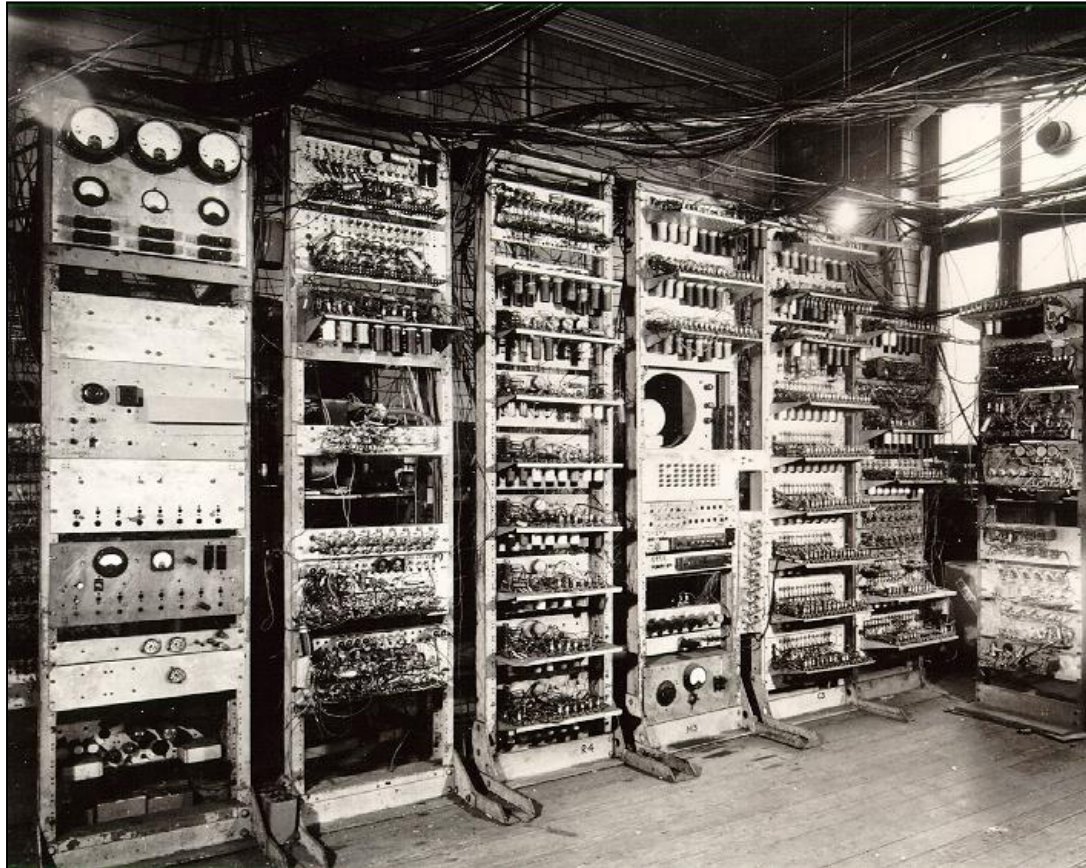




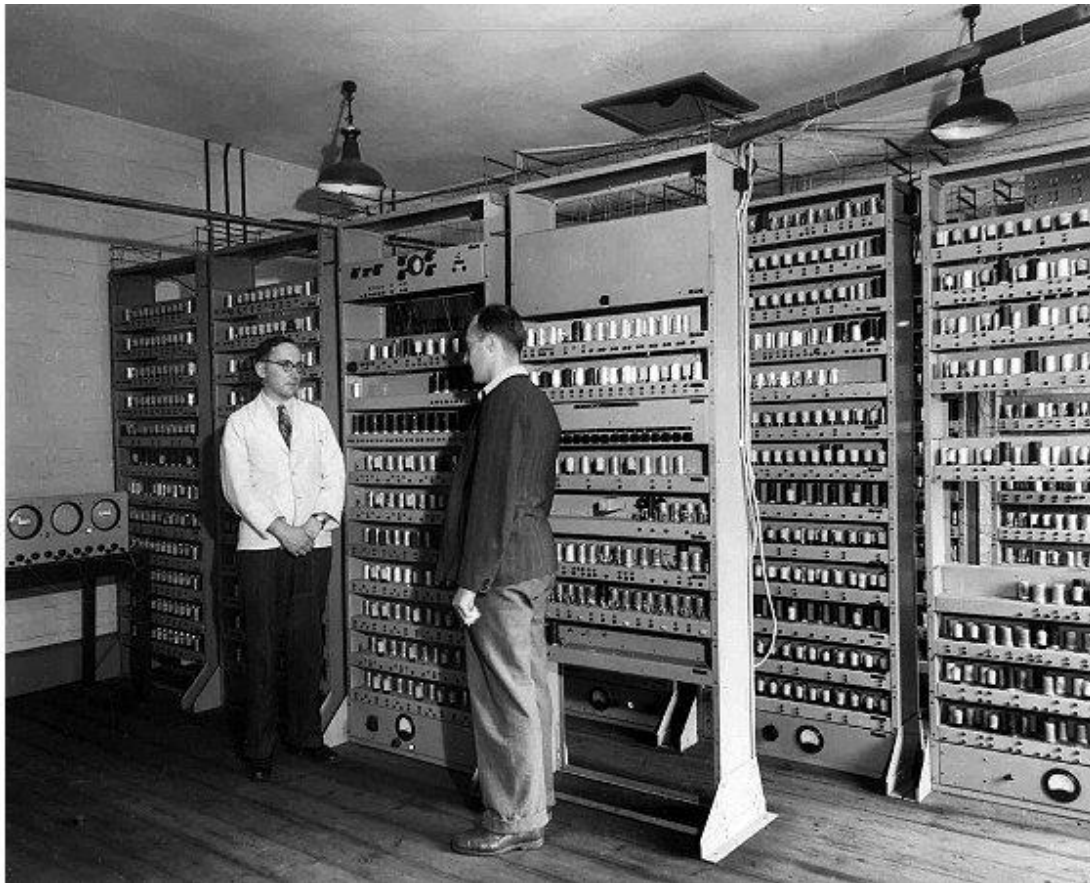
Software Development



Computer



Programmers

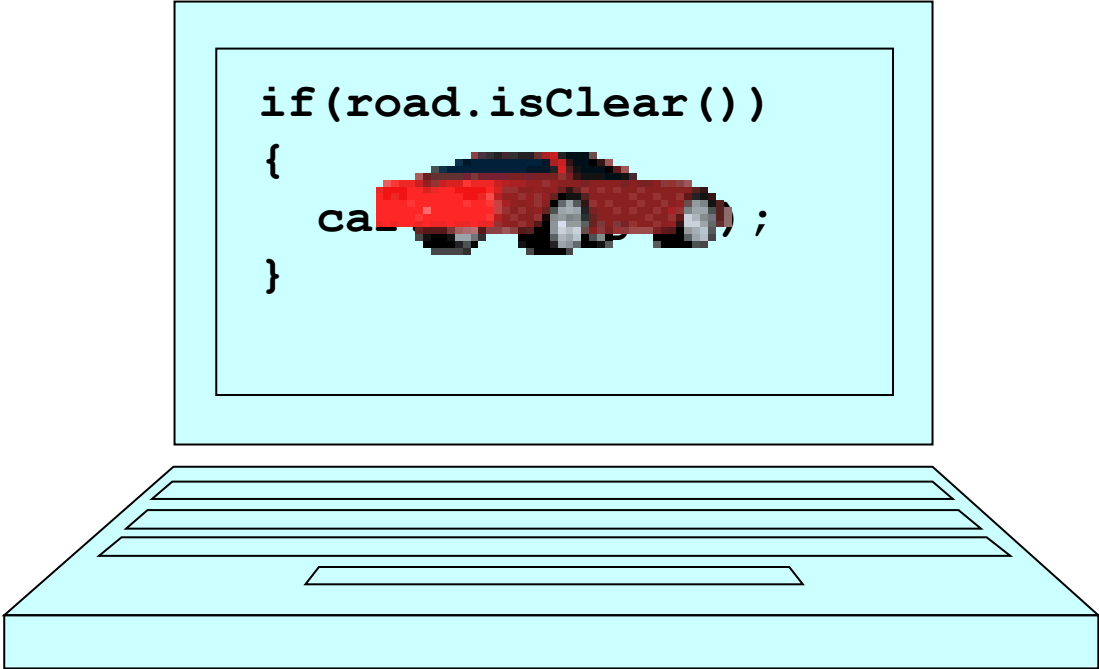


Computer



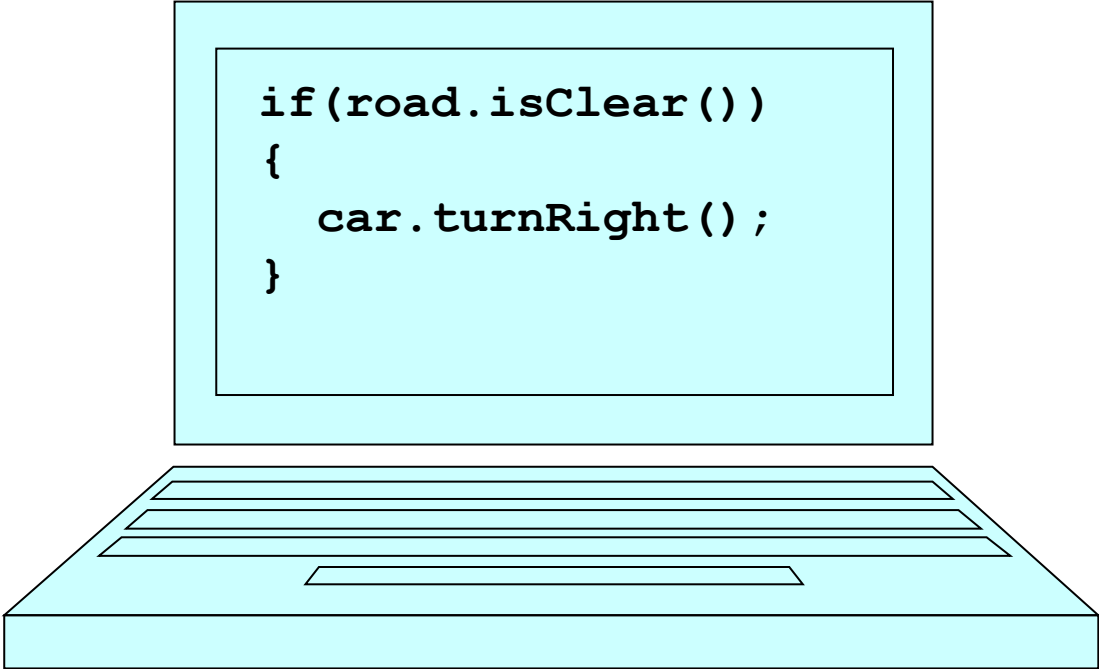
Programmers





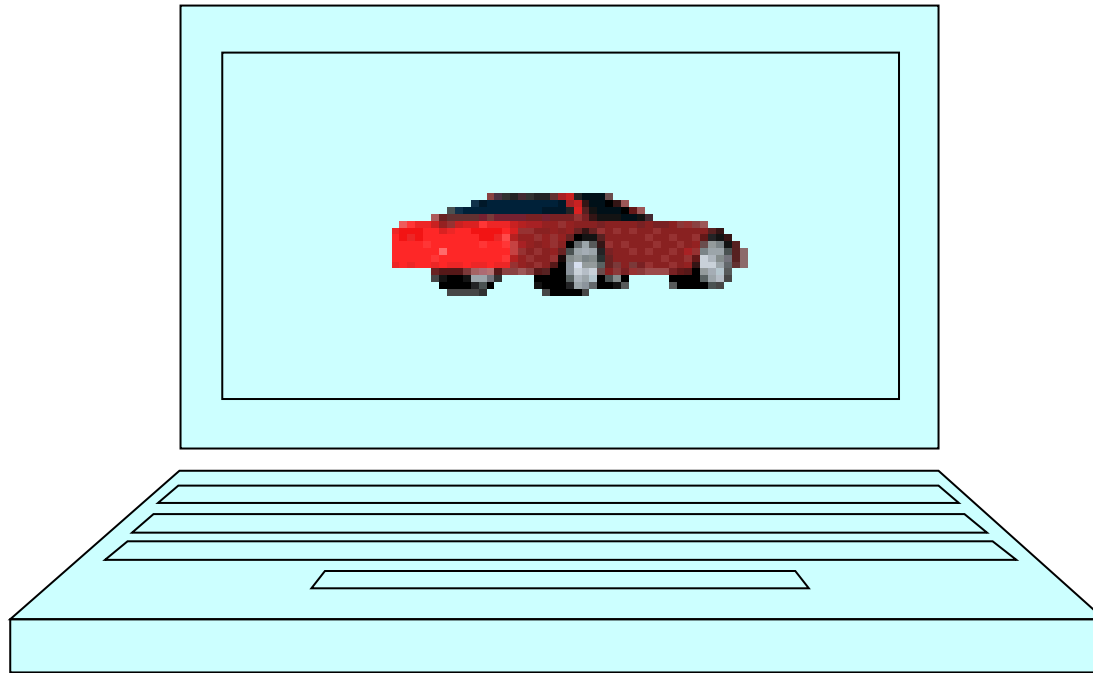
```
if(road.isClear())  
{  
    car ;  
}
```

The set of instructions that tells a machine what to do is called a **program**

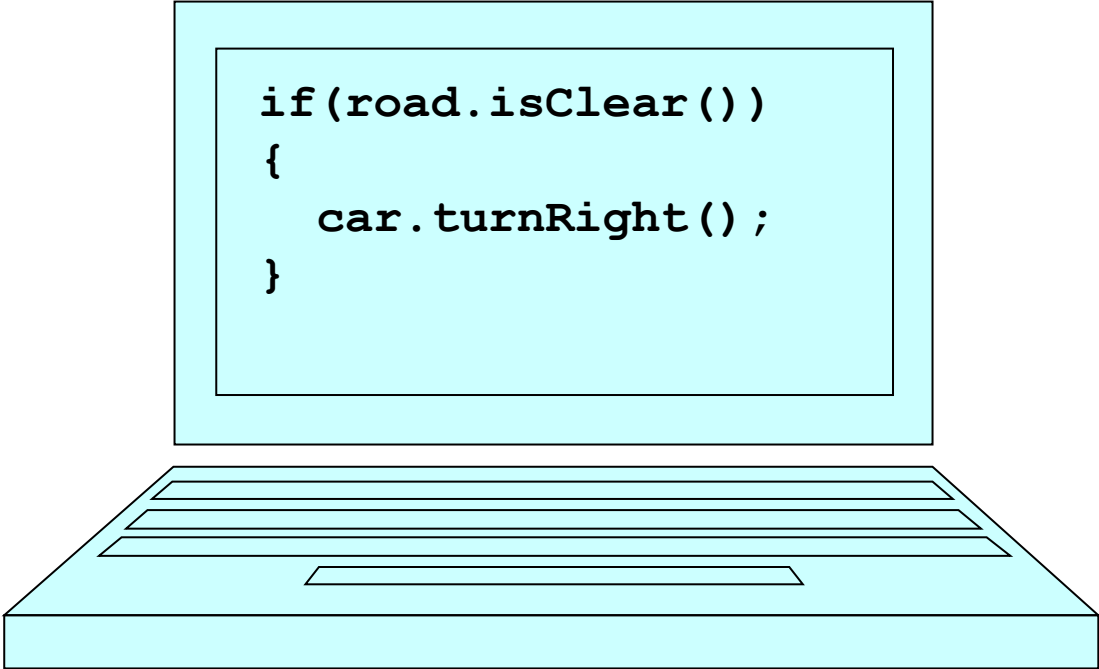


```
if (road.isClear())  
{  
    car.turnRight();  
}
```

Software is the name given to a single program or a set of programs.

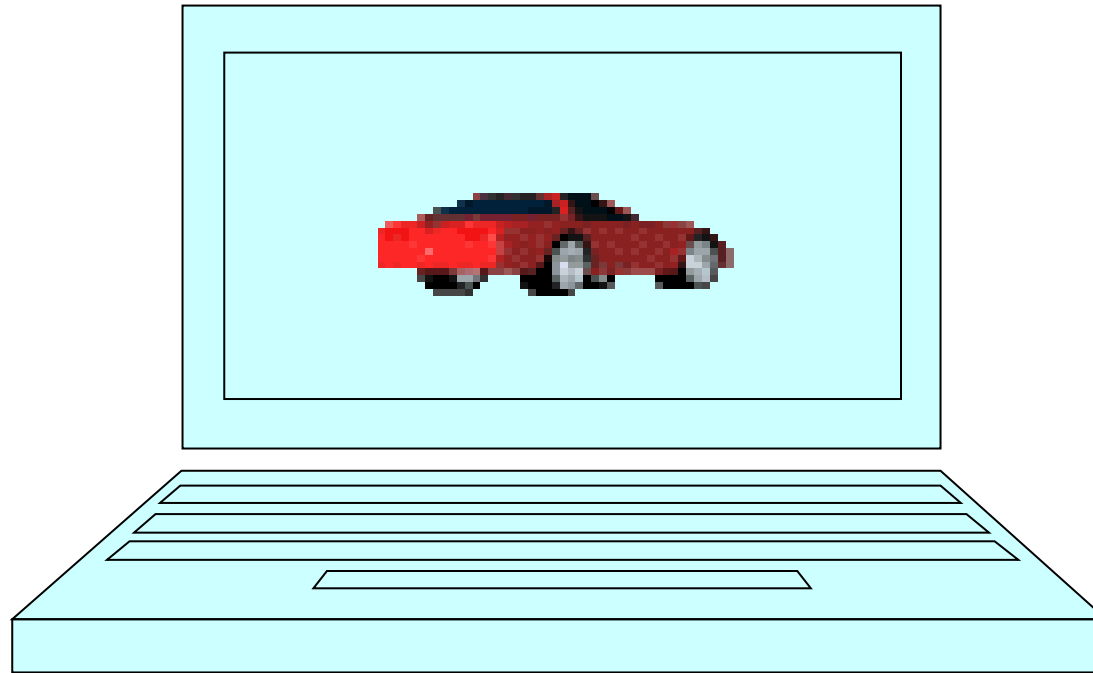


Programming is the task of giving instructions to a computer



```
if (road.isClear())  
{  
    car.turnRight();  
}
```

These instructions usually have to be written in a special **programming language**.



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Activity

**“Can you name
some **programming
languages** in use
today?”**

Sep 2019	Sep 2018	Change	Programming Language	Ratings	Change
1	1		Java	16.661%	-0.78%
2	2		C	15.205%	-0.24%
3	3		Python	9.874%	+2.22%
4	4		C++	5.635%	-1.76%
5	6	⬆	C#	3.399%	+0.10%
6	5	⬇	Visual Basic .NET	3.291%	-2.02%
7	8	⬆	JavaScript	2.128%	-0.00%
8	9	⬆	SQL	1.944%	-0.12%
9	7	⬇	PHP	1.863%	-0.91%
10	10		Objective-C	1.840%	+0.33%

PYPL PopularitY of Programming Language index

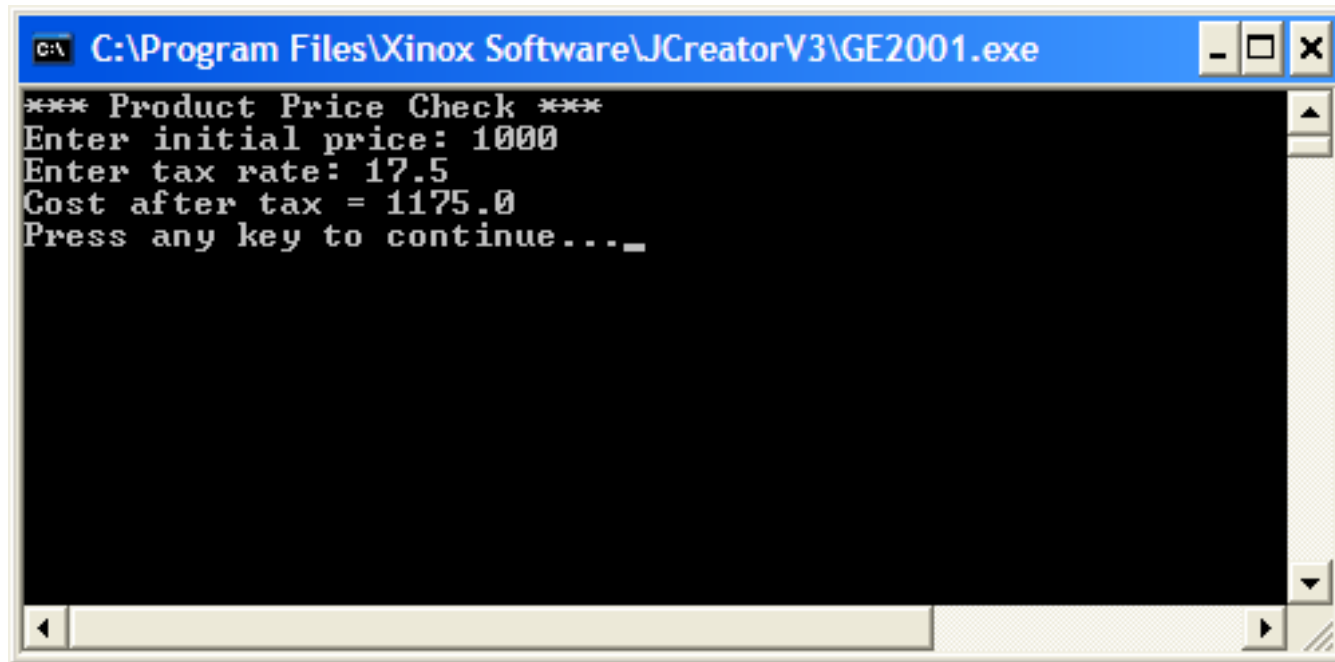
<https://www.tiobe.com/tiobe-index/>



Java Applications



A console application



```
*** Product Price Check ***
Enter initial price: 1000
Enter tax rate: 17.5
Cost after tax = 1175.0
Press any key to continue...
```

A graphical application

Hostel

Room Name

Add Tenant Display Tenants Remove Tenant Save and Quit Quit without Saving

Room	Name
1	Bill Tin-Closet
2	Dan Druff
3	Sue Nora Later
4	Walter Wallcarpeting

Room Month Amount

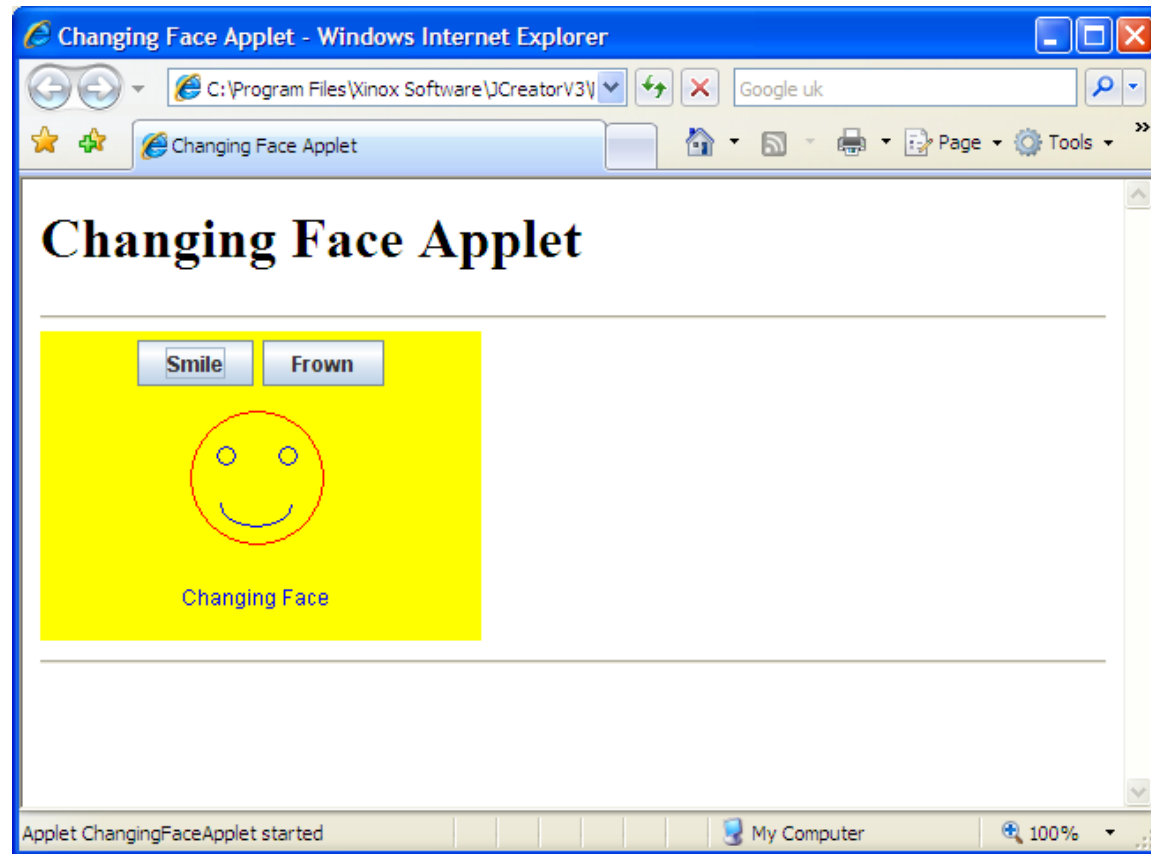
1

Make Payment List Payments

Month	Amount
JAN	£200.00
FEB	£175.00

Total paid so far : £375.00

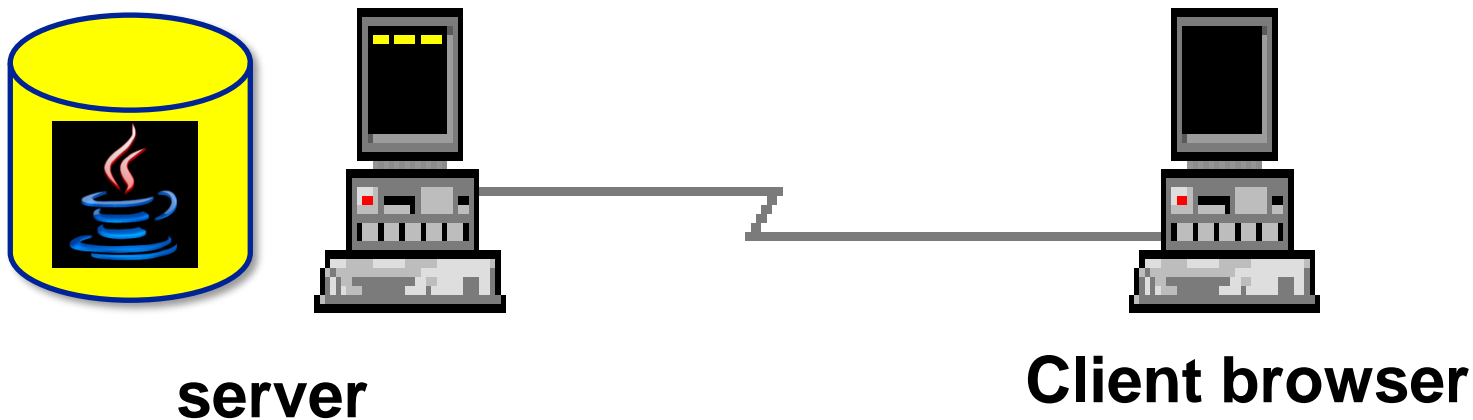
A Java **Applet** running in a browser



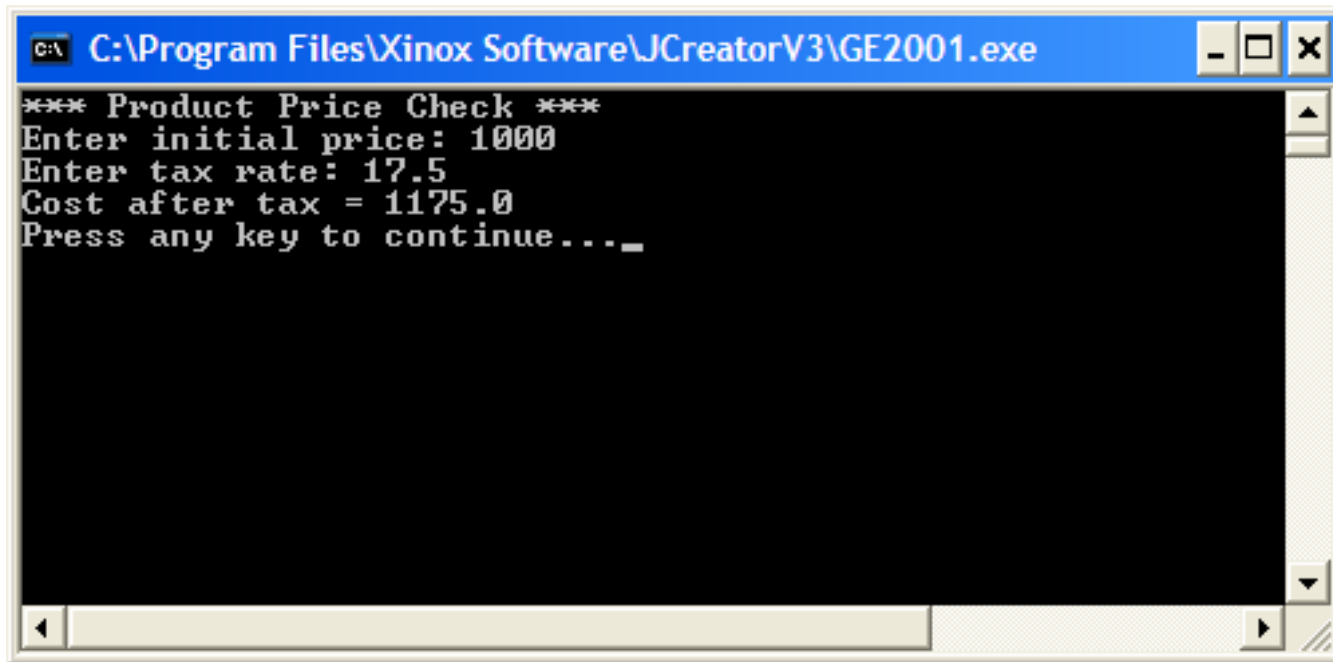
A Java application running on a **smart phone**



Java in a Network Environment



In this module we will develop
console applications..



```
C:\Program Files\Xinox Software\JCreatorV3\GE2001.exe  
*** Product Price Check ***  
Enter initial price: 1000  
Enter tax rate: 17.5  
Cost after tax = 1175.0  
Press any key to continue..._
```

