

Unit 6 Software design and development

Types of languages

Types of language

There are a number of different types of programming languages, for example:

- visual languages
- mark-up languages
- script languages.

These are used for programming in different situations.

Visual languages

- Used to write programs for Windows software environment.
- Usually do a lot of the work for the programmer by providing tools to create Windows elements such as forms, dialog boxes, buttons, scroll bars etc.
- Usually create event driven programs which respond to mouse clicks and other Windows events.
- Microsoft Visual Basic is a good example.

Mark-up languages

- The best known example of a mark-up language is HTML (Hyper Text Mark-up Language).
- Used to format web pages.
- Uses 'tags' to control the formatting of text e.g. `<bold>` this text would be shown in bold`<\bold>`.
- Not really a programming language in the traditional sense – cannot control program flow with selection or loop structures.

Mark-up languages

```
<html>
```

```
<head>
```

```
<title>Simple web page</title>
```

```
</head>
```

```
<body>
```

```
<p>
```

```
This is a simple web page
```

```
</p>
```

```
<p>
```

```
<b>This text is in bold</b>
```

```
</p>
```

```
<p>
```

```
This is a link to the <a href="http://www.bbc.co.uk">BBC web site</a>
```

```
</p>
```

```
</body>
```

```
</html>
```

Script language

Small programs used within an application to provide extra functionality. Examples include:

- Spreadsheet macros – recorded or written within an Excel spreadsheet to add automated functions.
- JavaScript – used within web pages. The JavaScript code is embedded within the HTML.

JavaScript example

