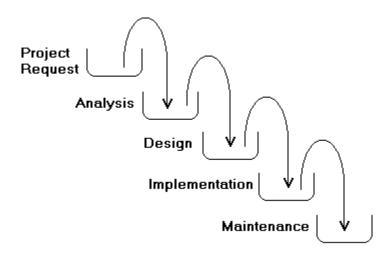


Unit 9: Multimedia

Design Methodologies

Generally product development for conventional software systems use a variation on the "Waterfall" methodology referred to as the "Software Development Life Cycle".

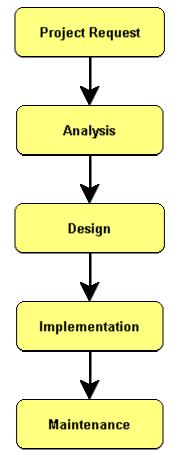


One view of this methodology is illustrated above. As one stage of the life cycle is filled, i.e. completed, then the next stage commences. Each stage has a deliverable associated with it. This cycle as a flow chart together with a deliverable for each stage is detailed on page 2.

The method that we are going to use to develop multimedia applications is not dissimilar to the conventional life cycle. An overview of the design method is illustrated on page 3.



Unit 9: Multimedia



The project outcome and scope are defined, together with constraints.

Deliverable: Project Plan

We build an understanding of the system under study, with attention paid to those elements relevant to the "project".

Deliverable: Systems Requirements

We propose a change to the system, or we present and contrast several alternatives, with recommendation.

Deliverable: System Design

We build or modify the system, properly test it, install it and train the audience.

Deliverable: System and Its Documentation

Problems with the system are corrected, and required enhancements are addressed.

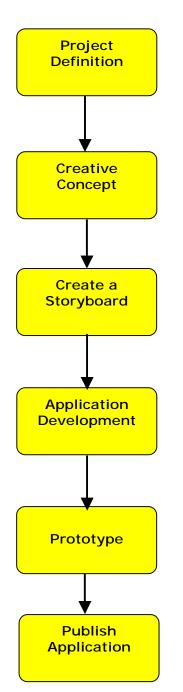
Deliverable: Updated System and Documentation



Unit 9: Multimedia

Multimedia Design Methodology

The following multimedia design methodology consists six separate stages, each with a deliverable.



Project Definition

User population Goals Content Planning

Deliverable: A Project Plan

Creative Concept

Gather information – ensure factually correct. Collate the information and create a content list. Organise the information into a logical sequence(s).

Deliverable: High Level Flowchart

Create a Storyboard

Design a navigation map.

Define screen layouts, contents and actions.

Design user interaction controls.

Deliverable: Storyboard

Application Development

Define and implement visual layout of the interface. Produce/edit graphics, videos, sound. Create controls and insert elements.

Deliverable: Application Style and Style Templates

Prototype

Produce a working model. Application Testing.

Deliverable: Alpha

Publish Application

Publish completed application on CD. Accompanying documentation. User training.

Deliverable: Demonstration



Unit 9: Multimedia

The first three stages of the multimedia design methodology can expended to define the stages in more detail.

Stage 1:

Project Definition

The project

In one sentence describe the vision that you have for your project. Decide on an application title.

User population

Who is it intended for? How do you propose to reach your intended audience?

Goals

What message do you wish your application to convey? What do you want your application to accomplish? Style - what look and feel are you planning for your application?

Content

What will it consist of?
What structure is there to the content?
What type of navigation are you envisaging?

Planning

What technologies and skills do you posses or intend to develop in order to create your application?

Deliverable: A Project Plan

Using the headings in bold above produce a word-processed project plan to the standard detailed in the GNVQ handbook.

Your plan should be no longer than two sides of A4 paper.

Hand the plan into your tutor on Wednesday 11 October for groups 1 & 2 and Friday 13 October for group 3.

Do not proceed with any design for your application until your plan has been agreed with your tutor. You will receive feedback on whether or not your plan is accepted on Wednesday 18 October and Friday 20 October respectively.



Unit 9: Multimedia

Stage 2:

Creative Concept

Gather information – ensure factually correct.

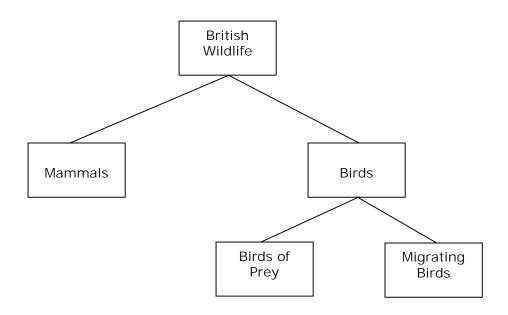
Gather information from more than one source to ensure the integrity of the information. You could well access information from more than one medium, i.e. the Internet and an encyclopaedia.

Collate the information and create a content list.

Collate information into categorised lists. For example if you were to create an application about British Wildlife, you could categorise the information into different species.

Organise the information into a logical sequence(s).

This is best accomplished using a high level flowchart. The example below again uses the British Wildlife example.



The above is simply an example; the flowchart for a large application may well occupy several pages.

Deliverable: High Level Flowchart



Unit 9: Multimedia

Stage 3:

Create a Storyboard

Design a navigation map.

A navigation map provides details of how the user will traverse the application. The map need not be specific in the type of navigation control this will be detailed in the design of user interaction controls. An example of a navigation map for a multimedia application that provides information about the Planets in the Solar System is illustrated on page 7.

Define screen layouts, contents and actions.

Screen layout, contents and actions are described in detail using a screen template, details of which can be found on pages 8 onwards.

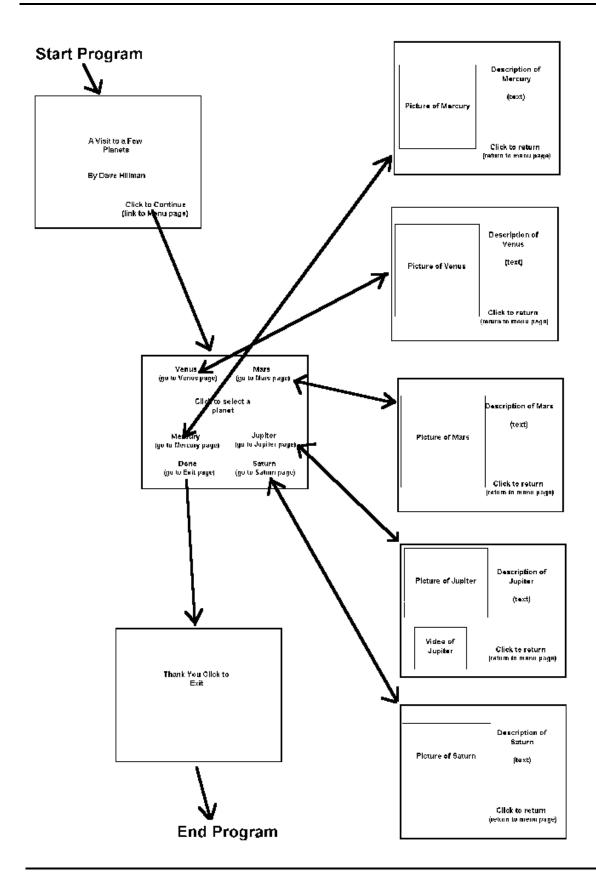
Design user interaction controls.

This is where you decide how the user will take control of the information within the multimedia application. Such considerations will involve the use of text links, graphical navigation buttons/bars and hotspots, i.e. clicking on an image of Mars to display the page containing information about the planet.

Deliverable: Storyboard



Unit 9: Multimedia





Unit 9: Multimedia

Storyboard Sequence

The following pictures are an illustration of how to sequence your storyboard designs. The example uses the planets multimedia application design.

A template of the storyboard will be made available from your tutor.

Title: The Planets Introduction	Page lof8
	Content Description :
	Background Image: Collage of planets (Mercury, Mars, Venus, Jupiter, Saturn)
A Visit to a Few Planets	Background Music: Quiet music
By Dave Hillman	
Click to Continue (link to Menu page)	



Unit 9: Multimedia

Title: The Planets Menu Page 2 of 8

Venus Mars (go to Venus page) (go to Mars page)

Click to select a planet

Mercury Jupiter (go to Mercury page) (go to Jupiter page)

Done Saturn
(go to Exit page) (go to Saturn page)

Background Image: Collage of planets (Mercury, Mars, Venus, Jupiter, Saturn) - Note that buttons will be placed on top of planets.

Background Music: none

Content Description:

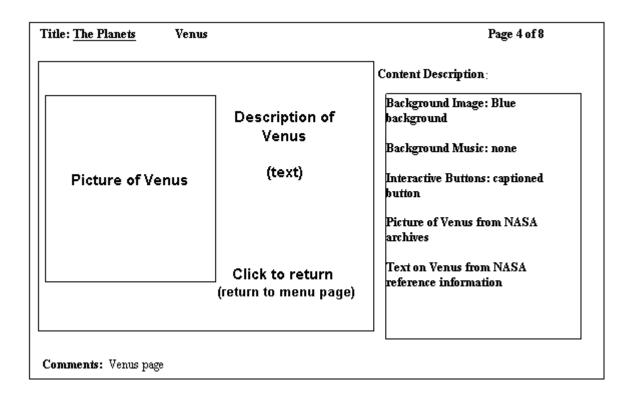
Interactive Buttons: hot spots or captioned buttons

Comments: Main Menu - user can move back and forth from pages on each planet.

Page 3 of 8 Title: The Planets Mercury Content Description: Background Image: Blue Description of background Mercury Background Music: none (text) Interactive Buttons: captioned Picture of Mercury button Picture of Mercury from NASA archives Text on Mercury from NASA Click to return reference information (return to menu page) Comments: Mercury page



Unit 9: Multimedia



Title: The Planets Exit	Page 8 of 8
Thank You Click to Exit	Content Description: Background Image: Collage of planets (Mercury, Mars, Venus, Jupiter, Saturn) Background Music: Quiet music Interactivity: Captioned button, clicking on exit will end the program.
Comments: Exit Page	