DETAIL DESIGN

4. DETAILED DESIGN

Introduction

During detailed design, the internal logic of each modules specified in system ign is decided. During this phase further details of the modules are decided. Design of h of the modules usually specified in a highlevel description language which is ependent of the language in which software eventually be implemented.

Structure of software package

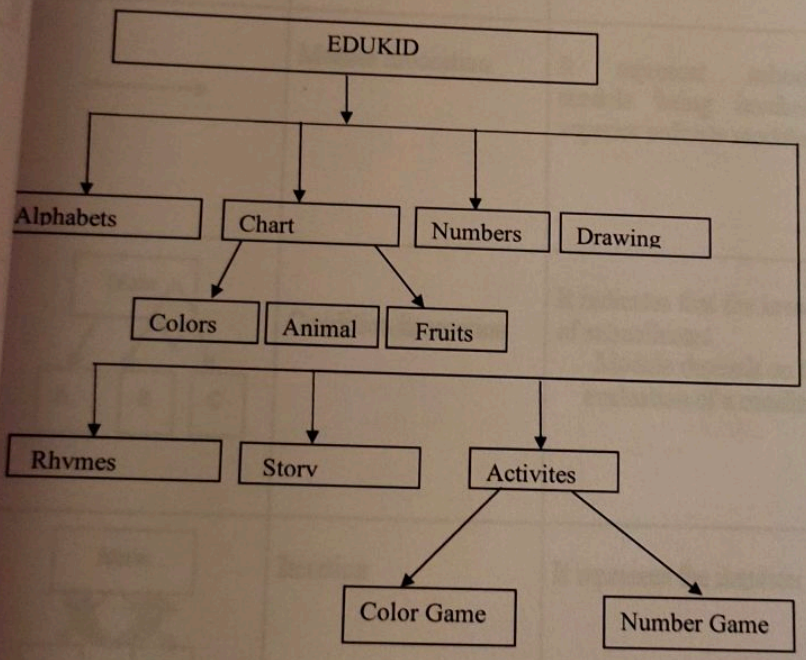


Figure 4.1 Structure of software package

.3 Module decomposition of software

Structure Chart:

Structure chart is a top-down modular design, consist of squares representing different models in a system and lines. Structure chart shows

how program has been partitioned into manageable modules hierarchy and organization of those modules and communicational interface.

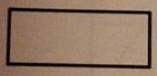
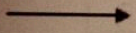
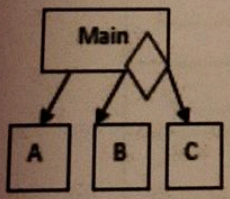
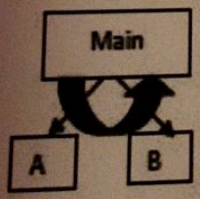
Symbol	Name	Process
	Data flow	Show the direction flow of data.
	Control flow	Shows the direction of flow control.
	Processing	Shows manipulation, calculation and processing.
	Module Invocation	It represent subordinate module being invoked by superior ordinate module.
	Condition invocation	It indicates that the invocation of subordinates Module depends on the evaluation of a condition.
	Iteration	It represent the iteration

Table 4.1 Structure Chart

Flow Chart:

Flow chart is a graphical representation of solution to the given problems. A Flowchart is pictorial representation of an algorithm, workflow or process. The diagrammatic representation illustrates a solution model to given problem. It uses the following symbol.

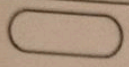
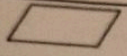
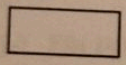
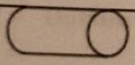
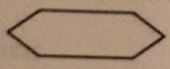
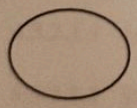
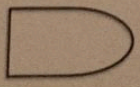
Symbol	Name	Purpose
	Terminator	It indicates the start and end process.
	Input/output	Input / output data
	Decision	It represents a comparison or question that determines an alternate path to be followed.
	Flow direction	Shows the direction of data flow.
	Processing	It represents manipulation, calculation or information processing.
	Direction access storage	File storage
	Preparation(Looping)	An instruction or Group of instruction
	In-Page	
	Off-Page	
	Delay	

Table 4.2 Flow Chart

4.3.1 Alphabet

4.3.1.1 Inputs: Select the alphabet.

4.3.1.2 Procedural details

Algorithm:

Step1: Start

Step2: Select the alphabet from the List

Step3: [Draw the alphabet] using from turtle import*

Step4: [Display the alphabet]

Step5: Name of the alphabet

Step6: End

Algorithm 4.1 Alphabet

4.3.1.3 File I/O interfaces: Image.

4.3.1.4 Outputs: Name of the alphabet.

4.3.1.5 Implementation aspects : Frame, Button, Icon.

4.3.2 Chart

4.3.2.1 Color

4.3.2.1.1 Inputs: Select the color.

4.3.2.1.2 Procedural details

Flow Chart:

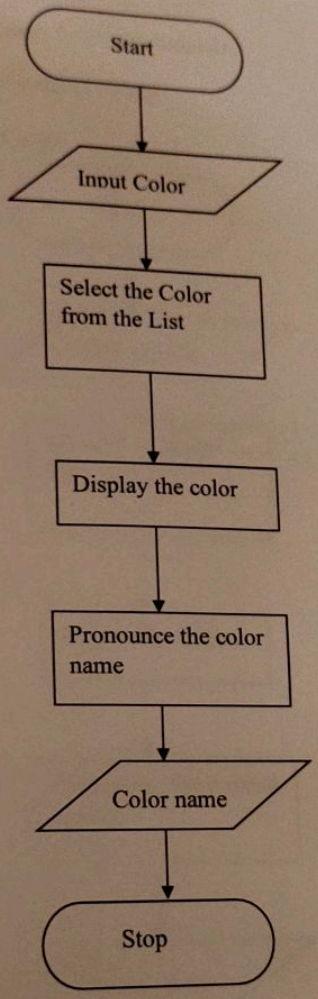


Figure 4.2 Color

4.3.2.1.3 File I/O interfaces: Image.

4.3.2.1.4 Outputs: Name of the color.

4.3.2.1.5 Implementation aspects: Button, Frame.

4.3.2.2 Animals

4.3.2.2.1 Inputs: Select the Animals.

4.3.2.2.2 Procedural details

Flow Chart:

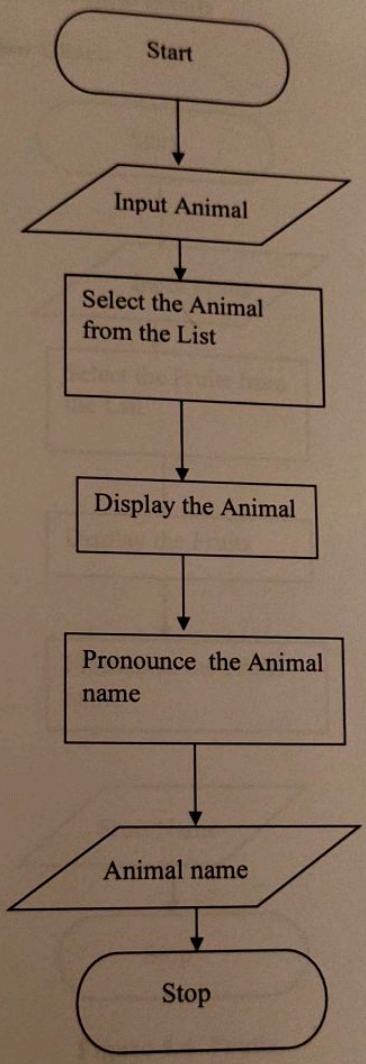


Figure 4.3 Animals

4.3.2.2.3 File I/O interfaces: Image.

4.3.2.2.4 Outputs: Name of the animal.

4.3.2.2.5 **Implementation aspects:** Button, Frame, Label.

4.3.2.3 Fruits

4.3.2.3.1 **Inputs:** Select the Fruit.

4.3.2.3.2 **Procedural details**

Flow Chart:

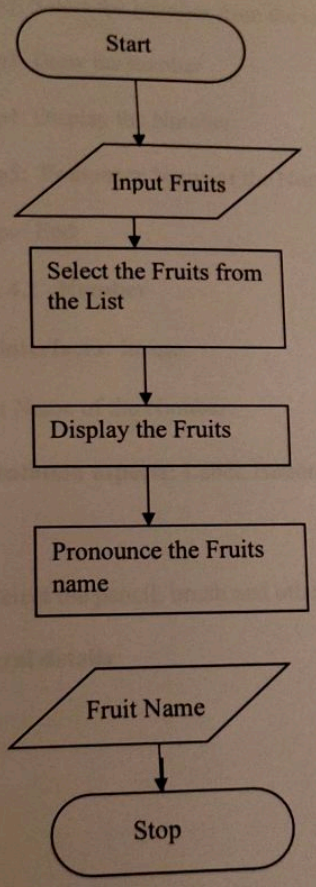


Figure 4.4 Fruits

4.3.2.3.3 **File I/O interfaces:** Image.

4.3.2.3.4 **Outputs:** Name of the Fruits.

4.3.2.3.5 **Implementation aspects:** Button, Frame.

4.3.3 Numbers

4.3.3.1 Input: Select the number.

4.3.3.2 Procedural details

Algorithm:

Step1: Start

Step2: Select the Number from the list

Step3: Draw the number

Step4: Display the Number

Step5: Pronounce Name of the Number

Step6: End

Algorithm 4.2 Number

4.3.3.3 File I/O interfaces: Image.

4.3.3.4 Outputs: Name of the Number.

4.3.3.5 Implementation aspects: Label, Button.

4.3.4 Drawing

4.3.4.1 Input: Select the pencil, brush and other tool.

4.3.4.2 Procedural details

Structured chart:

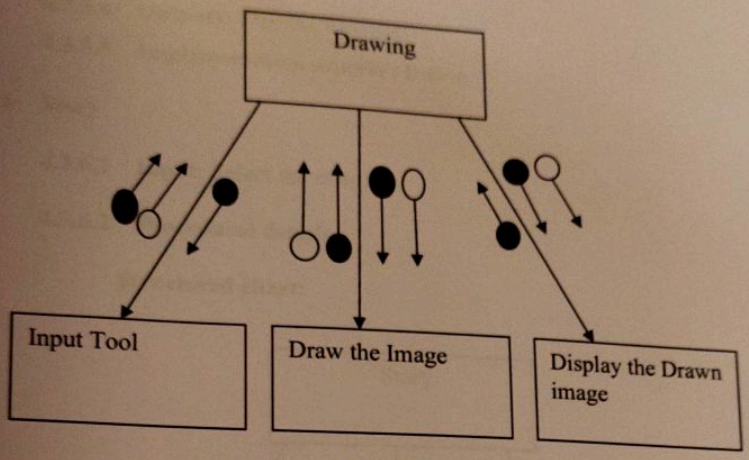


Figure 4.5 Drawing

4.3.4.3 File I/O interfaces: Image.

4.3.4.4 Outputs: Drawn image.

4.3.4.5 Implementation aspects: Tools, Button.

4.3.5 Rhymes

4.3.5.1 Input: Select the Rhymes.

4.3.5.2 Procedural details

Structured chart:

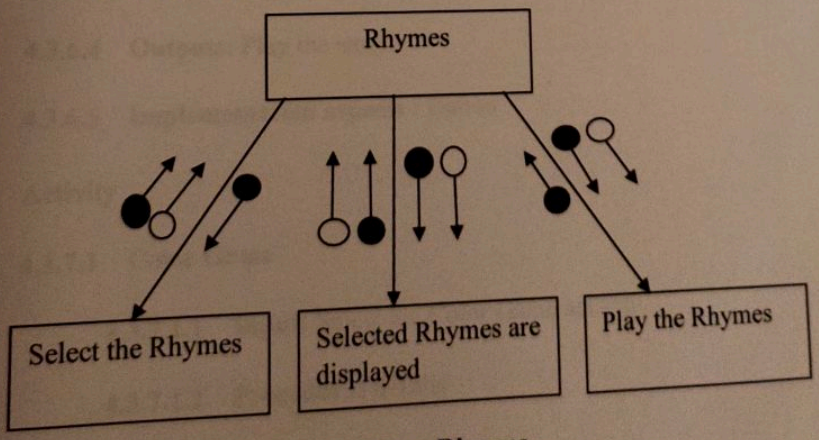


Figure 4.6 Rhymes

4.3.5.3 **File I/O interfaces:** Image.

4.3.5.4 **Outputs:** Play the Rhymes.

4.3.5.5 **Implementation aspects :** Button.

4.3.6 Story

4.3.6.1 **Input:** Select the story.

4.3.6.2 **Procedural details**

Structured chart:

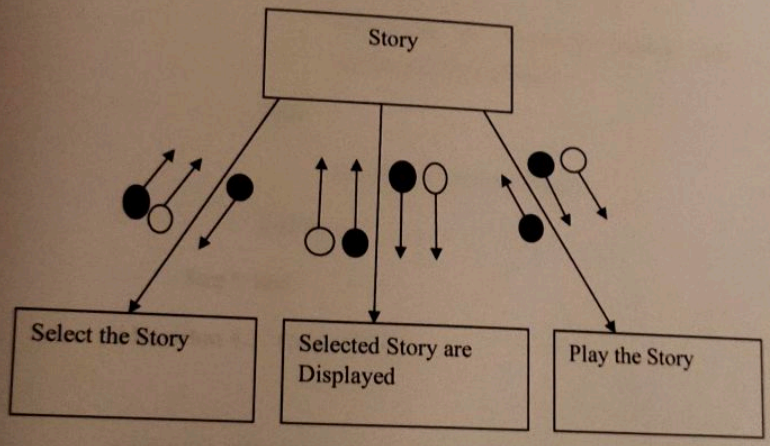


Figure 4.7 Story

4.3.6.3 **File I/O interfaces:** Image.

4.3.6.4 **Outputs:** Play the story.

4.3.6.5 **Implementation aspects :** Button.

4.3.7 Activity

4.3.7.1 Color Game

4.3.7.1.1 **Input:** Select the Color Game activity.

4.3.7.1.2 **Procedural details**

Algorithm:

Step1: Start

Step2: Select the Color Game activity.

Step3: Search and click the given color.

Step4: Validation

Step5: [Check for condition]

Step6: If matched elements are correct then

Displaying the successful message and disable matched element

Else

Displaying Error message

End If

Step7: End

Algorithm 4.3 Color Game

4.3.7.1.3 File I/O interfaces: Not applicable.

4.3.7.1.4 Outputs: Matched elements are disappeared.

4.3.7.1.5 Implementation aspects : Canvas, Button.

4.3.7.2 Number Game

4.3.7.1.1 Input: Select the Number Game activity.

4.3.7.1.2 Procedural details

Algorithm:

Step1: Start

Step2: Select the Number Game activity.

Step3: Find the given number.

Step4: Validation

Step5: [Check for condition]

Step6: If all given numbers are found then

Displaying the successful message and disable element.

Else

Displaying Error message

End If

Step7: End

Algorithm 4.4 Number Game

4.3.7.1.3 File I/O interfaces: Not applicable.

4.3.7.1.4 Outputs: Match the elements are disappeared.

4.3.7.1.5. Implementation aspects (if any): Canvas, Button.