

Assessment Front Sheet

Assessment Title		Assessment Final: DH2R34 – Multimedia: Developing Multimedia Applications	
Qualification		Module Code and title	
HND in Computer Science		DH2R34 – Multimedia: Developing Multimedia Applications	
Student ID		Assessor's Name	
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Cohort	Date Issued	Submission Deadline	
	13 th September, 2021	19 th September, 2021	

No.	Learning Outcomes	Task no
LO1	Identify and document task and user requirements and context of use	1
LO2	Produce a design and specification for the prototype multimedia application	2
LO3	Implement a multimedia application based on a design specification	3
LO4	Test and evaluate a multimedia application and revise as required	4

Learner Declaration

I certify that the work submitted for this Assessment is my own and research sources are fully acknowledge.

Student Signature:.....

Date: 24/09/2021



Assessment Final
Outcome covered 1-4
Assessment task instruction

Case Study

Sunnyhill Plantations – Promote Premium Flavored Tea Products

Sunnyhill Plantations (SP) is one of the primary producers of Sri Lankan premium quality tea for the international market. Currently they export various products of Sri Lankan tea to the global tea lovers in all around the world. SP has decided to introduce several flavored tea products under the categories of “PREMIUM” and “GREEN TEA”.

SP is looking forward to promoting these newly launched products through their website. The Marketing and Sales division of SP has decided to develop and use a multimedia application that can be embedded in their website. SP wants this application to be promoted through social media and hope to attract more international buyers.

Application should display detailed information about their new flavored and green tea products. SP wants to use multimedia elements such as images, audios and videos to enhance the quality of the application. User friendly page navigation and layouts are essential parts of their application. The application should clearly highlight their “Premium Flavored Tea” and “Green Tea” products line and should be able to distribute by email if required.

Tasks

- 1) You are required to produce a User Requirements Document based on the Sunnyhill Plantations case study provided. The document is to be in report format and must include
 - Identifying client requirements
 - Identifying user requirements
 - Identifying context of use
 - Identifying hardware and software requirements
 - Research skills

- 2) You are required to produce a Design and Specification and Build a Prototype Multimedia Application based on the Sunnyhill Plantations case study provided. The document is to be in report format and must include
 - Information components of the application
 - Production of a design specification
 - Navigational techniques
 - Prototyping the application
 - Testing the prototype

- 3) You are required to implement a Multimedia Application Based on a Design Specification for the Sunnyhill Plantations case study provided. The document is to be submitted as part of the final report along with Learning Outcome 4 and must include;
 - Appropriate text, graphic, audio and video elements
 - Acquire the identified media elements in accordance with relevant legislation
 - Import and manipulate media elements
 - Determination and setting of interface object properties
 - Handle keyboard and mouse events

- 4) You are required to test and evaluate a Multimedia Application and Revise as required based on the Sunnyhill Plantations case study provided. The document is to be in report format and must include;
 - Select an appropriate test strategy
 - Ensure that the application operates as specified
 - Check the usability of the application
 - Evaluate the extent to which the application meets client and user requirements
 - Revise the application as required

User Requirements

Abstract

This report pertains to containing specific information regarding the client's requirements; the user's requirements; the identification of the context of use; the hardware and software requirements; and the necessary research skills and measures taken to promote Sunnyhill Plantations' Premium Flavored Tea Products effectively.

Client's Requirements

A Multimedia Application that can be embedded into their already existent Website with the ability and means to showcase and promote Sunnyhill Plantations' newly launched Premium and Green Tea Flavored Tea Products effectively not only through their website but also through social media with hopes to attract more International Buyers. They have also requested that the Multimedia Application maximize the use of elements such as images, audios and videos to enhance the quality of the application. User friendly interface and ease of use is a necessity so therefore page layouts and navigation are essential parts of their application and the application itself should be able to distribute by email if required.

User's Requirements

For their users Sunnyhill Plantations has requested that there be detailed information about their new Premium and Green Tea flavored products and that the Multimedia Application consist of a user friendly interface with ease of use and access so therefore page layouts and navigation are essential parts of their application. They have also allowed the maximum use of elements such as images, audios and videos to enhance the quality of the application.

Context of Use

Multimedia Applications play a vital role in advertising. The more forms of multimedia used, the higher the exposure of the product to the market thereby increasing sales, creating a huge influence in the market and gaining popularity; hence clearly justifying and indicating why Sunnyhill Plantations would also promote through social media as well.



System Requirements

Hardware requirements - 2GHz or faster processor

- Windows 7 OS or higher
- 2GB RAM (8GB Recommended)
- 4 GB of available hard-disk space and more during installation
- 1024x900 display (1280x1024 recommended)
- GPU of OpenGL version 3.3 or higher

Software requirements - Adobe Animate

Research Skills

Searching for relevant information

Paying attention to detail

Skimming and Scanning through texts and taking notes

Managing time efficiently

Effective problem-solving

Communicating results

Design Specification and Prototype

Components of the Application

As previously discussed by and required by the users a whole range of multimedia elements are going to be incorporated into the application. A range of images, sounds, video, audio and colours are to be implemented within the application. The manner in which the elements are to be placed will be set efficiently so that Sunnyhill Plantations will benefit from a high user interaction and engagement. However the whole reason behind the request for such an application is solely to promote their new range of products so therefore communicating and showcasing the product will take priority above all else.

Design Specification

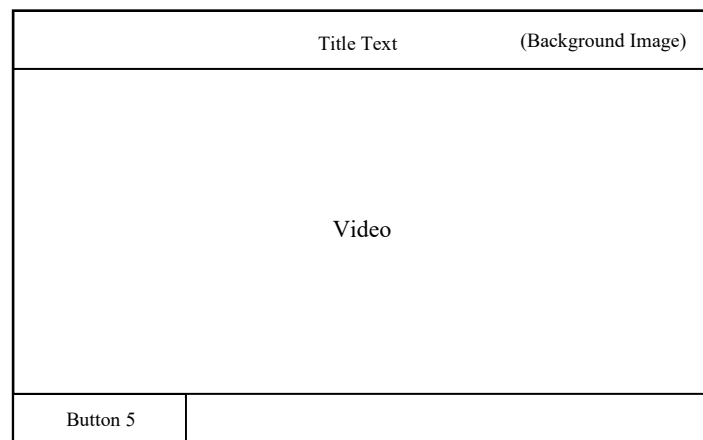
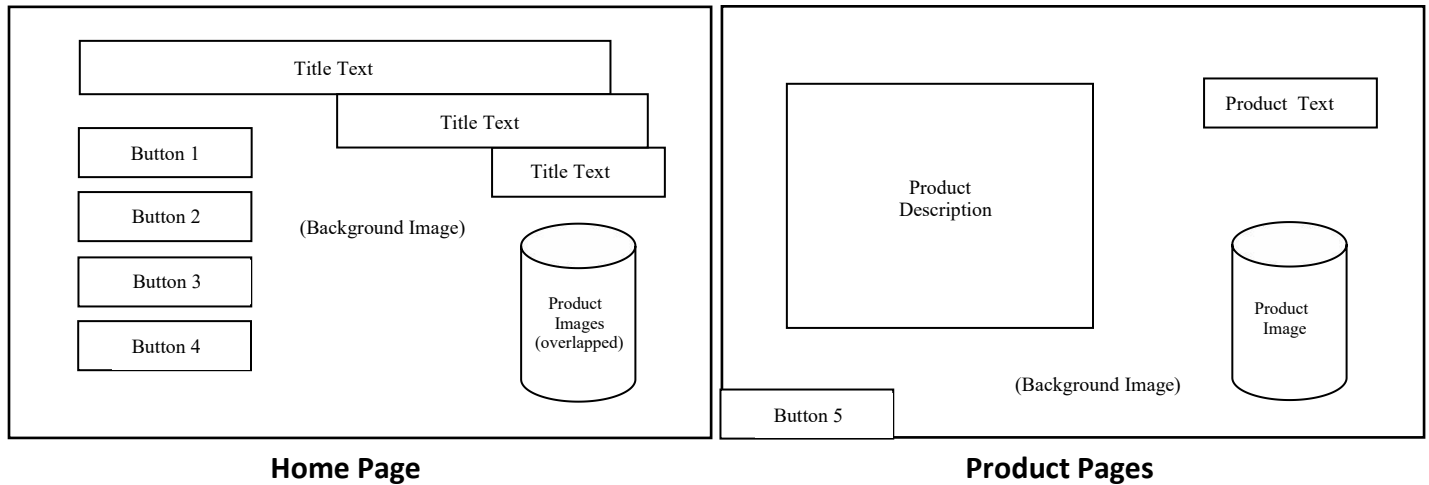
- An image will be used as a backdrop for the application and will act as a background image.
- Three images showcasing Sunnyhill's products will be used to give users a visual on the product.
- Animations manipulating the transitioning of the products will be used on the product images.
- Background music will be used to stimulate a unique and memorable experience for users.
- A video enlightening viewers on Sunnyhil's vision for the tea industry will be playable.
- Colours in close relation to each product and the prestige of the company will be used.
- Font customizations will be effectively used to make the entire application more appealing.
- Text will be used to hold titles as well as information unique to each product.
- Brush strokes will be used to give each product title a superior finish.

Navigational Techniques

Buttons that link to other pages via ActionScript Code

Prototyping the Application

Prototype of the required multimedia application is created through the combination of various elements via Adobe Illustrator



Video Page

Testing the Prototype

The prototype was extensively tested personally for flaws in functionality; and by random groups of people as well for the chance identification of previously unrecognized faults; for valuable thoughts on the visuals of the application; along with any other feedback or constructive criticism that could possibly prove vital to improvements made towards the construction of the final application.

Testing Stage

Test Strategy

Method of White Box Testing and Black Box Testing will be used for swifter fault identification and resolution of any faults as well as potential improvements that could be made

Ensuring Application Operates as Specified

Conducted separate checks on whether each and every element implemented into the multimedia application worked as intended and made minor tweaks to transition timings and other components where necessary

Interface Element	Expected Result	Actual Result
Product Images	Continually transitions on loop in Home Page; In Scenes 2 - 4 Image relevant to Product Page is displayed in a stationary manner	Success
Labeled Product Buttons	On click takes to Product Page relevant to Button Label;	Success
Background Music	Plays on loop in all scenes except for Scene 5	Success
Click Sound	Plays on all button clicks	Success
“Home” Button	On click takes to Home Page; also pauses video when clicked in Scene 5 and plays background music on Home Page	Success
“Our Vision” Button	On click takes to Scene 5; also pauses background music on Home Page and autoplays video when clicked in Scene 5	Success

Usability of the Application

The usability of the application was successfully tested for through the effective use control groups. Strangers from these groups were told to try out and perform tasks using the final multimedia application and were asked for feedback on the overall application respective of the client's requirements. These experiences were then recorded down along with any suggestions. Once tallied in, the overall satisfaction of the entire experience with the application and its usability proved to be remarkably positive.

Evaluation of Application against Client and User Requirements

Successfully created a multimedia application as requested by the client, Sunnyhill Plantations, that highlights and showcases their unique range of premium and green tea flavours along with user friendly page navigation tools in strategic locations for easy access for their users throughout the entire multimedia application.

Revision of the Application

The multimedia application consists of five different scenes with Sunnyhill's Premium Quality Green Tea Product Images animated under the title on the Home Page (scene 1) to create the effect of a transition from one product to another in a loop. Adding to this is an aesthetic image that resides in the background which is used as a backdrop to bring out the other elements on the Home Page. Also On the same Home Page are four navigational buttons with each of the first three buttons leading user's into one of the three Premium Product Pages (scenes 2-4), respective to their Button Labels. Each of the Product Pages (scenes 2-4) contain descriptive texts that give users information and a general idea of what the product is and what it would look like; its packaging and design. All this information would reside to the left side of the product title with the Product Image respective to its Product Page right under it; displayed in a stationary manner. This layout is the same for all Product Pages (scenes 2-4) and is solely kept that way to visually appeal to all users. The Final Scene consists of a Video empowering Sunnyhill's Vision for the future of the Tea Industry and the journey the company wishes to take its consumers on with every sip. The Video has been programmed to auto-play as the user is brought to the Vision Page (scene 5) to create the effect of the viewer having been entrusted with a core memory of the heart of the company and its driving force. Background Music has been incorporated into the entire multimedia application and has been programmed to auto-play to heighten the whole Premium feel users will be experiencing and has been looped to make sure that the experience isn't short-lived. A Navigational Home Button is placed at the bottom left of all pages exclusive of the Home Page (scenes 2-5) as its sole functionality is to lead users to the Home Page. However the Home Button in the Vision Page (scene 5) has been programmed through the ActionScript to stop Video playback on click and start the Background Music playback as the user is taken back to the Home Page (scene 1).