# **Assignment Phases**

This project assignment is divided into three (3) phases, each of which requires you to demonstrate your understanding of Scalable Vector Graphics (SVG), how to create SVG designs, how to develop an animated interactive User Interface (UI), how to embed SVG with HTML, CSS, and how to use JavaScript libraries for interaction. You will also design and develop a VR website utilizing Web VR frameworks and publish your work online.

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| Phase 2 |

* Design a layout plan for a VR website, illustrate your ideas for the VR website explaining various element and attributes applied using a VR JS library
* Design and develop three (3) webpages as follows:
  1. Static VR SVG scene using primitive SVG shapes, textures and lights,
  2. Animated VR scene using primitive SVG shapes, textures and lights,
  3. Interactive animation VR scene using primitive SVG shapes, textures and lights,
  4. Integrating a video in a VR environment.

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## ***SE3.3-Create an SVG animated logo and describe Scripting calculations and line of animation used. 10 Marks***

You are required to create a VR logo to place in each VR scene.

To complete task **SE3.3** you need to:

* Create a logo with ADOBE illustrator or any other vector tool and adapt it for VR environment integrating it with primitive shapes. Place the logo in each of your VR web pages.

**5 Marks □**

Create a video tutorial in ADOBE illustrator or any other vector tools you used to create the logo and publish it online in a VR environment.

*Note the video tutorial can be part of your VR website in one of the three (3) VR web pages.*

**3 Marks □**

* Explain how you have integrated the logo with primitive shapes to adapt in a VR environment.

**I put the svg in the body as I did for the font webpage, then in the css I put the svg as z-index : 2 to be on top of the virtual reality. I have everything explained in the video.**

*Note this can also be a video explanation.*

**2 Marks □**

**AA3.4- Produce a prototype to visualise an interactive animation project**

## **7 Marks.**

Create a VR website producing three (3) VR web pages. You are free to choose any subject you want. Note that any subject or content that is considered offensive will not be tolerated or approved and will result in your assignment being failed.

See details below:

To complete **AA3.4** you are required to:

1. **Webpage 1 -** Design and develop a VR scene that contains at least three (3) primitive shapes adding:   
   * Background
   * Ground
   * Colour and rotation properties.
   * Interaction

**1 Mark □**

1. **Webpage 2 -** Design and develop a VR scene that contains at least three (3) primitive shapes adding:   
   * Background
   * Ground
   * Tweaking lighting
   * Texture
   * Animation
   * Interaction

**2 Mark □**

1. **Webpage 3 -** Design and develop a VR scene that contains at least three (3) primitive shapes adding:
   * Background
   * Ground
   * Tweaking lighting
   * Texture
   * Animation
   * Interaction
   * Video

**4 Mark □**

***SE4.1-Argue the functionalities of the project and the development of specific techniques applied. 10 Marks***

You are asked to produce a report based on evidence of the work completed to develop your VR website. To complete **SE4.1**, you must:

* Describe at least **five (5)** interactive functionalities applied to the VR webpages you have designed and developed,

**My five interactive functionalities are :The first one is :when the user visit my website, there will be 3 buttons: the home button, menu button and video button. When they press on one of them, it will take them to another landing page that is a virtual reality page.**

**Second interactive function: when the user press on the home button, the website will take you to a virtual reality page that have a prototype of my restaurant under the moonlight. The interactivity is to look around my restaurant.**

**Third interactive function: when the user press on the menu button it will take you to a virtual reality page that have a menu. The interactivity is to put the cursor on the white box to make the menu visible.**

**Fourth interactive function: when the user press on the last button it will take you to another virtual reality page that have a video explaining how I did the svg logo and how I place it on every virtual reality pages. The interactivity is that the user needs to put the cursor on the play button to start the video.**

**Fifth interactive function: This is also part of the video. When the user needs to pause the video, it just needs to put the cursor on the pause button to pause it.**

**3 Marks □**

* Explain at least **five (5)** HTML and CSS animation properties and attributes used to develop the interactive front-end design,

**For my front-end design I did an animation logo. I animate the stroke to move around the shape and I also need an animation with transform to move the bee. I animate this by use the @keyframe in css.**

**The second animation I did on the buttons. Whenever the user hover on the buttons, they will grow a bit. I used “onmouseover /onmouseout”**

**Third animation I did on the background. Whenever the user presses on my logo, the background will animate. (I used points)**

**Fourth animation I did it on the title. I used transformY in css to make it move a bit downward.**

**3 Marks □**

* Which event listeners components, animation events and audio or video components you have decided to use and why.List at least two reasons for

each.

**4 Marks □**

## ***SE4.2- Appraise critically the project presented. 10 Marks***

You are requested to present an overall report of your project assignment and its functionality. You are also requested to discuss improvements and recommendations.

To complete **SE4.2** you, must:

* Produce a presentation that explains the functionality of your dashboard and VR development such as functionality of animated item, interactivity, and strategy of code implementation,

**4 Marks □**

* Identify at least four (4) improvements that can be applied to your VR website

**3 Marks □**

* Present at least four (4) recommendations that demonstrate further development for a future research study related to SVG VR interactive animation, design, and development.

**3 Marks □**

Note: Not less than 1000 words for all the three (3) sections.

***KU4.3- Define strategies to further develop the project including recommendations 5 Marks***

You are asked to present a strategic plan for further studies about Web VR development. To complete KU4.3, you need to:

1. Illustrate a strategic plan to create a VR scene for a VR educational game.   
   **3 Mark □**

Decide on what type of educational game

Do some talk with young children about educational games

Start creating the vr educational game

Test it and show it to someone who is related to you (young)

And see if they are interested or not

If interested

Upload it

If not

Fix it

1. Create a report providing a milestone project plan to complete one (1) VR game scene with recommendation and time of completion.

**2 Mark □**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Think | Plan | Process | Test it | Develop |
| 17 – 21 Jan |  |  |  |  |  |
| 24 – 28 Jan |  |  |  |  |  |
| 31 – 4 Feb |  |  |  |  |  |
| 7 – 11 Feb |  |  |  |  |  |
| 14 – 18 Feb |  |  |  |  |  |
| 21 – 25 Feb |  |  |  |  |  |

<https://danicafiteniii.000webhostapp.com/index.html>