University of Lethbridge
Faculty of Fine Arts
Department of New Media

Assignment 3 – Dynamic World

DUE: 8 p.m., December 4, 2021

Description

Assignment 3 requires producing with Processing an active design environment offering aesthetic experiences for a user in interaction with your system. It is also possible to design the interactive environment in tandem with a narrative development. In any case, the visual design of this world remains of primary importance for this assignment.

The interactive world can be designed as an abstract space, it can be figurative, or it can combine abstract elements with figurative elements if such combinations make sense from the point of view of your design.

The output from this project must be a Processing sketch (canvas size: **1920 X 1080**), which can run live to demonstrate your design ideas and/or your narrative.

In addition, like for the previous assignment, you must generate a movie (movie resolution: **1920 x 1080**) from your Processing sketch. This movie must demonstrate the visual aesthetics and functionality (interactivity) of your design.

Delivery

Delivery in the Class folder: Place the entire delivery in a folder named Assign03_Dynamic World.
Place this folder in your class folder by the due date/time.

Deliverables:

(60%) The processing sketch in the correct sketch folder.
The Processing sketch must be functional when running live during class time. Please name your Processing sketch: **DynamicWorld.pde.**

The Processing sketch must include:

1. At least two or three 3D objects (boxes, spheres, cameras, light(s) etc.). A rectangle that can be manipulated in 3D space can be considered a 3D object. Please note that all the rest of the sketch can be in 2D if you prefer so. You can also create a world that is entirely or to a large degree based on 3D content, which can be abstract or figurative.

2. Image processing at pixel level (examples have been provided in class).

3. At least one object called as an instance of a class created by you.

4. At least 4 different interactive events (mouse button and/or keyboard generated events) must be included in your Processing sketch.

5. Modular programming:
   As much as possible, the Processing sketch must be **modular** and the functionality of the sketch should be easy to understand at a glance from draw(). This means that, whenever possible, the code must be based on functions and classes.

- (10%) Comments inserted into the Processing code: The Processing sketch must include satisfactory comments so that anyone can easily understand how your code functions to achieve your design goals. At least, the following comments must be included:

  - A comment at the beginning of each sketch must include:
    - **Your Name**.
    - **The Title** of the Dynamic World piece.
    - **A Summary** of what the respective sketch is doing.

  - Comments inserted into the code explaining what various parts of the code are doing. In this sense, each function must be preceded by a short comment explaining what that function does.

- (10%) A text document explaining your Processing sketch:
  - Explain if the sketch is intended as a pure art/design piece or as a narrative piece.
  - In case a narrative is intended, a summary of the narrative development must be provided.
  - The visual design concept of your Dynamic World must be summarized.
  - This text document must be brief and to the point (no essay is expected). It can be in point form. You can use this as basis for your oral presentation.

    Please name this text document: **DynamicWorld_YourName.docx**

- (10%) A short movie: Like for the previous assignment, using the saveFrame() function, please save frames from the running Processing sketch and then generate a movie from these frames. Please name this movie: **DynamicWorld_YourName.mp4**.

Critique **(20%)**

A critique is scheduled during the first class following the due date. Please include in your oral presentation the following:

- A discussion of the visual design of the world and of the narrative (if you have a narrative piece) as related to your project.

- Discuss how the code is organized to produce the planned results.
  You should not explain in excessive detail all aspects of the code. Instead, explain broadly how the code is organized (for example: what functions and objects you have created and how you use these to generate the world).

- Discuss the interactivity implemented through your code and how it engages the user.

- Run the sketch live in class.