

University of
Lethbridge



Faculty of Fine Arts
Department of New Media

Assignment 2 – Generative Art

DUE: 8 p.m., November 6, 2023

Description

This assignment requires creating with Processing a generative art/design piece. This must include animation and/or video and interactivity. The animation and/or video included in this project must be your own and not borrowed from other sources.

The purpose of this project is to create an interactive space of changing forms that evolve through input from the user. User interactivity must be based on mouse and/or keyboard events.

The generative art piece can be abstract, it can be figurative, or it can combine abstract elements with figurative elements if such combinations make sense from a design standpoint. The generative art piece can mainly offer an aesthetic experience, but it may also include some form of narrative if you prefer.

The output from this project must be a Processing sketch (canvas size: **1920 x 1080**, which must run live to demonstrate your design idea. In addition, you must generate a movie from this project.

Optional: You are encouraged to explore the possibility of making your generative art piece a space suggestive of Indigenous culture, history, and/or current life. For this, you can research on your own Indigenous culture and/ or history, select elements of colour symbolism or create on your own visual motifs so that you can suggest an Indigenous space or narrative. This must be done within the general guidelines of this assignment. A 3% bonus will be added to your mark for this assignment for your additional research on Indigenous topics.

Delivery

You must deliver:

(30%) **The processing sketch folder.** The Processing sketch must be functional when running live during class time. Please name your Processing sketch:

Assign2_YourName.pde

Requirements:

- **The code must be functional and free of bugs.** None of the other requirements make sense if you code is not functional.
- **Modular programming:**
As much as possible, the Processing sketch must be modular and the functionality of the sketch should be easy to determine from the draw() function.
- **Minimum four functions created by you:**
In addition to the draw() and setup() functions, the Processing sketch must include **at least four other functions created by you.**
- **At least 4 different interactive events** (mouse button and keyboard generated events) must be included in your Processing sketch.

- **(15%) Comments inserted into the Processing code:** The Processing sketch must include satisfactory comments so that anyone can easily understand how the code functions to achieve your design goals.

The following comments must be included in your sketch:

- **A comment at the beginning** of each sketch must include:
 - **Your Name.**
 - **The Title** of the generative art piece.
 - **A Brief Summary** of what the respective sketch is doing and what interactivity is included, so that the sketch can be easily tested and assessed knowing how it is supposed to work.
- **Comments inserted into the code** explaining what various parts of the code are doing. In this sense, each function must be preceded by a comment explaining what that function does. In addition, whenever you have a block of code that performs a certain operation, it is expected that a comment explains what that particular block of code is doing.
- **(15%) A text document explaining your Processing sketch as follows:** What kind of aesthetic experience is offering and how this has been designed (visual composition, color design, use of other elements of design). In case a narrative is intended, a summary of the narrative development must be provided. Please name this text document:
[Assign2_YourName.docx](#) or [Assign2_YourName.txt](#)
- **(20%) A short movie:** Using the `saveFrame()` function, please save frames from the running Processing sketch and then generate a movie from these frames. Please name this movie:
[assign2_YourName.mp4](#).
Movie resolution: 1920 x 1080.

The delivery must be made in the **Class Folder**

- Please place the entire delivery as described above in a folder named [Assign02_YourName](#).
- Please make sure the organization inside this folder and the file and folder naming conventions are correctly followed.
- Deliver your assignment in your **class folder** by the due date.

NOTE: The time stamp on your files is considered the date/time of your delivery. Please be careful and don't access by mistake any part of your delivery after the due date. This is because this last time of access will be considered the delivery time and date.

Critique (20%)

Time/Date: A critique is scheduled during the first class following the due date.

Duration of your oral presentation: 5-6 minutes

You must succinctly present to the class the following:

- **Discuss the visual composition(s), aesthetics,** and/or **narrative** as related to your project.
- **Discuss how the code is designed and organized** to produce planned results.
We don't need all the details in the code to be explained in class. Just explain broadly your approach to programming with Processing to produce the generative art piece.
Please be aware that you may receive questions from the class or from the instructor about any part of the code that you will run during class time.
- **Run the sketch(s)** live in class.
It is not acceptable to try debugging the code during the class presentation. Please make sure you test your code on our new media lab computers well in advance of the oral presentation.