WI21 ITGM 220 CORE PRINCIPLE: PROGRAMMING

ASSIGNMENT 01

A1. Abstract Self-Portraits (15%)

Learning Outcomes

After completing this Assignment, students will be able to:

- Break down complex problems into steps.
- Create a plan for a programming project.
- Become familiar with the programming environment.

Key Skills

1. Set up a Workstation environment. Backup and Zip project files.
2. Basic operation of Processing.
3. Mastering shape functions and fill colors to produce the intended result
4. Beginning to learn good practices of code structure, comments, and formatting

Overview

You will investigate abstract self-portraits and collect images for reference. Using a picture of yourself, draw an abstract self-portrait in your sketchbook and render in color. Then plan how you are going to draw it out in Processing.

Requirements

1. Student's (creator) name must be clearly viewable on the top/bottom/corner of the work.

Procedure

1. Collect several abstract self-portraits and images for reference and create a mood board.
2. Hand-sketch an abstract self-portrait (in color if needed) in your sketchbook. Keep in mind you will be using primitive shapes and lines for your design. Evolve your design by sketching out the next version. Do not erase old sketches as you would need them for documentations.
3. Based on your final hand-drawn sketch, create a plan for your self-portrait in Processing.
    - How will your shapes be layered?
    - What colors will you use?
    - In what sequence will you draw the shapes?
4. Write the code to create your self-portrait in Processing.
    - Stage Size Range: (500 x 500 px (smallest) - 1200 x 800 px(largest)
    - Use Minimal 1 function to automate your tasks.
    - Maintain good code structure as shown in class (Bracket Placements, Comments, Headings, Variable Names)
5. Create Project Presentation Deck.
    - Consult Sample Project Documentation Structure Guide Below

Submission and Due Date

1. Create an assignment report by Exporting a PDF of your presentation deck.
2. Properly ZIP your saved project.
    - Double Check one last time and make sure the project runs smoothly..
    - Make sure you have included the complete folder content, along with your assignment report pdf.
    - Remember the project might NOT execute if missing essential pngs / sound / libraries.
3. Name your submission zip file correctly:
    - WI21_ITGM220_FirstNameLastName_portrait_project.zip
    - for example, John Doe would name the file "WI21_ITGM220_JohnDoe_portrait_project.zip
4. Submit this file via the Assessment link in the course menu **before** class starts (8:00 p.m. EST/EDT) on due day
5. Post your 1) self-portrait design drawing + 2) Processing rendered self-portrait for peer review to the appropriate module discussion forum by 11:59 p.m. U.S. EST/EDT on due date.

Grading

- This Assignment is worth 15 percent of your overall grade in this class.

- Your Assignment will be graded according to the criteria specified in the Abstract Self-Portrait Rubric below.
- Detailed Rubric Explanation can be found on BB> Course Work Section.

Mood Board	Hand-Drawn Sketches	Use of Drawing Functions	Shapes and Lines	Documentation	Generated Sketch
10	20	20	30	10	10

Recommended Project Documentation Structure

HOW	- Document Size: Portrait. (1920 x 1080) or A4 - Presentation Deck: I recommend using presentation tools to create: Keynote, Powerpoint, Google Slides etc. - Export Format: PDF (No Doc / Txt)
WHO	- Reviewer Analysis: Professor will be your primary reviewer. - Presentation: Project will be presented in class via workstations. Students are expected to use a presentation deck to discuss projects.
WHAT	● **TITLE PAGE** (1 page) ○ Student Name, Class Info, Assignment Number. ○ Give your work an interesting title. “HOW I LOOK WHEN I SEE MY BEST FRIEND” “ANGRY JIMMY” ● **IDEA / RESEARCH** (1 - 3 pages) ○ Write a statement explaining what you are planning to do. ○ Cite influential sources as your inspirations: Painting, photos, movies, poetry etc. ○ Any relevant pages taken from your sketchbooks. ● **SOLUTION / EVOLUTION** (1 - 3 page) ○ Pencil / Digital Drawing of your intended Results. ○ Post discarded / older ideas as well. ○ Annotate for clarifications. ● **WORK IN PROGRESS** (1 page)

	○ Discuss the evolution of the project by showing at least 1 in-progress screenshot. (Just grab the whole screen) ○ You can begin with Pseudocode or a flow chart, but not necessary. ● **FINAL OUTCOME** (1+ page) ○ Final Output of the code when executed in Processing. ○ Additional pages explaining interesting details (use zoom in) or color variations.
WHEN	Assignment Submitted to Blackboard before 8:00 pm EST on due day or be considered LATE.

Expectation of an A Assignment:

Before you declare your project finished and ready to deliver, check against the following criterias. Project which qualify for the grade of A should meet most if not all of the following:

Moodboard	Written description of concept includes all features to be implemented. At least 5 different visual references are used. Sketches are included and clearly illustrate the desired visual output. All references and sketches are clearly and individually annotated.
Hand-Drawn Sketches	The final render communicated intended color palette, proportion and shape motifs. The design contains more than enough details to form an aesthetically sound abstract portrait.
Drawing Functions	Processing sketch uses 4 or more different types of drawing functions effectively. The sketch is complete as all the elements descriptive in the design document were implemented in the final processing code.
Shapes and Lines	Processing sketch draws at least 25 shapes and lines. Their usage conforms to the schematics laid out in the design documents, and thus directly contributes to the pleasing aesthetics of the final output.
Documentation	Documentations are well organized in a single file. Communicated the development of concept, workflow, code snippets and final output. Materials are organized professionally and are ready to be shared on social media. Ready to be included in the portfolio.
Generated Sketch	The processing output executed the design successfully. The code demonstrates a mastery of programming concepts covered in the unit. The final outcome is polished, aesthetically sound, and ready for portfolio purposes.