Creative Coding 1 . DATT 2400

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Course Github repository:
https://github.com/atarilover123/DATT-2400-CreativeCoding-I

Course calendar description

This course introduces students to writing computer code that is the basis for creative projects. As software now pervades all aspects of contemporary culture, artists and designers can significantly expand their creative palettes through knowledge of and experience with coding. By engaging with the computer more directly students explore the potentials of software to create and form systems and environments. In course projects, students will address contemporary aesthetic and conceptual concerns, and develop their works in a current creative coding environment with coding concepts explored transferable to a range of related development environments.

This course will be delivered through a combination of:

Weekly lectures – Showcasing the medium of creative coding and spotlighting techniques, movements and artists in the field.

Weekly labs – Putting creative coding techniques into practice through weekly development and experimentation.

Required tools

The practical element of this course will be taught using the creative coding environments Processing and p5.js.

Processing – https://processing.org/

p5.js – https://p5js.org/

Submissions and class resources

Students will create a Github account to upload weekly sketches and notes. Tests and quizzes will be conducted via Moodle.

Github – https://github.com/

Moodle – https://moodle.yorku.ca/

Topics and concepts

Topics include introduction to fundamental coding techniques, utilization of mathematical functions as a practical utility and creative tool, interactivity, animation and web based art. Students will practically apply these concepts in the creation of 3 creative coding projects.

Learning outcomes with examples

At the completion of this course, students will be able to:

- Address contemporary aesthetic and conceptual concerns at an introductory level through creative code-based artwork creation.
- Employ fundamental programming concepts.
- Write code to create systems and environments.
- Apply strategies and techniques for developing creative code based creative projects
- Discuss the range of ways that artists integrate creative coding into their processes.

Graded assessment

- Quizzes: 20%
- In class contributions: 10%

- Assignment 1: 20%
- Assignment 2: 20%
- Assignment 3: 30%

Quizzes will focus on code and artistic content from labs and lectures.

In class contributions from participation in class discussions, in class coding tasks and creative experiments.

Assignment 1 create a static piece of generative art, using loops, two-dimensional geometry and simple mathematical functions.

Assignment 2 computationally generated animated project inspired by computational gif artists such as Bees & Bombs.

Assignment 3 the creation of a final project combining generative and interactive techniques to make a screen based art installation or game.

Module breakdown

Weeks 1 - 3, Introduction to creative coding and the strategies of generative art

Week 4, Rendering creative coding for digital and physical presentation

Week 5 - 7, Computational animations

Weeks 8 - 10, Interactivity, rules, sensors and game logic

Weeks 11 -12, Developing final projects

Additional information

Academic policies/information

Last date to drop a fall term (F) course without receiving a grade: November 11, 2022

Last date to drop a winter term (W) course without receiving a grade: March 17, 2023

Last date to drop a full year (Y) course without receiving a grade: February 10, 2023

Senate Academic Standards, Curriculum and Pedagogy Committee (ASCP) provides information that includes:

Research Ethics: https://www.yorku.ca/research/research-ethics/

Academic Honesty: https://www.yorku.ca/secretariat/policies/policies/academic-honesty-senate-policy-on/

Student Conduct: https://oscr.students.yorku.ca/student-conduct

Accessibility: https://accessibility.students.yorku.ca/

Academic Integrity: https://www.yorku.ca/unit/vpacad/academic-integrity/

Religious Observance: https://rights.info.yorku.ca/accommodating-creed-religion-a-guide-for-students-faculty-and-staff/

Academic Accommodation: https://accessibility.students.yorku.ca/academic-support- accomodations

Grading Scheme: https://calendars.students.yorku.ca/2022-2023/grades-and-grading- schemes

• Important University Sessional Dates (you will find classes and exams start/end dates, reading/co-curricular week, add/drop deadlines, holidays, University closings and more.

https://registrar.yorku.ca/enrol/dates/2022-2023/fall-winter

Manage my Academic record

https://myacademicrecord.students.yorku.ca/degree-progress-report

• "20% Rule"

No examinations or tests collectively worth more than 20% of the final grade in a course will be given during the final 14 calendar days of classes in a term. The exceptions to the rule are classes which regularly meet Friday evenings or on Saturday and/or Sunday at any time, and courses offered in the compressed summer terms.

Final course grades may be adjusted to conform to Program or Faculty grades distribution profiles.