UAL Creative Computing Institute Diploma
Unit 1: "Creative coding and creative computing frameworks"
Assessment 2: Practical Exam
Monday 27th January, 2020.

Duration:

120 minutes or 150 minutes for students with ISAs.

Directions:

Name (PRINT IN CAPITALS):

RETURN THIS EXAM TO ME WITH YOUR CODE!

You may use the internet, but do not talk, confer with others or cheat. You are only cheating yourself. Otherwise, standard exam conditions apply. Please work in silence to avoid disturbing others.

Find the more information brief on the following pages. The **examinable brief** is this:

"Design a *visual clock* that displays a novel or unconventional representation of the time.

Your clock should appear different at all times of the day, and it should repeat its appearance every 24 hours (or other relevant cycle, if desired).

Challenge yourself to convey the time *without* numerals."

I.e. make a visual clock that **doesn't** use text or numerals to show the time. The "Variations & Suggestions" section is **just** that – some extra inspiration. The **examinable brief** is above.

You **must** use the p5.js online editor to complete this exam:

https://editor.p5js.org

You **must** log in to the editor to enable you to save your code **throughout** the exam **and** at the end of the exam. This is an open book exam, so please make use of the p5.js website to help you.

The reference section of the website has several functions that will be **very** helpful in making your project:

https://p5js.org/reference/

Remember to **build a skateboard** before attempting a bicycle, motorbike or car! **Make the most basic clock you can** *before* iterating and making it more complicated/beautiful/strange.

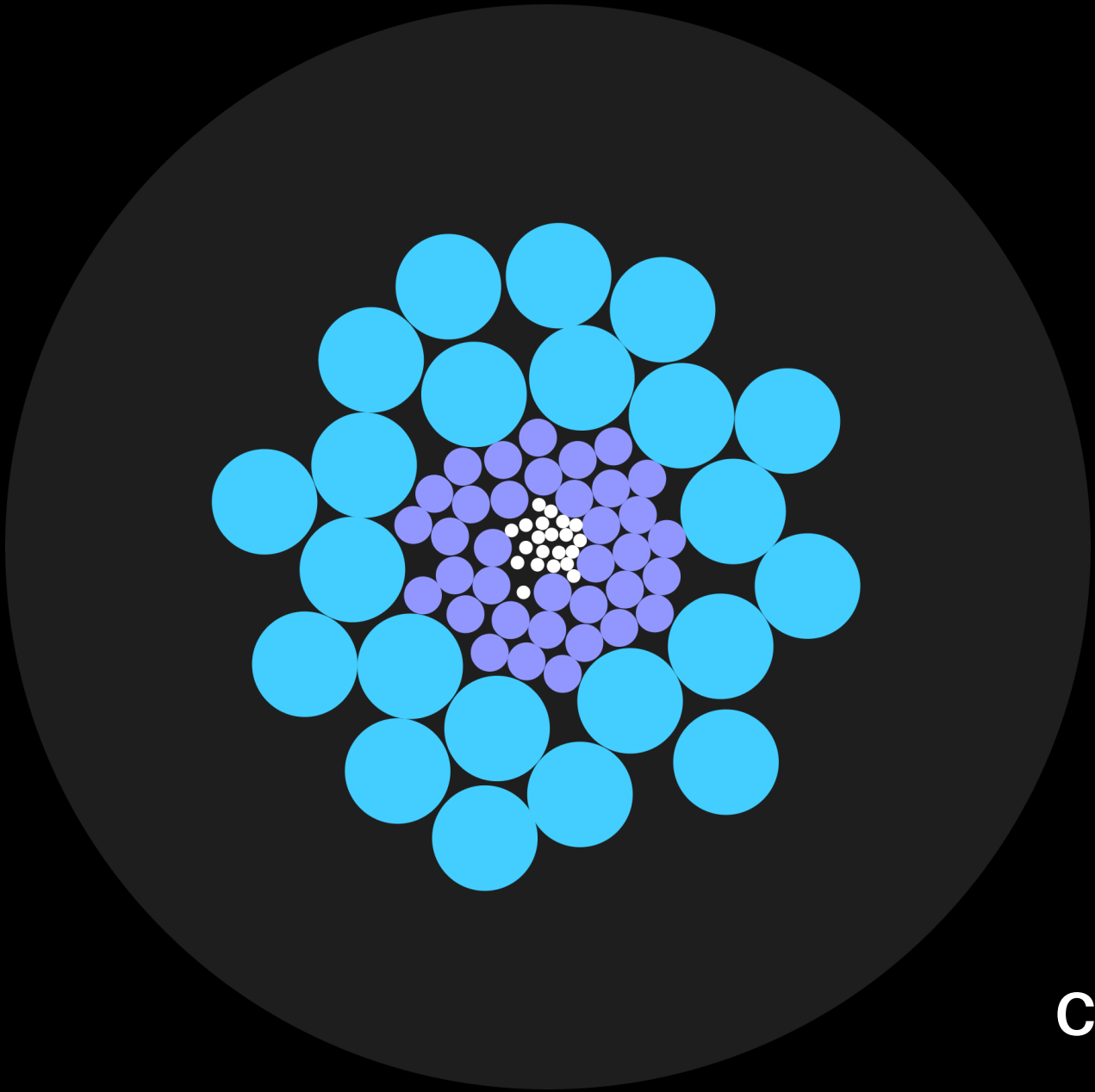
Remember to **comment your code**, for yourself and your examiner. You **can and should use paper and pens** to sketch out your idea before you start to code.

At the end of the exam, use the save command in the file menu of the p5.js online editor to save a complete zip of your p5js sketch to your desktop. Then rename your zip file to something like:

2020_01_27_YourFullNameUnit1Assessment2PracticalExam.zip

I will provide a memory stick for you to copy your zip file onto at the end of the exam.

Good luck!



Clock

Clock

Representing time

Brief

Design a "visual clock" that displays a novel or unconventional representation of the time. Your clock should appear different at all times of the day, and it should repeat its appearance every 24 hours (or other relevant cycle, if desired). Challenge yourself to convey the time without numerals.

You are encouraged to question basic assumptions about how time is mediated and represented. Ponder concepts like biological time (chronobiology), ultradian and infradian rhythms, solar and lunar cycles, celestial time and sidereal time, decimal time, metric time, geological time, historical time, psychological time, and subjective time. Inform your design by reading about the history of timekeeping systems and devices, and their transformative effects on society.

Learning Objectives

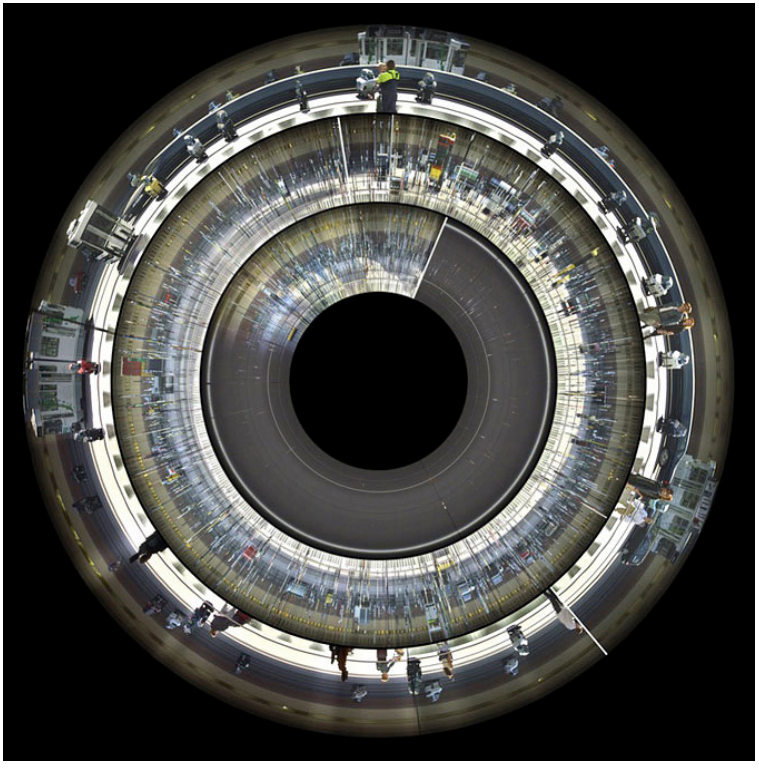
Students can use this assignment to:
• Become acquainted with the history of systems and devices for timekeeping
• Devise technologies and graphic concepts for representing time that go beyond conventional methods of visualization and mediation
• Refine craft skills through the use of programming to control shape, color, form, and motion

Variations & Suggestions

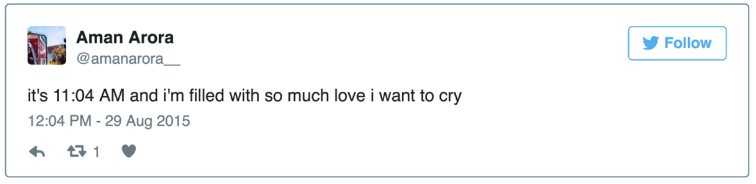
• Feel free to experiment with any of the tools at your disposal, including transparency, color, sound, dynamism, and physical actuation. Reactivity to the cursor is optional.
• Avoid using Roman, Arabic, or Chinese numerals, but make the time readable through other means, such as by visualizing numeric bit patterns, or using iteration to present countable graphic elements.
• Make a clock which operates at a much slower time scale, changing over months, seasons, or human lifespans.
• Develop your clock for a portable or wearable device, such as a mobile phone, smart watch, fitness tracker, or other standalone computer with a miniature display. Consider incorporating data from your device's other sensors into your design, such as the user's image, movements, body temperature, or heartbeat.
• Free yourself from the desktop or laptop screen, and design your clock for a context of your own choosing. If you could place your clock anywhere, where would it be? On the side of a building? In a piece of furniture? In a pocket? In someone's skin, as a digital tattoo? Include a drawing, rendering, or other mockup showing your clock as you imagine it *in situ.*

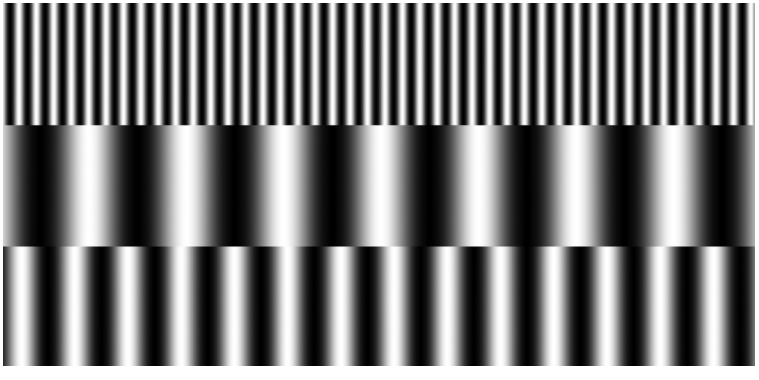
Making it Meaningful

Attempts to mark time stretch back many thousands of years, with some of the earliest timekeeping technologies being gnomons, sundials, water clocks, and lunar calendars. Even today's standard representation of time, with hours and minutes divided into 60 parts, is a legacy inherited from the ancient Sumerians, who used a sexagesimal counting system. The history of timekeeping is the history of a still unfolding relationship between technological developments and a social pressure for greater precision, accuracy, and synchronization. Every increase in our ability to precisely measure time has had a profound impact on our mastery of science, agriculture, navigation, communications, and as always, warcraft. Despite the widespread adoption of machinic standards, there are many other ways to understand time. Psychological time contracts and expands with attention; biological cycles affect our moods and behavior; geological or planetary rhythms can span millennia. In the twentieth century, Einstein's theory of relativity further upended our understanding of time, showing that it does not flow in a constant way, but rather in relation to the position from which it is measured—a possibly surprising return to the significance of the observer.

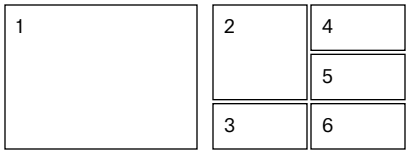



Carly Schaber
@Carly_Schaber
Follow
It's 11:04 AM and I want to go home.
12:03 PM - 3 Sep 2015
1
4


Aman Arora
@amanarora__
Follow
it's 11:04 AM and i'm filled with so much love i want to cry
12:04 PM - 29 Aug 2015
1




02
30
OCTOBER



Noteworthy Examples

1. Lee Byron's *Center Clock* (2007) presents the time as countable, bouncy circles. Every minute, sixty white "second" circles coalesce to form a new violet "minute" circle, and so on. *http://leebyron.com/centerclock/*

2. Using a slit-scan technique, Jussi Ängeslevä & Ross Cooper's *Last Clock* (2002) presents traces from a live video feed at three different time scales. *http://angesleva.iki.fi/art/last/*

3. In Golan Levin's *Banded Clock* (1999), the seconds, minutes and hours of the current time are represented as a series of striated bands. *http://www.flong.com/projects/clock/*

4. Studio Moniker's *All the Minutes* (2014) is a Twitter bot that retweets mentions of the current time. *https://twitter.com/alltheminutes*

5. Mark Formanek's *Standard Time* (2003) is a 24-hour performance in which 70 workers constantly construct and deconstruct a large wooden "digital" display of the current time. *http://www.standard-time.com/index_en.php*

6. *Ink Calendar* by Oscar Diaz (2009) uses the capillary action of ink spreading across paper to display the date.

Additional References

Biegert & Funk. *Qlocktwo.*
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Foer, Joshua. "A Minor History of Time Without Clocks". *Cabinet Magazine,* Issue 29, 2008.
Giffen, Daniel Craig. *Human Clock,* 2001.
Groom, Amelia. *Time (Documents of Contemporary Art.* MIT Press, 2013.
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HumansSince1982. *The Clock Clock.*
Levin, Golan. *Clocks in New Media.* 2016.
Lewis, Richard. "How Different Cultures Understand Time". *Business Insider,* 6/1/2014.
Maeda, John. *12 O'Clocks,* 1996.
Marclay, Christian. *The Clock,* 2010.
Morzier, Eric. *Horloge Tactile,* 2005.
Mulder, Sander. *Continue Time,* 2007.
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Nakamura, Yugo. *Industrious Clock,* 2001.
Paterson, Katie. *Time Pieces,* 2014. *http://www.katiepaterson.org/timepieces/*
Saqoosha. *Sonicode Clock,* 2008.
Tseng, Yen-Wen. *Hand in Hand.*