## THEME 2 BASIC ANIMATION

### Theme information

### Modules:

- 1. JavaScript, part 1
- 2. Character design, storyline
- 3. JavaScript, part 2
- 4. Group assignment
- 5. Group assignment continued, exhibition, test, feedback

## Total number of ECTS-points for the theme: 7.5 Theme coordinator (gsc)

### Theme description

The module aims at introducing basic animation, concepts from classic storytelling and character design as well enhanced interactivity through Javascript.

The theme will end out with a small set of interactive animations, an interactive story designed for a specific target group, or a small game. The production will be tested on different stages of development.

The final module is a group project, where the students, for the second time, will try working on a bigger project in groups. There will be fundamental teaching in group processes and iterative development

### Criteria for participation

The students must have a general understanding of HTML, CSS communication theories and be able to produce digital illustrations.

The students must have the necessary software to produce the illustrations, and a web host to publish their material online.

### The theme's objectives and learning goals

### Interaction design

Knowledge see earlier themes.

#### Skills

skills needed to:

- use key methods for modelling and structuring by developing simple digital user interfaces in a multimedia production.

- use key technologies and methods of version control for a multimedia production.

### Competencies:

none yet.

### Here you'll learn:

- -Theories and methods used include, pseudo-code and sequence diagrams.
- -The theme focus is primarily on client side applications, server side might be touched though, as an example of what JavaScript is capable of, external (server side) APIs might be introduced as teaser for the more advanced students
- -Procedural programming, browser's developer tools, and code flow will be covered, with an emphasis on the students being able to produce their own code
- -Controlling and using videos, audio and images of various types

### **Visualisation:**

Knowledge:

see earlier themes

Skills:

skills needed to:

-use central design processes for multimedia production, including documentation of the design process

### Competencies:

none yet

### Here you'll learn:

- -Drawing graphics with a consistent visual expression and a specific style
- -Sketching and drawing of graphics in Illustrator and Photoshop, that are open for further editing and used in a multimedia production
- -Preparation of storyboard, dramaturgical elements, character sheets and animation principles as the fundament for design decisions in the team and feedback from the teachers.
- -Visual research and inspiration online etc

### Communication:

Knowledge:

see earlier themes

Skills:

skills needed to:

-plan and conduct user testing of a multimedia production.

# Competencies: none yet

Here you'll learn:

-to work with story using the narrative curve and to take the target group into consideration.

### **Business:**

Knowledge:

development-based knowledge and an understanding of:

-development methods for multimedia production

### Skills:

skills needed to:

-use key theories, methods and tools for managing a simple multimedia production.

### Competencies:

none yet

Here you'll learn:

-Use of Kanban chart

### Working processes and teaching methods for the theme

### Working processes and (teaching) methods for module 1:

Module 1 (and module 3) relies heavily on flipped learning. The students prepare using online tutorials and lessons (such as freecodecamp.com). Classes will contain short lectures each day, with the rest of the time used for individual feedback.

### What

JavaScript combined with HTML/CSS (DOM).

- Built-in & custom functions
- Events & EventListeners
- querySelector
- classList
- Variables
- Sequence diagrams
- Pseudo code

### CSS

- setTimeout / setInterval
- Controlling audio
- Advanced selectors
- Transitions (revisited)
- Transform
- Animations
- Positioning
- SVG

### HTML

• Adding SVG files to the site, audio element.

### How

The module will, apart from traditional teaching, use a lot of external, self-teaching resources, among others:

- freecodecamp.com, the JavaScript track as the primary source
- Lynda.com as secondary
- Various interactive tests, such as <a href="http://flukeout.github.io/">http://flukeout.github.io/</a>

### Working processes and (teaching) methods for module 2:

### What

Drawing of visual universe and characters in illustrator.

Hand drawing, Sketching, Character sheets, psychological profiles, dramaturgical elements, the narrative curve.

### How

Short instructions followed up by individual work on the computers. The module will use a lot of external, self-teaching resources, among others:

• Lynda.com

### Working processes and (teaching) methods for module 3:

### What

### JavaScript

- Logical control structures (if/else)
- Loops
- querySelectorAll
- createElement
- state-variables
- JavaScript plugins
- Objects
- Controlling video and audio

#### How

The module will, apart from traditional teaching, use a lot of external, self-teaching resources, among others:

- freecodecamp.com, the JavaScript track as the primary source
- Lynda.com as secondary

### Working processes and (teaching) methods for module 4 and 5:

Group project week with minimal teaching. The students mostly implement the processes and skills learned through the precedent weeks.

#### What

Usability test (think-aloud-test)

Audio: simple record of narration and editing of the recorded audio. Group work fundamentals.

The students develop (in groups) an interactive production that follows a narrative curve using html, css and javascript.

### How

Short instructions followed up by work on the project backed up by coaching.

### Hand ins and feedback

02.01.01. Your github profile (like: https://github.com/meatkea/)

(3 April, 22:00 on Fronter): Approved/Not Approved

02.01.02. Link to simple animation (5 April, 22:00 on Fronter): A/NA

02.02.01 PDF to Final work (14 April, 22:00 on Fronter): A/NA

Style tile & Story idea

Story board & Work sheet

Link to Sprite sheet animation

02.03.01 Your freecodecamp name & handle (16 April, 22:00 on Fronter): A/NA

02.03.02 Interactive Animation (18 April, 22:00 on Fronter): A/NA

02.03.03 ProjectPool day 1 (19 April, 22:00 on Fronter): A/NA

02.03.04 ProjectPool day 2 (20 April, 22:00 on Fronter): A/NA

02.04.01 Personas collage (24 April, 22:00 on Fronter): A/NA

02.04.02 Story board (24 April, 22:00 on Fronter): A/NA

02.04.03 Summary of expert test (30 April, 22:00 on Fronter): A/NA

02.04.04 Link to final interactive production (4 May, 22:00 on Fronter): A/NA

02.04.05 Project documentation: screen cast (4 May, 22:00 on Fronter): A/NA

### **Case and Business contacts**

Contacts: New Nordic Youth ("Efterskole" with entrepreneurial focus). <a href="https://www.newnordicyouth.dk/">www.newnordicyouth.dk/</a>

The theme collaborates with the school for testing purposes.

### Assessment

Online questionnaire at the end of the theme, oral evaluation or A/NA in Fronter at the end of each modules.