

## CMGT Personal Portfolio Learning outcomes template v1.4

**Name: Nils Meijer**

**Student number: 466301**

*You need 2-4 learning outcomes for every personal portfolio. A learning outcome should represent 20-40 hours of work. Each Personal Portfolio module is 3 ECTS, every 1 ECTS is 28 hours. In total you need to spend approximately 84 hours on every Personal Portfolio module. That equals 1 day of work in every week of the term. Your portfolio item and critical reflection needs to represent this.*

*Please decide before starting if you want to connect your learning outcomes or work on unrelated outcomes. It's allowed to connect/align multiple learning outcomes across multiple Personal Portfolio modules, as long as it's clear what you learned and achieved for each separate one.*

### **Learning outcome 1**

"As an engineer looking for an internship and in need of a better portfolio website, I want to make use of & further improve/deepen my JavaScript programming capabilities (game mechanics, physics), by making a 2D platformer game, using Three.js, meant as an engagement tool for my portfolio website, so that I can eventually implement it into my portfolio website (separate from this course) and enter the industry with a proper-looking website and can convince potential employers to offer me an internship/job. I intend to spend around 42 hours on this learning goal.

**CMGT Competence(s):**

1. *Technical Research & Analysis*
2. *Designing & Prototyping*
3. *Testing & Rolling Out*
11. *Learning Ability & Reflectivity*

### **Learning outcome 2**

"As an engineer with experience in only 1 industry-used engine, I want to familiarize myself with the Unreal Engine, preferably UE5. I will make a simple FPS minigame, with one main mechanic and goal, using C++. This will result in a new portfolio piece, which shows I have gained experience in Unreal Engine. I intend to spend around 42 hours on this learning goal.

**CMGT Competence(s):**

1. *Technical Research & Analysis*
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**Describe how your learning activity corresponds with your learning outcome.**

Which assignment(s) and activities will you carry out to achieve your learning outcome?

### **Learning goal 1**

I will expand on the previous term's learning goal 1, where I practiced HTML/CSS/JavaScript (in a collaborative context). This term, I am planning to actually make a web-based game, using the JavaScript library "Three.js", and include better physics and actual game mechanics. This should all result in an interactive & functional portfolio platformer game. I will draw an UML diagram, which displays the hierarchy of the game.

	<p><b>Learning goal 2</b></p> <p>I will create a pre-code UML diagram, which I will follow to maintain a structured codebase, and create a small FPS minigame with one main mechanic and a simple goal.</p> <p>When all is finished, I will create an after-code UML diagram, to accurately display the program's structure and to gain insight in what improvements I made compared to the 1<sup>st</sup> UML diagram.</p>
<p><b>Which product(s) (or outcome(s)) will you work on to demonstrate the extent to which you have achieved your learning outcome? Describe what the essential conditions, necessary characteristics, and requirements of each product (outcome) should be?</b></p> <p>What is the least you must do to demonstrate that you have achieved your learning outcomes?</p>	<p><b>Learning goal 1</b></p> <p>I should have improved my JavaScript abilities even further, while keeping the codebase concise &amp; clean. The website should have a functional, without game-breaking bugs 2D platformer game. It should all portfolio items, and presented in the layout designed in last term.</p> <p><b>Learning goal 1</b></p> <p>I should have a functional FPS minigame, with one main mechanic and a simple goal.</p>
Describe your portfolio item(s):	<p>A playable web-based 2D platformer, with several game mechanics.</p> <p>An FPS minigame, with one main mechanic and one main goal, programmed in Unreal Engine 5 &amp; with C++.</p>
Which sources (literature, tools, books, blogs, specialist journals, video tutorials, keynote speeches, interviews, etc.) will you consult and why? Which software/hardware will you use?	<p><b>Learning goal 1</b></p> <p>StackOverflow, Visual Studio Code, Three.js library</p> <p><b>Learning goal 2</b></p> <p>Unreal Engine (+ documentation), YouTube tutorials/GDC talks, StackOverflow.</p>
<p><b>Previous Learning Outcomes</b></p> <p>Please paste the learning outcomes of modules here. Explain the relation with your current learning outcome and/or portfolio item, and or/ other CMGT modules.</p>	<p><b>Personal Portfolio (or other CMGT module): 1 Learning outcome:</b></p> <p><b>Learning goal 1</b></p> <p>"As an engineer looking for an internship and with limited knowledge of HTML, CSS, Javascript, I want to practice those elements to gain the capability of developing a properly running &amp; looking portfolio website, and create some mini-prototypes to demonstrate gained skills, and gather this knowledge in a reflection. I intend to spend around 42 hours.</p>

**Learning goal 2**

“As an engineer looking for an internship and with limited knowledge of what a website should contain, as well as knowledge on UI/UX design, I want to gather knowledge regarding those areas to gain the capability of designing (pleasing UI/UX) a relevant (important information should be present) portfolio website, and gather this knowledge in a reflection. I intend to spend around 42 hours.

**Short description of portfolio item:****Learning goal 1**

A collection of HTML/CSS/JavaScript prototypes, which were developed after answering a set of research questions (the basis for the prototypes).

**Learning goal 2**

The same as LO1, but this time it concerned the UI/UX design of a portfolio website (research questions + prototypes).

**Relation to current learning outcome: (if applicable) ...**

(Only applicable to learning goal 1) Last term I introduced myself to JavaScript by programming small prototypes, while this term, I will actually program a full game and deepen my JavaScript capabilities.