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| CMGT Personal Portfolio Learning outcomes template *(v1.6)* Name: Arvid van den Hoogen Student number: 494474 | |
| Write your SMART formulated learning goals here:  **Learning outcome 1:** "As a programmer looking to enter the game Industry,  I want to gain further Insight into procedural generation methods by Implementing a 2D Iteration of the Wave Collapse Function Algorithm using the Unity Engine, so that future employers can see that I have an advanced understanding of procedural generation methods."  CMGT Competence(s):  1. Technical research and analysis 3. Testing and rolling out 11. Learning ability and reflectivity  Hours: 30  **Learning outcome 2:** "As a programmer looking to enter the game Industry, I want to gain further Insight Into procedural generation methods by Implementing a 3D Iteration of the Wave Collapse Function Algorithm using the Unity Engine, so that future employers see that I have an advanced understanding of procedural generation methods."  CMGT Competence(s):  1. Technical research and analysis 3. Testing and rolling out 11. Learning ability and reflectivity  Hours: 50 | |
| **In depth description of the learning activities**   1. What do you want to learn? 2. What will the process be? How are you doing research, how will you be building, testing, and iterating? 3. How is this skill or knowledge important for your professional development? | 1: I want to learn the in-depth workings and implementation details of the Wave Collapse Function Algorithm in the context of procedural generation in both 2D and 3D settings within the Unity Engine.  2: I will start by deepening my understanding of the theoretical workings of the algorithm. Then I will investigate how this concept can be translated into Unity. After this I will start on creating an implementation in 2D space. First to get a simple iteration working in the engine, after which I will go back to clean up the code and do some minor optimizations. Once this is complete, I will move on to a 3D implementation.  3: Doing this will give me greater insight in procedural generation methods and allows me to improve at implementing complex algorithms into the Unity engine. |
| **The portfolio item**   1. Describe the portfolio item. What will be the exact numbers, qualities, and characteristics of your portfolio item? 2. Why is this portfolio item relevant for your portfolio? | 1: My portfolio item will be the Unity Project hosted on Github. The project will contain 2 scenes, one for the 2D implementation and one for the 3D implementation. Both implementations will have a base “Generate” function and a “Step-by-step” function.  2: This item will both show off my ability to work with complex algorithms and my competencies with procedural generation. |
| **Required input**   1. Which specific and suitable resources will you need access to? | I will be using various sources to investigate the algorithm (Youtube, Wikipedia, Forums), and will be using the Unity Engine for my implementation, Visual Studio as my IDE, and Fork as my git interface. |
| **Measuring goal achievement**   * How will you measure your current level of skill or knowledge on the subject you selected? * How much will you improve your level of skill or knowledge? * At the end of your project, how will you determine the degree to which you have improved your level of skill or knowledge? | A good measuring point for my current skill is my Procedural Art project in terms of writing algorithms. My knowledge of the subject is currently at being able to give a basic description.  These will be my reference points for measuring by how much I have improved. |
| **Previous Learning Outcomes**  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. | Procedural Art In this module, we learn about procedural generation algorithms as well as learning more about implementing complex algorithms. This hooks nicely into this personal portfolio, while still covering separate subject matters. |