Assessment Criteria

Full Time Courses – Games Programming

10343NAT Advanced Diploma of Professional Game Development

Title: Artificial Intelligence for Games

Assessment Details: (please refer to your Class Schedule for actual date)

Start Date: Week

Submission Milestone: Week

Assessment Milestone: Week

Assessable units of competency

ICAGAM404A – Apply artificial intelligence in game development

General description

For this assessment you are tasked with implementing Pathfinding and Artificial Intelligence (A.I.) behaviours for multiple agents within a game world.

Your game world must contain at least **two** distinct types of entities that make decisions to achieve some sort of goal. This goal must involve the need to find a path to a location within the game world and move towards it in a suitable manner in addition to any other goals.

The "game world" does not need to implement interactive game mechanics.

Before development of the application can begin you must write a short document detailing the decision making techniques to be used and a diagram of the logic behind the decisions that the entities will make. For example, a Behaviour Tree diagram of all behaviours and logic if a Behaviour Tree is the chosen method of implementing the decision-making process. The document must also describe the pathfinding technique chosen to be implemented.

A graphical framework will be provided to be able to display the game world.

Knowledge and skills

Listed here is the knowledge and skills you'll be learning and on which you will be assessed.

- An understanding of a broad knowledge base of artificial intelligence strategies.

- Ability to design and implement artificial intelligence strategies.

Evidence specifications

This is the specific evidence you must prepare for and present on assessment day to demonstrate you have competency in the above knowledge and skills. The evidence must conform to all the specific requirements listed below.

1. A.I. Plan Document

2. A.I. Game World Application

Your roles and responsibilities as a candidate

- Understand and feel comfortable with the assessment process
- Know what evidence you must provide during your assessment

- Take an active part in the assessment process
- Be ready for the assessment at the nominated time

Assessment rubric

This table defines exactly what is required to be successfully deemed competent.

Evidence	Definition of Competent for Artificial Intelligence for Games
1. A.I. Plan Document	Competence in the A.I. Plan Document task is defined as • Document submitted in PDF format that clearly states the • Decision making techniques chosen to be included in evidence task 2 • Diagrams detailing the decision logic • Pathfinding technique chosen to be included in evidence task 2 • Overview of the distinct entity types and their unique decision logic
2. A.I. Game World Application	Competence in the A.I. Game World Application task is defined as • Application submitted as a Release executable, including all assets necessary for running the application, that implements the features described in the General Description • Application demonstrates decision making and pathfinding techniques for at least two distinct entities • Source code submitted

Assessment instructions for candidate

METHOD OF ASSESSMENT

Assessment is a cumulative process which takes place throughout a subject. A 'competent' or 'not yet competent' decision is conducted at the end of a subject through an interview. The interview will be conducted by you personally presenting evidence that demonstrates your competence in a short interview with your assessor. The evidence you must prepare and present is described above in this assessment criteria document. Assessments will be conducted at a specific milestone recorded above in this assessment criteria document.

ASSESSMENT CONDITIONS

Formative assessment takes place as your teacher observes the development of your work throughout the subject and, although the assessor is likely to be aware of the evidence you are submitting, it is your responsibility to be prepared for the interview where a competency judgement is made. If you have forgotten something or made a small mistake at the time of the milestone assessment you may correct it, however the assessor may choose to assess other candidates who are better prepared and return to you if time permits. Upon completion of the assessment you will be issued with feedback and a record of the summative assessment, which you will need to acknowledge that you have accepted the result. If you are absent on the nominated assessment day (without prior agreement or a sufficient documented excuse) you will be assessed as not yet competent.

GRADING

The assessment you are undertaking will be graded as either *competent* or not *yet competent*.

REASSESSMENT PROCESS

If you are assessed as being not yet competent you will receive clear, written and oral feedback on what you will need to do to achieve competence. You will be given a reassessment milestone no more than one (1) week later to prepare your evidence. If you are unsuccessful after your reassessment you will be required to attend an intervention meeting with your Head of School to discuss your progress and any support you may need.

REASONABLE ADJUSTMENTS

We recognise the need to make reasonable adjustments within our assessment and learning environments to meet your individual needs. If you need to speak confidentially to someone about your individual needs please contact your teacher.