Title: Introduction to C#

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

Start Date: Week

Submission Milestone: Week

Assessment Milestone: Week

Assessable Units of Competency

ICAPRG418A – Apply intermediate programming skills in another language
ICAICT406A – Build a graphical user interface

General Description

A 2-dimensional sprite sheet (also called a sprite map, tile maps or a sprite / gui atlas) is an image that contains the images of several smaller individual images used in 2-dimensional games for animation purposes or as images used for 2-dimensional overlays such as menus and heads-up-displays (HUDs).

You are to design and build a tool in C# that loads an image that contains many smaller images and allows the user to select regions within the image and assign them an identifier.

For example, an image may contain all of the various icons for a HUD and your tool must allow a user of the tool to select the portion of the image that represents the "Health" icon for the game so that the game can access and display just that section of the image when the game is running. It must also allow the user to select other regions and assign them an identifier as well.

Your tool must be able to save the regions, which must specify their location within the image in addition to their identifier, to XML format. It must also be able to load a previously saved XML file and correctly display the regions for the image. The file must contain all of the regions, not an individual file for each region.

Your tool must also save the regions sorted by their identifier within the XML file.

In addition to setting, loading and saving regions the tool must allow a user to edit a previously created region, and be able to delete previously created regions.

Regions must contain:
- Identifier
- Position
- Dimensions

You are to first design a mock-up of the tool's interface and an example XML tree structure for a saved region file.

Knowledge and Skills

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

1. Skills in application of another programming language (C#)
2. Skills in requirement analysis and design of data structures
3. Ability to follow a design brief and create code structures as per specifications
4. Developed object-oriented graphic user interfaces based on advanced tools, libraries and algorithms
5. Design and develop external XML data source and linkages

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. Interface design mock-up
2. C# Sprite Tool
3. Exported XML files and their accompanying images

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 Introduction to C#

1. Interface design mock-up	Competence in the Interface design mock-up task is defined as
	• Submission of an image depicting the layout and functionality of the intended C# Sprite Tool's controls including
	  o Control containers
	  o Buttons / Sliders / Text Boxes
	  o Menu
	• A short document detailing the usage of the tool for a new user

2. C# Sprite Tool	Competence in the C# Sprite Tool task is defined as • A release executable and all relevant assets submitted that fulfils the requirements specified in the General Description • Source code for the executable
3. Exported XML files and their accompanying images	Competence in the Exported XML files task is defined as • At least 2 saved XML files and their accompanying image submitted • Files can be correctly loaded by the C# Sprite Tool and edited

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. Your assessment will be conducted by an official AIE qualified assessor. This may be someone other than your teacher. The evidence you must prepare and present is described above in this assessment criteria document. Assessments will be conducted on 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 (summative assessment). 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 and acknowledge that you have received the result. If you are absent for the nominated assessment milestone (without prior agreement or a sufficiently 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 may be asked 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