

## Producing an Interactive Computer Game (40%)

The purpose of this group project is to produce a prototype game (or a simulation program with approval), using **Unity3D Game Engine**. Students may obtain ideas from a variety of commercial games (identifying references required). This group project requires **2-3 students** to develop a game in an EPOC (Electronic Proof of Concept) format (horizontal screen dimension). Groups should establish a set time for meetings (at least one meeting per week) and record their progress as per the GROUP MEETING PROGRESS TRACKING FORM attached.

### 1. Project Requirements:

- Include one level, failure condition, win condition, credit page, reward system, start/end screen
- The game may be a first-person shooter, real-time strategy, racing, rogue or platform game.
- The game should include at least one **Griffith University Logo**.
- There must be a minimum of **three(3) types of intelligent NPCs** for the player to contend with.
- Employ at least **two of the gameAI/algorithms** to control game characters (refer to lecture notes).
  - o Waypoint Navigation Algorithm, FSM, A\*, Best Search, or any GameAI technique.

### 2. Submission Items (one submission per group)

**(Week5)** midnight, Sunday, Aug 25 - submission of your **Pitch** document (max 2 pages project draft), including:

- Group members (student names and numbers), (tentative) Title, Genre, Aims, Target users,
- Your design concepts and the game structure draft in a flowchart and a storyboard.
- Zero mark for this component but failure to submit will incur a **5pt penalty**.

**(Week10)** during your workshop – **Alpha Build** Presentation

- Zero marks for this component but failure to present your alpha version game will incur a **10pt penalty**.
- The teaching staff will provide you with some comments on your game.

**(Week12)** Sunday midnight, Oct 13, 2024 - **full submission** including the below:

- a. Game Design Document in a Word or pdf format.
- b. All the files related to your game (including source codes and images)
- c. A short video clip (or a self-playing Demo)
  - 3 minutes maximum (made using a screen recording program), total file size should be less than 100MB.
  - The video will show the major functionality of the game.

**(Week13)** 9am, Monday - **Peer Review** Due (optional), email to j.jo@griffith.edu.au

### 3. Presentation

**Nathan** students: Friday workshop in **Week12**

**Gold Coat** and **Online** students: Monday workshop in **Week11** or **Week13** (**Monday Week12 is a public holiday**)

### 4. Other Conditions (maximum penalty)

- Students are responsible for file errors, virus infection, lost files, etc. KEEP A BACKUP ALWAYS (100% penalty).
- **No presentation in week12 or 13, no mark!**
- **References** of borrowed materials: source codes, concepts, images, 3D models. (max 100% penalty)
- Use one of the suggested algorithms (50% penalty).
- Group members, student numbers and the game title should appear in each submission (10% penalty).
- The game player (or assessor) should be able to start playing your game by clicking the file named with your game title + ".exe" (".app" for Mac). e.g. "GUWalkThrough.exe" ("GUWalkThrough.app" for Mac) (10% penalty).
- Synopsis credit pages will include the role of each team member, students' photos, contact details and references.
- A release statement allowing the university to use the program for promotional work must also be provided (optional). See the attached sheet.
- Source Control must be used in this project. Provider is up to you. Example Providers are Unity Collaborate, GitHub and Bitbucket. All tutors must be given access to the repository **UNLESS** you are using Bitbucket, in that case, you can give access to one tutor.

#### Notes:

- All Submissions to the **Learning@Griffith** website.
- **Late submission:** a deduction of **5%** per day (no marks if submitted more that 7 days late)
- This is a 10 credit point course so each needs to spend at least **10 hours** a week towards the course.
- **No extensions at all!** (Submit as much as done)

## GROUP MEETING PROGRESS TRACKING FORM (sample)

PROJECT NAME: \_\_\_\_\_

DATE: \_\_\_\_\_ START TIME: \_\_\_\_\_ FINISH TIME: \_\_\_\_\_

ITEM	Student 1	Student 2	
Attendance (Signature required)			
Status of task/s assigned previous week (eg. completed, on-going, not done)			
Task/s assigned this week			
Notes/Comments			
Major outcomes of this meeting:			
Next meeting:			

Your group can modify this form.

## Usage rights release for the university (optional)

Assessment project for 3702ICT.

Project name \_\_\_\_\_

date \_\_\_\_\_

Group member's

Name

Student Number

\_\_\_\_\_ S\_\_\_\_\_

\_\_\_\_\_ S\_\_\_\_\_

\_\_\_\_\_ S\_\_\_\_\_

I, \_\_\_\_\_, declare that I have been a contributor to the above project for 3702ICT Games Development. To the best of my knowledge all work in this project is the original work of the members of the group unless otherwise specified or acknowledged within the documentation.

I hereby grant Griffith University all rights necessary to use the material produced in promotional material, in print or electronic forms providing suitable credit is given to all contributing group members.

Signed \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Witness \_\_\_\_\_ GU ID # \_\_\_\_\_

(Lecturer, tutor or Griffith University staff member)

#### 4. Peer Review (Individual submission)

This report is intended to provide the subject assessor with a confidential indication of how evenly workloads and contributions were shared among group members for the group project. Your opinions will remain strictly confidential in that the assessor will not identify any individual reports in discussions with other students. General discussions of the issues raised may occur. Email this (Peer Review) page to [j.jo@griffith.edu.au](mailto:j.jo@griffith.edu.au) with the title, **Peer Review – 3702ICT**. See format below:

##### A. IDENTIFICATION

Your name and student number: \_\_\_\_\_

Group Number: \_\_\_\_\_

**B.** Distribute 10 points to the members of your team (**excluding yourself**) for each of the following categories. Total points for each category (i.e. each horizontal row) should add up to 100%. Higher points imply more contribution and lower points imply less contribution. Do not give fractional points.

	Name	Name
Amount of work contributed	%(out of 100)	%(out of 100)
Attendance at team meeting	%(out of 100)	%(out of 100)
Quality of individual meeting participation	%(out of 100)	%(out of 100)
Completion of assigned work within schedule	%(out of 100)	%(out of 100)
Quality of assigned work	%(out of 100)	%(out of 100)
Individual's value and overall contribution to team	%(out of 100)	%(out of 100)
<b>Your Mark Distribution</b>	<b>%(out of 100)</b>	<b>%(out of 100)</b>

**C.** Add any comments you would like to make about any aspects of the team, the course or the project.