ITECH3201 / ITECH7201
Assignment 2 – Semester 2, 2015

Due Date: As per course description

Marks: 20 (20% of course total)

Important Note

This assignment requires the use of a provided code base. You must use the code provided in Moodle. Do not use code given to you by another student (or past student) as you will be awarded ZERO MARKS for the assignment task.

Assignment Overview

You are required to logically extend the functionality of the Maze Game introduced during lectures, via the modification of the code base as well as documentation and implementation of various user stories. You will use the Boost methodology discussed during lectures, which requires the use of pair programming. Working individually on programming tasks for this assignment is discouraged and will only be approved when necessitated by circumstances. All documentation must be completed individually.

The code base provided for this assignment has already implemented the “warm up” and some “sets”. You will be implementing numerous other “sets” for this assignment using the Boost methodology. The “warm down” stage is not required.

You are free to take ideas discussed during lectures and implement these in your own version of the code base provided in Moodle for this assignment.

This assignment will be marked according to the functionality of your code, in addition to the elegance and extensibility of your design and quality of your documentation.

Submission Requirements

Each student must submit a single zip file which contains all assignment files. This includes code for each deliverable / milestone and an individual report containing your student number, name, your partner’s student number and name, UML documentation, user stories and a contribution statement.

Assignment Requirements

Note: It is recommended that you spend some time familiarising yourself with the provided code base prior to beginning any work on this assignment. You should start by spending some time exploring the structure of the code to gain an understanding of the roles each class plays within the system and then complete Lab 7.

In Pairs:

1. Implement each of the following deliverables / milestones:
    a. functionality as detailed in Lab 7
    b. functionality as detailed in Lab 8
    c. collectItem / dropItem / list inventory commands. Ensure that weight restrictions are not exceeded.
    d. equipItem / removeItem commands. Ensure that weight restrictions are not exceeded.
    e. buyItem / sellItem commands. Ensure that weight restrictions are not exceeded.
    f. attackNPC / fleeCombat commands
    g. **Challenge Task:** group play, including joinGroup and leaveGroup functions. Both players and NPCs may join groups, but groups may only consist of all-friendly or all-hostile members. *Only attempt this task once all other tasks have been completed. These are bonus marks and will only be allocated if all other tasks have been completed.*
    h. **ITECH7201 only**: the full combat sequence described in the game description between single players and NPCs. Either the player or the NPC may attack first. Only hostile characters may be attacked. Combat ends when either the player or the NPC dies or the player flees combat.

Individually:

1. Prepare an individual report, to be submitted as a Word document or a PDF, which includes:
    a. Your student number and name
    b. Your partner's student number and name
    c. User stories for each of the deliverables / milestones
    d. Class diagrams for Lab 7 and Lab 8
    e. Sequence diagrams for each of the deliverables except Lab 7
    f. A statement of your own personal contribution to the components of the assignment that were completed in pairs
    g. A statement of your partner's contribution to the components of the assignment that were completed in pairs
    h. A reflection on what you have learned (if anything) through completing this assignment and using the Boost methodology.

Do not work with your partner or any other person to complete your individual report. These must be unique and your own work.

Please note that assignments will NOT be marked and zero marks will be allocated if the individual statements of personal and partner contributions are not submitted.

Marking Guide: ITECH3201 Assignment 2

Student ID		**Partner ID**	
Student Name		**Partner Name**	

Pre-Requisites For Marking

- Statement of personal contribution
- Statement of partner's contribution

Task	Available Marks	Student Mark
Paired Tasks		
a. functionality as detailed in Lab 7	1	
b. functionality as detailed in Lab 8	1	
c. collectItem / dropItem / list inventory commands, including weight restrictions.	2	
d. equipItem / removeItem commands, including weight restrictions.	2	
e. buyItem / sellItem commands, including weight restrictions.	2	
f. attackNPC / fleeCombat commands.	2	
g. **Challenge Task:** group play, including joinGroup and leaveGroup functions. Both players and NPCs may join groups, but groups may only consist of all-friendly or all-hostile members. *Only attempt this task once all other tasks have been completed. * Marks for this task are bonus marks, not to exceed 100%.*	4*	
Individual Work		
Individual report containing your student number and name, your partner's student number and name, and:		
a. User stories for each of the deliverables / milestones	4	
b. Class diagrams for Lab 7 and Lab 8	2	
c. Sequence diagrams for each of the deliverables except Lab 7	3	
d. A reflection on what you have learned (if anything) through completing this assignment and using the Boost methodology.	1	
Total	**20**	

Marking Guide: ITECH7201 Assignment 2

Student ID		**Partner ID**	
Student Name		**Partner Name**	

Pre-Requisites For Marking

- Statement of personal contribution
- Statement of partner's contribution

Task	Available Marks	Student Mark
Paired Tasks		
a. functionality as detailed in Lab 7	1	
b. functionality as detailed in Lab 8	1	
c. collectItem / dropItem / list inventory commands, including weight restrictions.	1	
d. equipItem / removeItem commands, including weight restrictions.	1	
e. buyItem / sellItem commands, including weight restrictions.	1	
f. attackNPC / fleeCombat commands.	1	
g. **Challenge Task:** group play, including joinGroup and leaveGroup functions. Both players and NPCs may join groups, but groups may only consist of all-friendly or all-hostile members. *Only attempt this task once all other tasks have been completed. * Marks for this task are bonus marks, not to exceed 100%.*	4*	
h. **ITECH7201 only**: the full combat sequence described in the game description between single players and NPCs. Either the player or the NPC may attack first. Only hostile characters may be attacked. Combat ends when either the player or the NPC dies or the player flees combat.	4	
Individual Work Individual report containing your student number and name, your partner's student number and name, and:		
a. User stories for each of the deliverables / milestones	4	
b. Class diagrams for Lab 7 and Lab 8	2	
c. Sequence diagrams for each of the deliverables except Lab 7	3	
d. A reflection on what you have learned (if anything) through completing this assignment and using the Boost methodology.	1	
Total	**20**	