## **COMP2069 – Intro to Graphics Programming**

# **Assignment 1**

### **Document the Dragon**

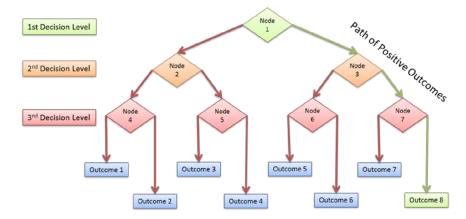
Due class #3 (Thursday May 23, 2013) @ midnight.

Value 10%

The Dragon.py program

Maximum Mark: 40

**Overview**: Use the dragon.py program provided on Blackboard as your template. Create both an internal and external document for the program. Ensure you follow documentation best practices and use the external documentation template provided. Currently the program only gives the player the choice of going into cave 1 or cave 2 (or one overall decision level or node). Extend the functionality of the program to include 2 more decision levels for the player. **Example:** after going into the cave 1, the player is given the option to turn right or left (2<sup>nd</sup> decision level). He chooses left and proceeds to the "inner cave" where he can choose to fight the dragon or try and convince the dragon to spare his life (3<sup>rd</sup> decision level).



#### Instructions:

(14 Marks: Functionality, 12 Marks: Internal Documentation, 10 Marks: External Documentation, 4 Marks: Version Control)

- 1. Add two decision levels to the game for a total of 8 possible outcomes (see decision tree diagram above) (14 Marks: Functionality):
  - a. Each Decision Level will allow the player at least 2 choices. (12 Marks: Functionality).
  - b. Only one positive outcome is possible for the player. (2 Marks: Functionality)
  - c. *Option:* You may allow the player to go back to the previous node or cross laterally to a node on the same level

- d. Option: You may allow the player to find "special items" to help him win.
- 2. Include Internal Documentation for your program (12 Marks: Internal Documentation):
  - a. Ensure you include a program header that indicates: the Source file name, Author's name, Last Modified by, Date last Modified, Program description, Revision History (6 Marks: Documentation).
  - b. Ensure your program uses contextual variable names that help make the program human-readable (2 Marks: Documentation).
  - c. Ensure you include inline comments that describe the conditional structure you will use for your decision tree matrix (4 Marks: Documentation)
- 3. Include External Documentation for your program that includes (10 Marks: External Documentation):
  - a. A company Logo (2 Marks: External Documentation).
  - b. Table of Contents (2 Marks: External Documentation).
  - c. Version History (2 Marks: External Documentation).
  - d. Detailed Game Description describing each node and any possible outcomes (4 Marks: External Documentation)
- **4.** Share your files on **Github** to demonstrate Version Control Best Practices **(4 Marks: Version Control).** 
  - a. Your repository must include **your code** and be well structured (2 Marks: Version Control).
  - Your repository must include commits that demonstrates the project being updated at different stages of development – each time a major change is implemented (2 Marks: Version Control).

#### **SUBMITTING YOUR WORK**

Your submission should include:

- 1. An external document (MS Word or PDF).
- 2. A zip archive of your python project files.

Please zip all files in to a single project archive.

Program Code & Functionality		
Technical Evaluation		
Functionality	The program's deliverables are all met and the program functions as it should. No errors appear as a result of execution. User Input does not crash the program.	14
Internal Documentation & Readability	A program header is present and includes the name of the program, the name of the student, a short revision history and a short description of the program. All procedures and classes include headers that describe their functionality and scope. Inline comments are used to indicate their function when code is new or unclear. Variable names are contextual wherever possible.	12
External Documentation	An external document (MS Word or PDF) has been created that includes a company logo, table of contents, version history, detailed program description, a sketch of the GUI and screenshot (if applicable), and other details outlined in the template provided.	10
Version Control	<b>GitHub</b> is used to track App development. A <b>Commit history</b> will demonstrate the App being updated at regular points in time that correspond with the milestones of the project.	4
Creative Evaluation		Mark
Creativity	The program's GUI / UI is attractive. The programmer has added additional elements outside of the scope of the program that enhance functionality, usability and fun.	0
Total (/40)		40
	%	100.0%

This assignment is weighted **10%** of your total mark for this course.

#### Late submissions:

• 10% deducted for each additional day.

External code (e.g. from the internet or other sources) can be used for student submissions within the following parameters:

- 1. The code source (i.e. where you got the code and who wrote it) must be cited in your internal documentation.
- 2. It encompasses a maximum of 10% of your code (any more will be considered cheating).
- 3. You must understand any code you use and include documentation (comments) around the code that explains its function.
- 4. You must get written approval from me via email.