EGP 310 – Final Project

Professor Dean Lawson

Working in pairs create a game using a graphics library other than Allegro

- Choose a different graphics library – DirectX9 and SDL 1.2 are in the examples folder of the svn repository
- Encapsulate the graphics library properly
- Game requirements:
    - Can be action or turn based
    - Menus – the following menus must be displayed
        - Main menu – can choose any of the following
            - Options
            - Play
            - Load saved game
            - Quit
        - Options – can get from main menu. Contains:
            - Speed control/difficulty level
            - Sound/music on/off
            - Any other applicable options for your game
        - Speed/difficulty
            - Choose between 3 speeds/difficulty levels
    - Must have a HUD during gameplay
    - Must have a leveling system (either multiple levels or some way of increasing difficulty)
    - Must have an AI or Physics system (some way of systematically altering gameplay agents)
    - Must have a sound/music system
    - Must be able to save game upon closure of the window
- Technical requirements:
    - Must have the following game systems/objects:
        - Game
        - GraphicsSystem
        - Sprites/animations
        - AssetManager(s)
        - InputSystem/Event system
        - Localization system
        - Menuing system
        - AI/physics system

        - Sound/music system
    - You may (and probably should) have more systems, the above are mandatory
    - All code should exhibit good Software Engineering practice and follow the principles of OOP
    - Game should not crash and should be able to deal with unexpected user input
- Team/work requirements
    - **You must use SVN for all your work – I will judge your individual participation based on your svn commits. If you are not checking in regularly it will appear like you are doing no work and your individual grade will suffer!**
    - SVN commits must contain comments detailing the reasons for your modifications
    - You **must include a system/technique/algorithm from an outside source in your game.** You may use textbooks for this, books in the library, articles on the internet. I must approve of any technique you choose to use and the source must be properly cited in your code.
    - Each week there will be a progress checkin. You are expected to be present for yours as well as to provide constructive criticism for your classmates. Schedule is detailed below. Code must be run able every class meeting!
    - **Remember – this project is a Game Architecture project. While it's easy to become distracted with graphics or design, you will ultimately be judged on the quality of your code/architecture and how tight (bug free and polished) your game is. Future courses in EGP will focus on advanced graphical techniques and your strong grasp of game architecture will allow you to spend more time on Graphics in the future.**
- Follow all coding standards
- Schedule of deliverables (all include presentation to the class):
    - Week 11 -10%
        - Game Design Document
        - Technical Design Document
        - Milestone schedule
        - Division of responsibilities
        - Tech demo
    - Week 12 – Milestone 1 – 10%
    - Week 13 – Milestone 2 – Alpha – 10%
    - Week 14 – Milestone 3 – Beta – 20%
    - Week 15
        - Final deliverable – 40%
        - Post-mortem/reflection doc and Presentation – 10%