CPE 353 - Project Concept Proposal - 2023 Fall - Version 1.0

Assignment Submission Deadline   **11:59pm Wednesday, October 11, 2023**

Project Proposal Requirements
This project concept proposal is an Individual Assignment.

- Teams have **NOT** been formed at this time.
- **Each Individual Student must come up with their own concept for a project** that satisfies the following constraints.

1. Project shall be a **networked multi-player real-time, interactive Qt widget-based SIDE-SCROLLER video game** utilizing 2D graphics and animation.
    a. *Turn-based games are unacceptable and will result in zero credit.*
    b. *Games such as those we have built in-class (Qt23 and Qt24) will NOT receive FULL CREDIT since they are NOT SIDE-SCROLLING VIDEO GAMES.*
2. Project shall be **open source** so that it may be used for instruction and student recruitment.
3. **A minimum of four people shall be able to play the game simultaneously FROM DIFFERENT COMPUTERS each with its own IP address**.
    a. *Single-player games are unacceptable and will result in zero credit.*
    b. *If your game only plays when all players have SSH'd into THE SAME COMPUTER, then you will receive zero credit.*
4. Video game operation shall be reliable. Player disconnect during game shall not crash the game or interfere with other players who are still playing the game.
5. Project shall be configurable so that it is portable and not tied to a specific machine by IP address or port number. *Hard-coding of network addresses and ports will result in zero credit.*
6. Project shall utilize an SQL database for storing high scores, pixmaps, and/or game level information. **Note that anything stored in the database must be secured against tampering.**
7. Project shall be implemented and tested on the Linux laboratory machines (ENG 246/ENG 247). *Projects that fail to operate on the designated platforms shall receive zero credit.*
8. **All games must simultaneously support left-handed controls (WASD) and right-handed controls (IJKL). Otherwise, you will receive zero credit.**
9. **All source code submitted for a grade by a team must be written by members of that team otherwise you will receive zero credit. Recycling code submitted in previous semesters is cheating and subject to Academic Honesty policies outlined in the course syllabus.**

Assignment Description
- Each student must come up with their own idea for a video game project
- Each student must use **Google Slides** to prepare their quad-chart description of their project concept. **Use the provided project concept quad chart example as a formatting guide.**
- It is important for you to think carefully about a project that is achievable with a small student team within the time remaining in the semester.
- Think carefully about a project concept that you (and hopefully others) will find interesting.
- **Teams have not yet been formed!!! Once teams are assembled**, the instructor reserves the right to steer team project selection.
    o Your team should discuss the project concepts generated by the members of the team and select a concept to pursue.
    o It is boring to have multiple teams attempting the same basic game.
    o As the customer, I want each team to attempt something different and interesting.