Programming Assignment 5: Game Data Driven

Due Date

- Assignment due on Finals Week (Regular scheduled Final's Class)
    - Grading Sunrise Next Day
    - ----- ABSOLUTELY NO EXTENSIONS ------------
- Submit all files and directories to Perforce
    - Create a directory called: Omega in your student directory
    - PA5-PA8 will be in the same directory
        - /student/<yourname>/<Game>/…
        - You will identify the discrete submissions in your readme file
            - Please remember to add descriptive check-in comments
    - Fill out the *PA5 Game Data Driven - Submission Readme.pdf*
        - Describes the summary of work for this PA5
        - ***Changelist numbers and dates*** associated to the assignment
            - ***This needs to be there or NO CREDIT***

Goals

- Convert Omega Race game to Data driven queued messages

Assignments

1. Refactor the existing Omega Race game to data driven queues
    a. Similar to the PA4 that we did in the last assignment
    b. Now use the game code and create queues
2. Identity the data that is networking dependent.
    a. Look at methods, data and calls that pass information between
        i. Players
        ii. Bombs
        iii. Game state
        iv. Missiles
        v. And other external data that the game is dependent on.
3. Create a message queue to uniformly contain all these types of data
    a. You will probably need to create new data types for messaging
    b. You will need to severely refactor the existing control and data structures to make the game suitable for this type of mechanics
    c. Add copious amount of debugging and tracking to prove that it's working
        i. Trust me, this time well spent

4. Fill out the *PA5 Game Data Driven - Submission Readme.pdf*
    a. Describes the summary of work for this PA5
        i. Quick step by step
        ii. How you accomplished this task (engineering perspective)
    b. Describe any issues you had in completing this task.
        i. What was your design/debugging process.
        ii. Describes the summary of work for this PA5
    c. Changelist numbers and dates associated to the assignment

Validation

Simple check list to make sure that everything is checked in correctly

- Program compiles and runs without crashing?
- Program warning free?
- Can you successfully connect to another machine?
- Did you finish the submission report?

Hints

Most assignments will have hints in a section like this.

- Baby steps, use an very incremental process
    - Big steps will prevent you from finishing task
- Study the existing Omega Race game
    - Single step it thoroughly
    - Start diagramming the communications between classes
- Look at the documentation
    - XNA directory in the /Reference
    - Programming guide is very useful.
    - Look around
- This is the MOST critical phase of porting a game to networking
    - The better this phase is completed, the easier the phases of the project!

Troubleshooting

- Baby steps
    - You'll be in trouble if you don't