CS399 - Assignment 1

Concepts

Gui Frameworks, Dlls and Embedding, Interprocess Communication, Sockets, Messaging

Objective

In this assignment the goal is to setup the basic structure of the engine and the editor. The editor will be set up as an independent project from the game engine. The game engine should be able to run embedded in the editor or as a standalone executable. If you do not have a game engine you can use the game sample that is already uploaded to the site. The editor should open then be able run a window for the game. A basic communication system between the host editor and the game should be created using an interprocess friendly technique. This will be used for a text console and basic commands.

Grading

The grade for this assignment is determined with a simple point system. You start with a base grade and implement features to get a higher grade. You can select the features you would like to include. Going over 100% does not give extra credit. When you turn in your assignment, have a text file with a basic readme. The readme should contain a basic explanation on how to run the application. Also include in the readme a list of each feature you completed, its point worth, where it is located in your code and any other comments. At the end of your readme total your grade. Package your project and readme into a single zip file and turn it in on moodle. During class you can demo your application and show the instructor your features.

Grading Rubric

- Running Gui Application Framework Application (+20)
    - Gui has tabs/docking (+5)
    - General nice Gui features (Ask Instructor) (+5)
- Game embedded into project (HWND hosting, DirectX Texture Sharing) (+20)
    - Game embedded can be a separate process (+10)
    - Game Pause / Resume From Editor (+5)
    - Game Editor Level Loading (+5)
    - Streaming of remote game (Optional stretch feature) (+10)
- Binary message based communication mechanism (+20)
    - Using named pipes or TCP/IP (+10)

- o   Basic Console text display from engine (+5)
- o   Game can except console commands (+5)
- o   Message Serialization or RPC system (+10)
- Connect to existing standalone exe (at lease display console messages) (+10)
  - o   Editor can launch standalone exe (+5)
- Late (-5) Per Day

Example Readme.txt

Name: Chris Peters

ReadMe: Run editor.exe, type help for console command Run Game.exe for game

Grading:

GameEmbed GameHost.cs +20

…

Expected Grade: 85