Assignment 6 – Dark GDK Graphical Application

Date Assigned: Friday, April 24, 2015
Date Due: Monday, May 4, 2015
Points: 40

For this final assignment, you will be placed into groups to create a graphical application using Dark GDK. On Monday, May 4, each group will present their application, talking about what each person did, and answer any questions from the class.

Application Specifics

Your application is to

1. use Sprites in a significant way

2. be large enough for each person to write an adequate amount of object-oriented code

3. have a significant amount of animation

4. allow the user to interact (keyboard and/or mouse) with the application as time passes

5. use dynamic memory allocation in a meaningful way.

The easiest application to write is some kind of game. Possible game ideas include:

1. Snake (http://www.snakeonline.net/)

2. Hangman (http://www.spellingcity.com/hangmouse-kids-hangman-online.html?listId=6347487)

3. BlackJack (http://www.addictinggames.com/puzzle-games/blackjack.jsp)

4. Maze (http://www.gamesolo.com/flash-game/maze.html)

Other ideas could be some kind of graphical application (simulation/tool) used in Biology, Chemistry, Physics, …

There cannot be any RPG-type games as I cannot grade those types of games in a reasonable amount of time.

Groups

By Monday, April 27, 2015 at 5pm, each group must send me an email detailing:

1. The name of the application
2. A description of the application
3. How the work will be divided. Describe which person will work on each part of the application.

Make sure your application has enough content for the number of individuals in your group. Divide the work by the number of people in your group as equally as possible.

On the day the assignment is due, each group will present their application and explain what each individual did. I will give you more details about the final presentation next week. The class will be able to ask questions of each group.

Goals for Assignment 6:

1. Implement the basics of 2D game programming
2. Work efficiently and effectively in small groups
3. Create better designs so that group members can interface code easily
4. Reinforce all of the C++ concepts learned in a graphical environment
5. Use a real API (Dark GDK) in program development

To complete this assignment you must:

1. Create a solution based on what your application is and then create projects (you need multiple projects) as necessary to hold <u>related</u> classes of code. You can reuse code from existing projects. All code is to be original (i.e. created by individuals in your group, not copied from any other source).
2. Every piece of code in the solution is to be completely and correctly documented including any code from my sample in class code. You are free to use any code from SpritesExample as long as the code is properly documented and the author is sited.
3. Your code is to be written using Visual Studio 2010 and placed in the CS250 Drop Box by 9:15am on the day in which the assignment is due. A stapled hard copy must be placed on the instructor's desk by 9:15am on the day the assignment is due. Remember, print thedriver.cpp, and the .h/.cpp related files.
4. **THERE IS NO LATE GRACE PERIOD FOR THIS LAST ASSIGNMENT!!!!**

Extra Credit (5 points)

I will decide which project in each class is the best. Each person in that group will receive extra credit.