Project #2

Drawing with SDL 2.0

CpSc 4160/6160: Data-Driven 2D Video Game Development

Computer Science Division, Clemson University

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Due Date:

In order to receive credit for this assignment, your solution must meet the requirements specified in this document and be submitted, using the `handin` facility, by 8 AM, Thursday, September 21st, 2017. The handin close date is set at three days after the due date. If you submit after the due date but before the handin close date there will be a ten point deduction. No submissions will be accepted after the handin close date and no submissions will be accepted by email.

Project Submission:

To submit your solution through handin, copy the README file from the top project directory in the repo to your project directdory, fill in the blanks in the README, make clean in your project directory, and compress the project directory using tar or zip.

Project Specification:

The purpose of this assignment is to help you to become familiar with SDL drawing and to provide practice writing C^{++} classes. For this project you must use the SDL 2.0 drawing primitives to draw a figure; an example is illustrated in Figure **??** showing a target and arrow shaft. These draw function primitives include: SDL_RenderDrawLine, SDL_RenderDrawPoint, and SDL_RenderDrawRect. There are examples that use these primitives in the course repository.

Figure 1: Bullseye

In addition, your program must include at least two C^{++} classes: one that you write from scratch, and one that I wrote called FrameGenerator. This latter class, FrameGenerator, is included in the project 2 directory and will generate an image in a directory called frames. You must create the frames directory as a subdirectory of your project directory and you should supply your username in the main program (not mine!). Both of these classes must use initialization lists and your class must include at least one overloaded operator. Before you compress and submit your project make sure that (1) your program creates a bmp of your image with **your** user name, and that you have used **make clean** in your project directory.

In using the SDL functions, your figure must include:

1. Usage of each primitive at least once,
2. at least 7 distinct lines or shapes, and
3. at least 3 colors.