STL & Iterators

CS 165 – Object Oriented Software Development

Macbeth – Lesson 10.1

Agenda

- Opening Prayer
- Scripture
- Skeet Project
- STL
- Looking Forward

Scripture

2 Nephi 32:9

"But behold, I say unto you that ye must pray always, and not faint; that ye must not perform any thing unto the Lord save in the first place ye shall pray unto the Father in the name of Christ, that he will consecrate thy performance unto thee, that thy performance may be for the welfare of thy soul."

Skeet Minimum Requirements

- To obtain an "A" on the Skeet Project, you must meet the following minimum requirements:
  - While playing the game, a standard bird, a tough bird, and a sacred bird are presented as targets.
  - When a bird is hit or leaves the screen un-hit, a new bird is created.
  - The game will add/deduct the correct number of points for each bird hit.
  - The bullets travel in the correct direction based on the angle of the rifle.
  - Tough birds will travel slower based on the requirements in the project.
  - Descriptive comments added before each function (if implemented inline in the .h file, the comments need to be added there as well).

- To obtain bonus points, you must:
  - Meet all requirements above (including comments) – if not met, then no bonus points will be given.
  - Add additional functionality to the game.
  - Summary of additional functionality must be provided in the makefile comments

STL – Standard Template Library

Class	Pro	Cons
vector<value type>	Quickly insert and erase from the end of the list. Quickly access any record in the list by position.	Slow at erasing or inserting in the middle of the list by position.
list<value type>	Quickly insert or erase at any location in the list. Able to directly access beginning and end of the list.	Unable to access in the middle of the list.
map<key type, value type>	Allow direct access by using a key (as opposed to an integer position).	Comparisons of non-integer positions (performance).

Looking Forward

- This Evening
  - Skeet Project Due
  - Turn in Checkpoints and Team Activity Quiz
- Read the textbook chapters shown in I-Learn and complete checkpoints.