The Triumvirate
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APCS2 p5
Angery Birbs

ANGERY BIRBS

Description:

A recreation of the iconic mobile game Angry Birds written in Java and Processing. Users can pull back on a slingshot to launch avian projectiles at structures of varying materials, with the goal of killing the enemy pigs to rescue their eggs!

Extra Aspects that may be included:

- Different birds
- Randomly generated stages
- Powerups scattered randomly
- Multiplayer games
- Final boss stage

Usage of Topics covered in the semester:

- QUEUES: The birds available to you will appear as a queue. Launching one will dequeue, and when the queue is empty and not all pigs have been eliminated, the level ends as a loss. At any point where all pigs die, the level ends in a win.
- DOUBLY LINKED LISTS: The levels are connected to each other via doubly linked lists, giving the user a choice to choose the next level or previous level. The user does not have to complete his or her current level to choose the next one.
- STACKS: A stack will be used to record the player's game history, as in the scores they achieved and which level they played. The most recent scores will be at the top, like how in a stack the most recently added element is first. For example, if the player scored 2000 points, then 1800, and then 5000, the match history will display 5000, 1800, and then 2000.
- HEAPSORT: This sorting algorithm will be used to sort the player's match history in order to create a highscore list. While any sorting algorithm would do fine, we believe that the ancient Romans would have preferred HeapSort.