Bugstomp Game

Goals

The purpose of this assignment is to learn to

1. Move a character sprite around a 2D grid to step on randomly generated bug sprites.
2. Use loops, 2D arrays, and conditional statements to move the character and check if he has stepped on a bug sprite.

Programming

Tasks

- Initialize a 2D array the size of your game grid.
- Initialize the NamedColors of your character, bugs, and background.
- Determine the starting point of your character on the grid.
- Create a function that uses keypress events to move the character around.
- Create a function that will generate bugs in a random place on your grid.
- Create a function that will check if the character has collided with a bug.
- Create a function that removes bugs after some amount of time.
- Create a win condition.

More Details to Get You Started

Key Press Events - NonBlocking Games

- keyUp()
- keyDown()
- keyLeft()
- keyRight()
- keyQ()
- keySpace()
- keyW()
- keyS()
- keyA()
- keyD()

Variables, Colors, and Sprite Symbols

- NamedSymbol.symbolname;
- NamedColor.colorname;
- drawSymbol(column, row, NamedSymbol, NamedColor);
- setBGColor(column, row, NamedColor);

Important Functions

- The gameLoop() function loops until the game is over.
- quit() stops the game.
- start() starts the game and calls the initialize() function once before it starts the gameLoop() function.
- render() sends your updated game grid to the server once. This is a blocking game function.

Help

For Java

NonBlockingGame documentation

[NamedColor Documentation](#) [NamedSymbol Documentation](#)

For C++

[NonBlockingGame documentation](#) [NamedColor Documentation](#) [NamedSymbol Documentation](#)

For Python

[NonBlockingGame documentation](#) [NamedColor Documentation](#) [NamedSymbol Documentation](#)