# CSPC 233 Group 14 Final Project (Snake) Work Log

#### Demo 1 (Text - Base)

## Oct 13 - 14, 2017

### Get user input

- Steven, Chris, Victor, Nav
- 20min
- October 13th
- This method asks the user for an input.

## Check for valid input

- Steven, Chris, Victor, Nav
- 20min
- October 13th
- This method checks the user input to see if it is a valid input. (w,s,d, a)

### Print game grid

- Chris, Victor, Nav
- 20min
- October 13th
- This method prints out a grid using an array and a for loop

#### Print tail

- Austin
- 3hrs
- October 14th
- For loop contained in print grid that prints the tail of the snake using the lists from updateTail().
- This for loop also comparatively checks if the 'head' of the snake has collided with the 'tail'. If it has, it will end the game.

### **Update Tail**

- Austin
- 2.5hrs
- October 14th
- Void method that takes 2 coordinates as an argument. These coordinates are passed from moveSnake() and are the previous coordinates of the 'head'.
- Adds these values to two separate lists of x and y values and then checks to make sure these lists don't exceed the length of the tail. If they do, it removes the oldest value in these lists.

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#### Move head of snake

- Steven, Victor, Austin
- 1.5h for Steven and Victor 30 mins on Austin's addition
- October 13th
- This method moves the head of the snake according to the user input. The head can up down left and right

#### Check if food is already on game grid

- Victor, Steven, Nav, Chris
- 15min
- October 14th
- This method checks to see if food if on grid, if food is on grid it does nothing, if food is not on the board then the method will randomize the location for the food to be spawned in.

#### Generate food

- Victor, Steven, Nav, Chris, Austin
- 20 min
- October 13th
- This method calls the checkFood method to see if food is already on the board. If there is no food, it will generate a random coordinate and put food there.

#### Score feature

- Victor, Steven, Chris, Nav
- 5 min
- October 13th
- This method updates the score each time the snake head eats food by setting the score plus one on top of the previous value.

#### Initialize game

- Victor, Steven, Chris, Nav, Austin
- 10 min
- October 13th
- Separate class that contains the main method. Prints the score and grid, and asks for user input, then moves the snake. Contains while loop that repeats these functions until game is over.

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## Check if game is over

- Victor, Steven, Chris, Nav, Austin
- 5 min
- October 14th
- Uses a while loop that continues running the game until newGrid.gameover returns a true value.

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Demo 2 (GUI)

Oct 27th - 29th, 2017

# **Creating Window**

- Steven, Chris, Victor, Austin, Nav
- 1 hour
- October 27 29th
- Creates a GUI window when compiled and constantly repaints the background based on input and event handling.

# **Adding Color**

- Chris
- 5 min
- October 29th
- Adds a background colour and fills in the body of food and snake shapes

## **Drawing Snake and Food**

- Steven, Chris, Victor, Austin, Nav
- 2 hrs
- October 29th
- JFrame class will call draw methods from snake/food class to be painted in the window. Coordinates for the snake will constantly be changing therefore a new drawing will be painted for every update.

#### **Snake Movement**

- Steven, Chris, Victor, Austin, Nav
- 3 hours
- October 29th

- Based on set string (direction) it will cause the snake to constantly move in the direction specified until changed by a key event.

### **Snake Boundaries**

- Victor, Austin
- 10min
- October 29th
- Checks if snake coordinates are outside the window boundaries and allows the snake to appear on the opposite side.

# **Score Updates / Generating Random Food**

- Austin
- 2hr
- October 29th
- If the snake coordinates equal the food coordinates they will update a score and the food with random coordinates

## **Event Handling**

- Steven, Victor, Chris, Austin, Nav
- 1hr
- October 28th
- Uses event listener to read keyboard input. Uses arrow keys to determine the direction the snake will move.

# Tail Update and drawing (Not yet fully functional)

- Austin
- 2hrs
- October 29th
- Fully commented out in the presented version just in case of bugs

# CSPC 233 Group 14 Final Project (Snake) Work Log

# **Meeting with Instructor**

#### Nov 8th

# Changed code to use inheritance

- Victor, Steven, Chris
- 2 hours
- November 1st
- Changed Snake class, Food class, and added GameObject class to incorporate inheritance

#### **GUI** draws tail

- Austin
- ∼6hrs
- November 6th
- ...

# Added game over functionality

- Austin
- 10 min
- November 7th
- ..

## Text based inheritance compatibility

- Victor, Steven, Chris, Nav
- 2 hours
- November 1st
- Implemented original text based snake to work with GUI classes

# **Text based tail implementation**

- Austin
- 1-2 hrs
- November 7th
- Implemented working tail into text based