Daniel Squicciarino

Software Development

Professor Arias

13 October 2017

Final Project Milestone

Abstract:

For my final project, I have created a small game called “Get To Class!” The objective of the game is to get the protagonist of the game to class by repeatedly pressing the spacebar to move him forward. It’s purpose is to show how challenging it can be to perform everyday tasks with anxiety. The game consists of a main menu that allows the player to either play the game or exit the application. There is a short introduction describing how to play and providing a bit of context regarding the protagonist. When the game begins, the player moves forward through a series of screens that get incrementally more difficult to traverse. Once the player enters the final doorway, the game ends, and once more provides options to either play again or exit the game.

Introduction:

As I stated in my milestone, my goal in making this game was to produce something that allowed me to be creative and artistic while simultaneously being manageable for me to create alone, given that I tend to struggle with programming. I decided to make a game early on, not only because I have an adequate knowledge of how games work and how to design games, but also because I thought it would be fun to attempt to make one on my own. During the brainstorming phase, I knew that I wanted to make something unique, rather than just making another generic pong game, asteroid shooter or 2D platformer. Thousands upon thousands of games like these already exist, and I wanted mine to stand out. Games as a medium have so much more potential than simply running, jumping and shooting, so I also knew that I wanted my game to say something important. My aim was to provide an overall takeaway that would be thought provoking and have some sort of emotional impact on players. These were my goals in crafting my concept, which I knew would have to be limited by what was possible for me to make given my time constraints and overall coding abilities. In the end, “Get To Class!” was a perfect fit. From a programming standpoint, the game was mechanically simple enough that I managed to write all of the code and debug everything myself. I did struggle a bit with some things that I thought would be simple, such as switching between screens and playing sounds, but ultimately I was able to finish the project without having to consult the programming lab or a professor. I also feel that I was able to say something meaningful and shine a light on day to day life for those who quietly suffer from anxiety. As the player gets closer to the end, they face increasing pushback and various in-game effects meant to simulate the onset of a panic attack. It’s purpose is to demonstrate to the player the way it feels to do seemingly simple and straightforward tasks while suffering from anxiety, specifically honing in on how difficult it can for a college student to force themselves to get to class when their mind and body are fighting against them.

Detailed System Description:

After my milestone, I decided to redo my menu system a bit to make it a bit more organized and easier to tweak on the fly. Rather than having the JFrame and the main menu JPanel in the same class, I separated them into different classes. With the JFrame now in its own class (the Game class), I decided to use a card layout to swap between various panels. I set the card layout to first show the menu panel upon startup, and all the panel from that point are connected in linear fashion. I also set the JFrame to exit the program upon being closed. For the main menu JPanel, I used JLabels to make the title and author tag, and JButtons for the play button and exit button. I made the labels opaque and tweaked some settings to make everything look pretty and uniform. I also added a nice background image behind the labels and buttons. The exit button closes the application, and the play button calls the card layout from the Game class to switch from MenuPanel to IntroPanel1, which is where the introduction begins. From there, the intro panels switch between each other in numbered order. Each loads in an image that I made detailing the game's introduction, and uses a key listener to switch to the next panel when the space bar is pressed. I included a playful false start that makes it look like the game is going start, and then takes the user to another series of panels (WaitPanel1 through WaitPanel6) with more instruction and exposition. After the last wait panel, it switches to GamePanel, which is where the game begins. GamePanel through GamePanel6 are the most complicated classes. They each load in the respective backgrounds that I made, as well as the four images used for the main character. They also load in whatever sounds and effects are included. I used a key action listener to execute the commands in the move() method when the space bar is released. In the move() method, I set it to alternate between the four different main character images to simulate walking. I also set the speed that he walks by setting how many points forward on the x axis the image moves (typically

20). At the end of the movement panel, I used a point on the x-axis near the edge of the screen to indicate that it should switch to the next panel. For panels where heartbeats and breathing sounds were used, I also added the audio clips to the move() method and set them to play when the image reaches specific points along the x axis. Outside of the move() method, I used the paintComponent method to draw the background image and main character image in their respective positions. For panels where the screen flashes, I drew in translucent gray images at specific points on the x-axis. Once the player reaches the doorway in GamePanel6, it switches to EndPanel, which uses most of the same code from MenuPanel. Here the player can choose to play again or quit the program.

Requirements:

In terms of the problem that this system is addressing, my game isn't necessarily the solution to any problem per se. Rather, it is meant to bring awareness to how crippling anxiety can be, and how difficult it can be to do things that other people can do without even a second thought. I suppose, then, that the problem I am trying to address is lack of empathy. Having never experienced it themselves, it is sometimes hard for people to understand how anxiety works, and to what extent it can affect someone's life. As a result, they are often not as understanding or accommodating of those with anxiety as they should be. My game tries to show them firsthand what anxiety is like, so that they can better understand it and relate to it.

Literature Survey:

Although I wouldn’t exactly call them commonplace, there are certainly other games out there that bring awareness to mental illness. Since their inception, video games have evolved from a simple and fun pastime into a bona fide and legitimate medium capable of tackling important issues and providing players for an opportunity for self-evaluation and ethical reflection. The most recent game that comes to mind is “Hellblade: Senua’s Sacrifice”, which focuses on psychosis. The game recently won the Games for Impact award at this year’s VGA’s for its tragic and realistic depiction of the condition, and the awareness it raised for it’s real-world victims. A couple others include the critically acclaimed “Spec Ops: The Line”, which tackles Post Traumatic Stress Disorder, the horror game “Until Dawn”, which features a character with schizophrenia, and the cinematic “Heavy Rain”, which handles addiction and drug abuse. Many smaller, independently made games handle issues like this as well, and I think in the coming years it will become much more prominent in mainstream, high-budget games.

User Manual:

The system is very simple to use. As far as controls go, the spacebar is the only key that the user needs, as it is used to switch between slides and to move the player forward. The main menu and the end menu use buttons that the user can click with the mouse to carry out straightforward commands, like playing or exiting the game.

Conclusion:

In the end, although there is more I wish that I could add and refine, I am very proud of the product that I was able to create, and genuinely impressed with myself for being able to make a real game. The game functions efficiently, and for the most part looks and acts like I envisioned in my head when I was coming up with the idea. I met my goals of being able to create something that was within my coding abilities, and also make something profound and thought provoking. I also think that this will be a useful thing to add to a portfolio when it comes to applying to applying for future jobs in the game industry.

References:

"Build a 2D Platformer Using Java." *Build a 2D Platformer - JAVA*, 22 Mar. 2014, pp. 1–170., www.brainycode.com/downloads/Building2DPlatformerV10.pdf.

Point, Tutorials. "SWING JButton Class." *Www.tutorialspoint.com*, Tutorials Point, 15 Aug. 2017, www.tutorialspoint.com/swing/swing_jbutton.htm

"JAVA Catch the Eggs Game Programming part1." *Sourcecodester*, 26 June 2014, www.sourcecodester.com/tutorials/java/7488/java-catch-eggs-game-programming-part1.html.