Chat GPT Game Homework

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For this homework I really wanted to see the capabilities and limitations of using Chat GPT to see in future use where it would be efficient to use and where it would be limited and time consuming. To start I asked it to code me a classic game of snake in Java. It wrote about half the code and then stopped. I had to prompt it for the second half of the code and after just writing the first half of the code a few more times I finally got what it thought was a complete code.

To see if this code worked, I had to download pictures for the apple, the dots which make up the body and the head dot. When I ran the code, the first problem I ran into was that I could not control the snake. I asked chat GPT what the problem was, and it fixed the KeyAdapter method so that it could control the snake.

Once I could control the snake, I soon realized that the apple would sometimes respawn somewhere that I could not see. I asked ChatGPT about this and it told me that I needed to change the locateApple function, so it works with the width and height of the board. I followed ChatGPT’s instructions and ran the code once again to see if it was fixed. It was not. I soon realized that it was popping up not only under the title bar up top but also a little bit off to the side. I fixed this problem on my own by adjusting the x and y location of where it could appear on the screen, so it was always visible when it respawned.

The next problem I encountered was the fact that as soon as I ran the snake into itself or out of bounds, the game was over but there was no way to reset. I prompted ChatGPT to add a reset button to my code and once again ran into the problem of ChatGPT printing the code and stopping halfway. There might be a limit to how much a free account can receive in code. I then asked just for the reset method itself and added it that way.

Once I was able to play the game as well as reset it, all I had left was minor details I wanted to add and fix to make the game more presentable. I did this part without ChatGPT because of not wanting to deal with partial and incomplete code. I added a score in the top left corner and had it displayed with the game over. I also realized the background color wasn’t displaying because of the paint method so I added it as an object and filled the screen except for the reset button with that. I also changed the colors around with the score and game over and added comments. I initially asked ChatGPT to add meaningful comments but ran into the problem again of it only being able to print a section of code each time I asked, so I just went through the code myself and added comments explaining each method a little.

Overall, I found that Chat GPT would be extremely helpful with small chunks of code or more simple games but is overwhelmed by medium to large sections of code. If the code is written correctly but does not work with the other methods, it can think there is nothing wrong. Lastly I found it can explain sections of code but has problems writing meaningful comments to large amounts of code.