



FEYZİYE SCHOOLS FOUNDATION

IŞIK UNIVERSITY

Human-Computer Interaction

Homework 1

19COMP1024

Bariş Girişmen

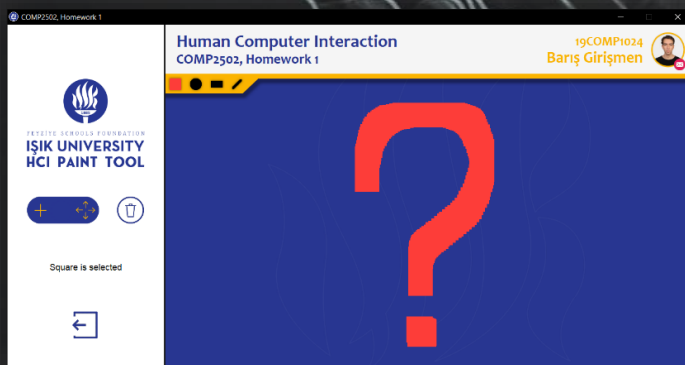
Introduction

The aim of this project was to build a drawing editor that allows a user to create, drag and delete certain shapes (square, circle, rectangle and line) in an interactive graphics using any programming language.

Since Java was the only programming language that I had experience in, I had no choice but to code with Java.

It was helpful for me to learn and search about Java Swing.

Because for the first time, I made a project with a GUI.



Process

Like most students, I started checking tutorials online to have a basic understanding of how to create a graphical user interface (GUI) on NetBeans, and which options I had in order to combine my knowledge of Java with a GUI.

I heard about the terms "AWT" and "Swing" for the first time during that research period. Then, I looked up for sources comparing what they were used for. Swing was the one I had to use as AWT was generally used in previous versions of Windows and had less functionality compared to Swing. Thus, interface-wise, Swing also looked more modern compared to AWT. You can compare the buttons and menus on Windows XP to Windows 10 in order to have a general idea about what the comparison between AWT and Swing is like.

After having watched many tutorials, I learnt that I had to use Java's Graphics class as it was exactly what I was looking for to create shapes.

A while later, I had an idea about what kind of interface I would like to have and how I was going to make it work. First, I focused on making functions work before getting into details. I took notes about what I was doing wrong and how I could fix bugs I had in my code. I made a step-by-step list on my notebook, deleted functions with errors from my code, and wrote from scratch again. Fortunately, it worked!

I created boolean variables, methods and if-else statements to make sure each operation worked as intended.

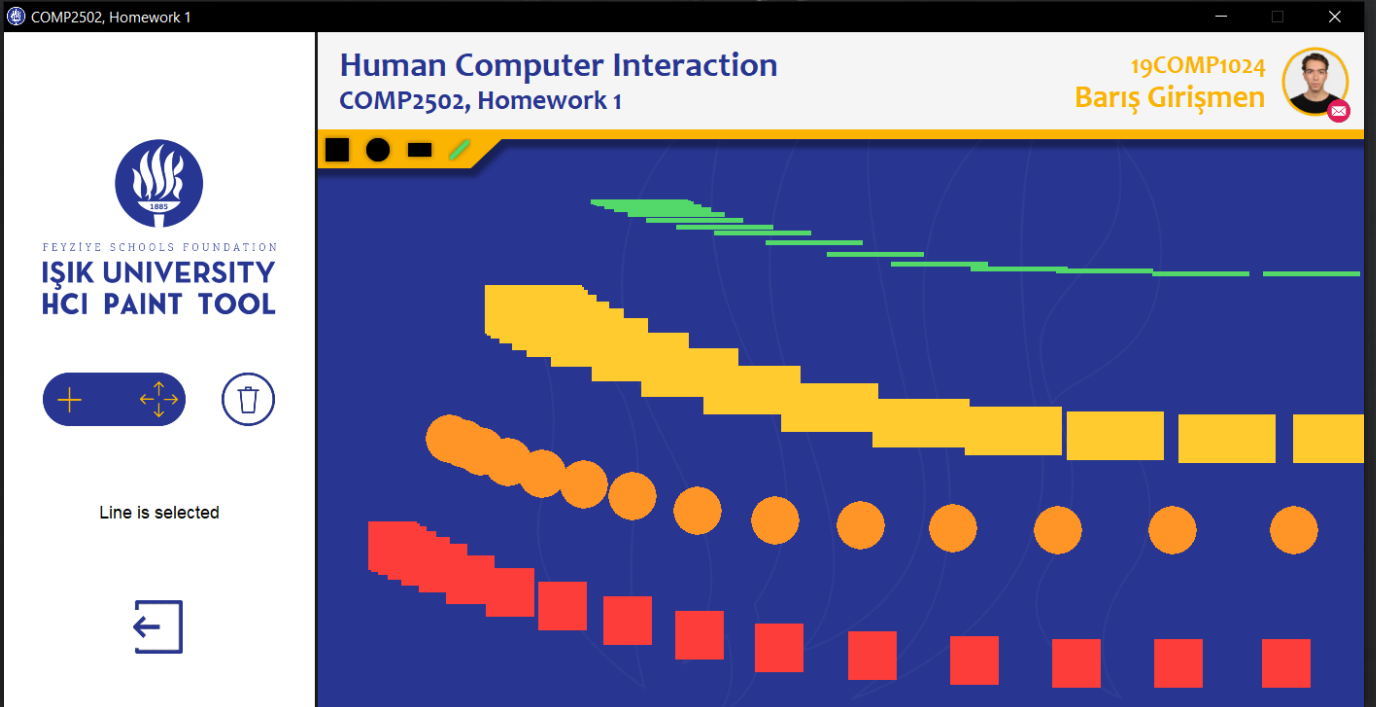
Additionally, I was working on a button to save an image file of drawings and a color palette to change the color of shapes. I decided to cancel them as they were a bit too buggy and not needed.



Features

- **Add & drag:** Allows user to add and drag shapes unlocked.
 - **Square:** Creates a red square with 50*50 pixels size.
 - **Circle:** Creates an orange circle with 50*50 pixels size.
 - **Rectangle:** Creates a rectangle with 100*50 pixels size.
 - **Line:** Creates a line with 100*5 pixels size.
- **Delete:** Deletes/clears everything drawn on drawing area.
- **Mailbox:** Previews my university e-mail address.
- **Exit:** Exits the program.

Screenshots



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