Drawing App

This report details the progress made on the "Drawing App" project for Introduction to Programming II. The project focuses on developing various drawing tools, including shapes, image insertion, line manipulation, and text input.

Introduction to Programming II Project Log

Project title:	Drawing App
Topic:	7 - Shapes Tool

What progress have you made this topic?

This week focused on the implementation of a Shapes tool. The development process involved creating functionality for rectangles and ellipses initially, followed by refinements for smooth operation. Subsequently, a comprehensive Shapes tool was developed, combining common functionalities and retaining unique functions for individual shapes. This pattern was then applied to additional shapes.

What problems have you faced and were you able to solve them?

An initial challenge was encountered in ensuring the shapes tool functioned correctly regardless of mouse movement direction (upward or downward). This issue was resolved by implementing `if` statements that identified the highest point of the mouse drag as the starting point for drawing the shape.

What are you planning to do over the next few weeks?

The next step is to develop an Image Tool for inserting images onto the canvas.

Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?

The project is currently on schedule, with the Shapes tool implemented within the planned timeframe.

Introduction to Programming II Project Log

Project title:	Drawing App
Topic:	8 - Image Tool

What progress have you made this topic?

This week's work involved implementing an Image Tool that allows users to add images to the canvas at their original size or scaled to the size of the mouse drag.

What problems have you faced and were you able to solve them?

Issues were encountered while using the Document Object Model (DOM) for adding information. These issues were resolved through research on the implementation of DOM mainly on Youtube tutorials. A current challenge is the duplication of images upon mouse click, which was still under investigation at the time of the initial report but was later resolved.

What are you planning to do over the next few weeks?

Initially, the immediate focus was to resolve the image duplication issue. Following this, work was planned to commence on Line Size and Transparency functionalities.

Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?

The project is slightly behind schedule as the Image Tool was not fully finalized this week.

Introduction to Programming II Project Log

Project title:	Drawing App
Topic:	9 - Line Size and Transparency

What progress have you made this topic?

Work this week involved implementing transparency across applicable items. An initial approach of implementing transparency within each tool was revised to a more efficient method by integrating it into the color section, which is connected to all tools. This resulted in cleaner and more effectively implemented transparency. Challenges were faced in adjusting line size due to hidden sizing implementations within tools. Extra time was allocated to resolving this, and it was finalized within the week. The image duplication issue from the previous week was also resolved.

What problems have you faced and were you able to solve them?

The primary challenge was the unexpected hidden sizing implementations affecting line size adjustments. These were addressed and corrected, allowing for proper line size control.

What are you planning to do over the next few weeks?

New week I will work on the implementation of the Text Tool.

Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?

The project was brought back on schedule.

Introduction to Programming II Project Log

Project title:	Drawing App
Topic:	10 - Text Tool

What progress have you made this topic?

The Text Tool was successfully implemented into the application.

What problems have you faced and were you able to solve them?

Implementing text input and display on the canvas proved more complex than anticipated. Initially, text input was placed within the tool options in the app's footer. After further research, the input box was relocated to the mouse click position. Text is displayed on the canvas upon the user pressing enter.

What are you planning to do over the next few weeks?

The upcoming tasks include documentation, code modularization, and report writing.

Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?

The project is on schedule.