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Summary report for final\_project “Drawing Program”

Introduction:

The purpose of this project was to create a drawing application using the C# Windows Forms library. The application was intended to be a simple but versatile tool that would allow users to create and edit drawings with various tools and functionalities.

Methodology:

The project was planned and executed by dividing the required functionalities into small, manageable tasks. The development was done using Visual Studio and the C# Windows Forms library. The initial plan was to create a basic drawing application with tools such as brush, AI shape matching, but later on, I have realized it was going to be hard features to implement since I don’t have and decided to go with rectangle, square, circle and pencil. added to enhance the application's functionality.

Results:

The final program was able to create and edit drawings with various functionalities, including:

* A main menu with shortcut keys
* Drawing tools such as pencil, line, rectangle, circle,
* Fill and stroke color options
* Export of the drawing as a vector graphic file in SVG format
* Mouse interaction
* Save and recover work feature.
* A picture control that displays the drawing
* Selection capability for deleting or moving visual elements.
* Undo and redo functionality

The user interface was designed to be simple and intuitive, with a menu containing toolbar on the left side containing the drawing tools and a properties panel on the right side displaying the properties of the selected tool or element. The application was able to handle large and complex drawings efficiently, thanks to the use of optimized algorithms and data structures.

Conclusion: Developing a drawing application using the C# Windows Forms library was a challenging but rewarding experience. The project provided an opportunity to learn about programming with C# and Windows Forms, as well as the fundamental concepts of computer graphics and vector graphics. The project also allowed for creativity and problem-solving skills to be utilized in implementing various features and functionalities such as selection which was the hardest for me so far.

The project was successful in achieving its goal of creating a drawing application with a range of drawing tools and export options. The application's user interface was simple and intuitive, and the program was able to handle small and easy drawings efficiently. Some areas for improvement could be adding more drawing tools for better functionality and improving the user interface for a better user experience.

Overall, this project was an excellent opportunity to learn about programming and computer graphics and to apply that knowledge to create a useful and functional drawing application.