Brainstorming and Ideation: Early in the project, I created a spider diagram to organize my ideas and plan out the functionality of the application. This helped in visualizing the features I wanted to implement and how they would interact with each other. Inspired by general Windows drawing applications, I aimed for a user-friendly interface with intuitive tools.

Implementation Progress

Stamptool (Rocket Shape): By the midterm report, I successfully implemented the stamptool feature, specifically adding a rocket shape stamp. Users can adjust the size of the rocket stamp using a slider, providing flexibility in stamp placement and size within the drawing canvas. This feature required careful consideration of UI/UX design to ensure intuitive use

Enhanced Color Picker: I refactored the color picker tool to offer a broader selection of colors beyond a simple array. This enhancement was based on user feedback and usability studies, aiming to improve the user experience by providing a wider palette for artistic expression.

Brushtool (Variable Thickness): In addition to the stamp and color picker enhancements, I implemented the brushtool feature. This tool allows users to draw on the canvas with variable thickness settings. The implementation involved integrating smooth brush strokes and adjustable thickness controls, enhancing the drawing capabilities of the application.

Next Steps

- **Adding Eraser Tool:** Moving forward, I plan to implement an eraser tool to enable users to selectively remove parts of their drawings. This tool will complement the existing drawing tools and enhance the overall editing capabilities of the application.
- Adding Upload Functionality: To expand the application's utility, I intend to introduce upload functionality. This feature will allow users to import images or files into the drawing canvas, enabling them to work with existing artwork or incorporate external elements into their creations.
- Optimizing HTML and CSS: I aim to optimize the application's frontend by refining the HTML structure and CSS styles. This optimization will focus on improving performance, accessibility, and responsiveness across different devices and screen sizes.
- **Refactoring and Testing:** Lastly, I plan to conduct thorough refactoring of the codebase to enhance maintainability and scalability. Rigorous testing, including unit testing and user acceptance testing (UAT), will be performed to identify and address any bugs or performance issues before final deployment.