

**Student Name- Jay Ashwinbhai Findoliya**

**Student ID- 11861304**

## **Sprint-2 Reflection**

During this sprint, I focused on enhancing the user interface and experience of our "Habit-Tracker" application, primarily through significant improvements to the Home and Login components. My key accomplishments include implementing a complete redesign of the Home component with sophisticated animations that create a more engaging and dynamic experience for users. I integrated a dark mode feature that not only improves accessibility but also gives our application a more modern, professional appearance. Additionally, I incorporated a testimonials section that showcases real user experiences, which helps build trust and motivation for new users considering the platform.

One of the most challenging aspects of this sprint was ensuring the animations performed well across different devices and browsers. I encountered performance issues when testing on older mobile devices, which required me to refactor some of the animation code to be more efficient. Another obstacle was integrating the user's initial letter icon in the Login component, which needed to dynamically generate and scale properly. I addressed this by creating a reusable component that handles different name formats and edge cases.

Throughout this sprint, I gained valuable insights into more advanced React patterns, particularly around component composition and state management. I learned to leverage custom hooks more effectively to share functionality between components while maintaining separation of concerns. Working on the user authentication flow deepened my understanding of security best practices and the importance of providing immediate visual feedback during the login process.

Looking ahead, several areas could be improved. First, I should have communicated my design decisions more clearly with the team early in the process, as some of my changes required adjustments in other components. Second, I believe we could improve our testing approach - while the features work, we lack comprehensive test coverage for the new animations and interactive elements. Finally, I could have better documented the new components and their props to make it easier for other team members to understand and build upon my work. For the next sprint, I plan to create a small documentation guide for the UI components I've built for login and establish a more structured testing protocol before submitting changes.