# PathMates - Change List Report

## [Change\_List.xlsx](https://docs.google.com/spreadsheets/d/1fNoU-YUYxB0boPXLIQTh2N195TRvEMWr/edit?usp=sharing&ouid=110671322658777382973&rtpof=true&sd=true)

## Implemented Changes - Summary

Since presenting the prototype on October 22, several significant changes have been implemented, reflecting insights from user research, usability evaluations, and heuristic principles. A key update was the inclusion of a privacy disclaimer to reassure users that their location is hidden from others. This change, inspired by Paper Prototyping and aligned with Heuristic #9 (Help users recognize, diagnose, and recover from errors), addresses privacy concerns and improves safety. It was rated as high importance and low difficulty. Another major improvement was replacing U-Card authentication with Duo login via the UMN Portal, simplifying the login process. This adjustment was inspired by findings from a Cognitive Walkthrough and adhered to Heuristic #4 (Consistency and standards), with high importance and medium difficulty.

To modernize the interface, the “show list” button for search results was replaced with a slide-up screen. This change, informed by a Cognitive Walkthrough and consistent with Heuristic #8 (Aesthetic and minimalist design), created a more intuitive and visually appealing experience, rated as medium importance and low difficulty. Additionally, the user list was made more visible by showing a preview, further enhancing system clarity. This update, guided by feedback from Preliminary User Testing, was rated as medium importance and low difficulty.

The matching and messaging workflow was revised to require users to message first before coordinating a walk. This adjustment was inspired by Preliminary User Testing feedback and aligned with Heuristic #7 (Flexibility and efficiency of use). It improved interaction flow and was rated as high importance and medium difficulty. Confirmation buttons and screens were also added for critical actions, such as submitting ratings and rejoining groups. These changes, validated through a Cognitive Walkthrough and guided by Heuristic #6 (Error prevention), ensured intentional actions and were rated as high importance and low difficulty.

To further enhance usability, a sock mascot was introduced to guide users through processes like sign-in, profile creation, and rating submissions. This engaging addition was inspired by insights from Heuristic Evaluation and aligned with Heuristic #10 (Help and documentation). It was rated as medium importance and medium difficulty. In addition, multiple back buttons were added to the user creation screen, allowing users to revisit or correct earlier steps. This change, inspired by feedback from User Testing and consistent with Heuristic #3 (User control and freedom), was rated as medium importance and low difficulty.

Based on User Testing feedback, the large red emergency button was removed because its design created fear and hesitancy among users. Instead, reliance on the device’s native emergency options was implemented, offering a more flexible and less intimidating solution. This update, consistent with Heuristic #9, was rated as high importance and low difficulty. To further enrich functionality, features like a rating system, friends feature, and walking history were added. These updates, inspired by insights from Preliminary User Research and aligned with Heuristic #6 (Recognition rather than recall), enhanced engagement and reduced cognitive load. They were rated as medium importance and medium difficulty. Lastly, the group joining process was streamlined by removing the redundant “add other people” button after matching. This simplification, validated during a Cognitive Walkthrough and consistent with Heuristic #8, was rated as low importance and low difficulty.

## Planned But Unimplemented Changes

Future iterations could focus on expanding walk management tools with AI-based route suggestions, enabling more efficient and optimized paths for users. Enhancing accessibility features to ensure inclusivity across diverse user groups is another priority. Improvements to the matching system could include removing redundant preferences to streamline the user experience and focusing on a more adaptable algorithm that responds dynamically to user behavior and preferences.

Additionally, addressing interface redundancies is crucial. For instance, having both "Message" and "Start Walk" buttons immediately after coordinating with another user is unnecessary, given the navigation options already present in the bottom navbar. In the current design, coordinating with another user becomes counterintuitive if the "Start Walk" button is pressed immediately afterward, bypassing the intended flow of communication and collaboration. Simplifying these interactions would align the system’s design with user expectations, improving the overall experience.

Another feature that we did not implement but would like to introduce in the future is a friend list. This would allow users to view and manage their in-app connections, fostering a sense of community and encouraging repeated engagement with the app.

## Known Problems With Design

Several issues with the app's design became evident during user testing and observations, highlighting areas for improvement. Users expressed needing clarification about the necessity of creating or verifying accounts, given that UMN students already use internet IDs and passwords. Similarly, the app’s current setup excludes Post-Secondary Enrollment Option (PSEO) students, as it lacks flexibility for underage users despite their presence on campus.

Some features were also perceived as redundant. For example, users questioned the inclusion of the area of study field, noting that such information could already be accessed through profiles during the matching process. This feedback suggests an opportunity to streamline the interface and focus on features that enhance functionality.

The "Path Overlap" feature proved particularly ambiguous. Users often misinterpreted the percentage displayed as a safety rating or review-based metric, and many relied on the map for decision-making rather than the overlap percentage. Some suggested color-coding percentages to make the feature more intuitive and visually clear.

Additionally, the instantaneous matching process caused users to assume their matches were also immediate, creating a misleading perception. Users often chose matches based on proximity rather than ratings or path overlap, indicating that these elements need to be better highlighted in the interface.

Concerns about privacy and safety also arose, particularly regarding location sharing. Users wondered if the app displayed real-time or approximate locations, worrying about potential stalking risks. Meanwhile, confusion persisted during the reporting process, as users questioned the need for confirmations when submitting reports.

Users also suggested improvements to the navigation experience, such as adding a tracker to display real-time location on the map during active walks. Despite these issues, some features received positive feedback. The rating system was praised for being fast and efficient, while the filter functionality was intuitive and easy to use. However, lingering frustrations, such as an unlinked prompt to create a group walk from a previous iteration, revealed inconsistencies that need addressing.