User Testing Findings

Below is a summary of our user testing results and the most significant findings across our participants' feedback. Before putting together all of our findings, we analyzed each of the 3 user tests.

1. What did users like?

Prototype A

All three users preferred **Prototype A** for its efficient **reservation creation flow**, **filter mechanism**, **notifications layout and content**, and immediate visual display for double bookings and pending events. Users appreciated the reservation creation flow for starting with selecting the date/time, an immediate double booking warning, and the clear outline of the reservation's update history. They also appreciated being able to easily toggle between viewing pending, approved, and denied events on the same calendar view using the checklist filter. For the notifications page, there was a common preference for the list and sidebar view layout once a notification has been selected.
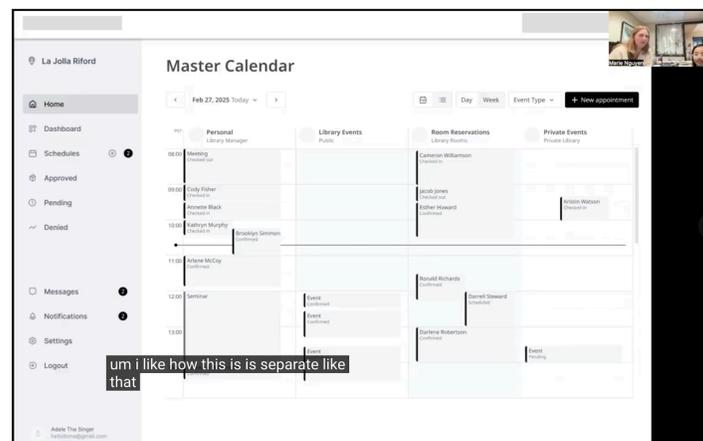
Prototype B:

Figure 1: In our interview with Dana, she mentions liking that multiple calendars are all on one view. While interviewing in person, we created a Zoom meeting to record her mouse movements while interacting with our prototypes.

All three users preferred **Prototype B** for its clean navigation, improved notification system, and structured master calendar. The split–view master calendar with personal, public, and private calendar integrations helped users efficiently track different categories, making reservation management more intuitive. There was also a common trend of ease of navigation within **Prototype B** due to users finding buttons and actions more discoverable. For instance, all users found the notification button more noticeable and easier to find.

2. What were users' struggles/confusions?

Prototype A:

Despite their preferences in Prototype A, users still encountered struggles, particularly with the discoverability of the notifications page and the editing status/making update process. All three

users had trouble locating where the notifications tab was placed on the top navigation bar rather than the sidebar, where the rest of the features were located (**Figure 2**).

Figure 2: Prototype A (left) has the notification button on the top right navbar, which users had more trouble finding compared to its location in Prototype B (right)

Although users preferred the layout and content of the notifications page, there was still some confusion with the process of making an update to the reservation. This is because the approve/deny/pending action was hidden until pressing the "Add note/update" box (**Figure 3**). This made users uncertain of what the next step would be in order to approve the event.
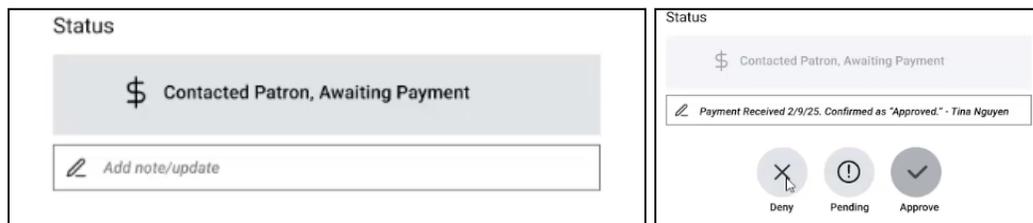

Figure 3: The ability to mark as denied, pending, or approved is hidden until pressing "Add note/update,"

Prototype B:

All three users found it difficult to determine room availability and how to change rooms within the reservation system. The UI of the "Pending" status, which requires users to hover over their desired time, was not noticeable, and filtering for pending reservations was unclear (**Figure 4**). Additionally, despite the user's high appreciation for the calendar view, we did receive feedback on the option to add or remove the user's desired calendar for a higher degree of customization and to ease the load of content.
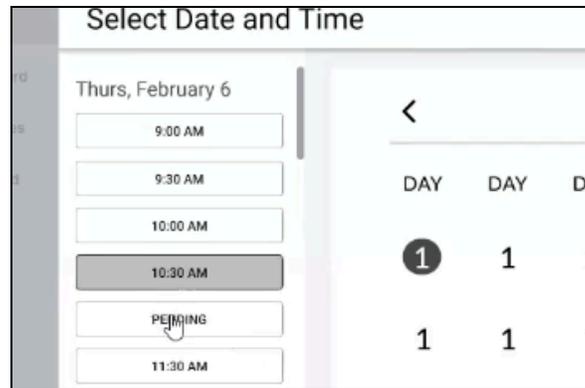
Figure 4: The "Pending" status was not visible until users hovered over each time slot, which made the task more effortful than necessary.

3. What were users' preferences?

Preferences by task

- **Task 1: Create a reservation**
    - Most users preferred **Prototype A** to create a reservation flow and display of relevant information (e.g. pending event view). The flow of Prototype A appears more intuitive with high visibility that enables users to confidently create reservations easily.
- **Task 2: Filtering for Pending Reservations**
    - Most users preferred **Prototype A** due to high accessibility when navigating filtering on the sidebar whereas Prototype B use of a hover state limits the visibility of the reservation status.
- **Task 3: Managing Notifications and Reservation Approvals**
    - Most users preferred **Prototype A** for its clear reservation details, which provided enough information without overwhelming or requiring excessive page traversals. Users additionally favored its list and sidebar view for updates, making it easier to track changes while keeping other reservations visible.
- **Task 4: Web Integration**
    - Most users preferred **neither prototypes** for integrating third-party web applications. From our findings, all users found the feature not relevant to their needs and did not reflect their goals.

What prototype was most preferred overall?

Even though users had similar preferences for features they liked and disliked in both prototypes, they had differing opinions when asked to choose their final preference for the prototypes.

User 1 preferred **Prototype A** overall for its intuitive nature and its relevance to displaying important information that would ease the cognitive load in her day-to-day workflow. In particular, User 1 greatly appreciates the information architecture and efficient flow for creating reservations and reviewing pending events. However, it is important to note that **user 1** values the layout of the master calendar in **Prototype B** opting for a **hybrid** of **Prototype A's** organization of information with

Prototype B's master calendar. User 2 preferred **Prototype B** for its familiarity, cleaner navigation, and effective daily planning. She appreciated its single-day view for its simplicity but found multiple schedules overwhelming. In **Prototype A,** she liked the intuitive 'New Reservation' button and filtering feature but disliked the monthly view, preferring a weekly layout. To improve usability, the design should maintain a familiar layout, offer view customization, and keep key actions easily accessible. User 3 was unable to choose a preference for just one prototype over the other. Instead, she expressed her wishes for a **hybrid** that combined her preferred features from both **Prototype A** and **Prototype B.** In particular, she favored Prototype B's master calendar design and notifications tab, while preferring Prototype A's reservation creation process/flow and reservation updates/notifications page.