Floor Navigation Page Interaction Design Specification

Based on the Fluid Navigation Philosophy

2356215_郑功灿 2352037_郑耀辉

1. Design Philosophy: Fluid Navigation

"Fluid Navigation" is a design philosophy that emphasizes smooth interface interactions, clear feedback, and intuitive operations. Its core goal is to ensure users experience consistent responsiveness and fluidity through micro-interactions, visual cues, and content hierarchy transitions. This enhances the overall user experience.

This system is built around the “Fluid Navigation” concept, incorporating detailed interaction designs to provide users with seamless and coherent feedback during information exploration, floor switching, and room searching.

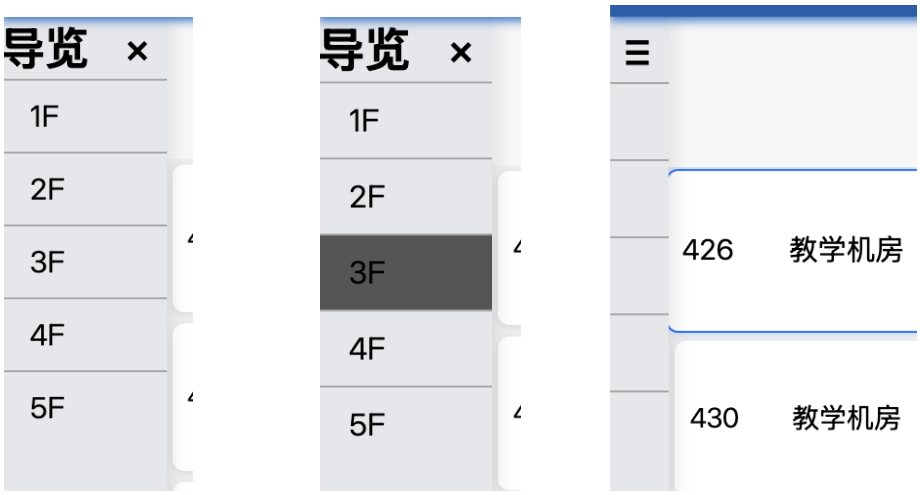
2. Page Structure & Interaction Design

1. Top Header Area

- **Logo (Left)**
  - Fixed at the top-left corner of the page to maintain consistent brand visibility.
  - Slightly enlarges on hover to indicate interactivity.
  - Clicking the logo navigates back to the homepage, serving as a clear navigation anchor.
- **Help Button (Right)**

- Fixed at the top-right corner for easy access to help from any page (design concept only; no implemented interaction on click).
- Slight icon enlargement on hover to maintain consistent feedback style.

2. Left Sidebar (Floor Navigation)



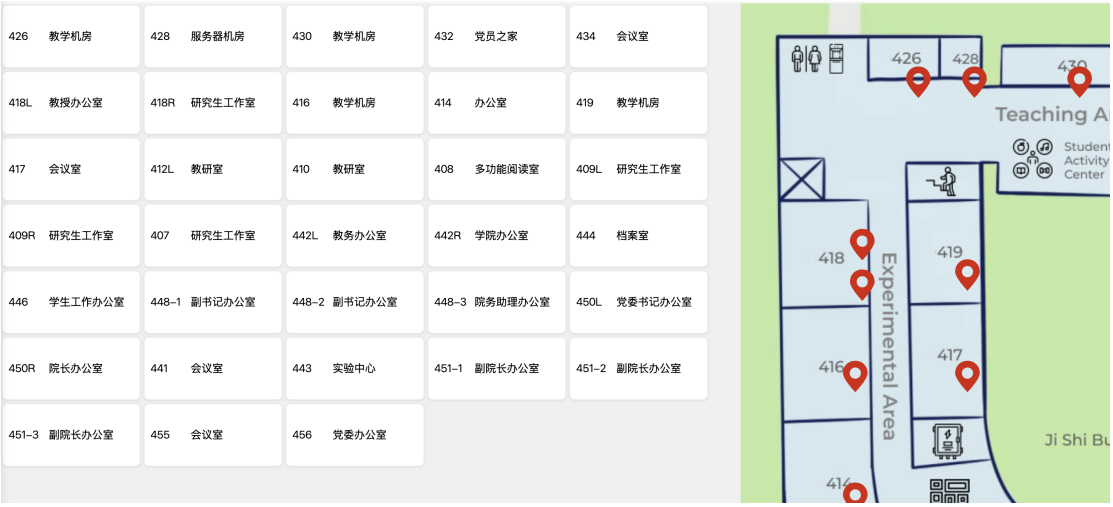
- Floors are expanded by default for compact and clear layout.
- Each floor button provides hover feedback with background color change to indicate clickability.
- Clicking a floor switches the map and room info on the right, with seamless content updates based on selection (design concept only; other floors not yet implemented).
- Sidebar can be collapsed to reduce distractions and keep the main content in focus.

3. Search Box Area (Top Right)

- Positioned at the top of the main interface for visual prominence and easy recognition.
- On hover or focus, border color changes to indicate it's editable.
- Entering keywords (e.g., name, room number, department) filters both the room list and map pins below, improving search efficiency.

4. Main Content Display Area

Split into two sections with synchronized search and map interactions:



- **Left: Message Box (Room List)**
  - Displays rooms on the current floor with scroll support.
  - Each room is presented in a card format with a consistent structure for readability.
  - On hover, the card border highlights and slightly enlarges to indicate selection.
  - The corresponding map pin is also highlighted simultaneously to create visual linkage.

- **Right: Map Display**
  - Shows the current floor’s map with accurately positioned pins for each room.
  - Supports responsive zooming and panning for different screens and use cases.
  - Hovering over a pin highlights it and shows a tooltip with brief room information.
  - Clicking a pin or room card opens a detailed popup with further information.

3. Detail Popup

- Triggered by clicking either a map pin or a room card.
- Pops up centrally with detailed room information and personnel composition.
- Right side of the popup displays a real-world image of the room to help users quickly build spatial awareness.
- If a person has a personal profile page, clicking their name navigates to it for further information exploration.

4. Interaction Consistency & Responsive Design

- All hover interactions feature consistent feedback (enlargement, color change, highlighting) for unified user perception.
- All components support responsive layout for both desktop and large screens, ensuring clear and accessible information.

- Page animations are natural and lightweight to avoid distracting users and maintain operational smoothness.

5. Conclusion

This floor navigation system aligns closely with the “Fluid Navigation” concept in its interaction details, consistently synchronizing user expectations with interface feedback. Through a unified visual language and refined micro-interactions, it builds

a smooth bridge among information structure, navigation pathways, and operational feedback. This improves the overall user experience and is suitable for guiding and locating within complex environments such as educational institutions, enterprises, and government buildings.