

Floor Navigation Page Interaction Design Specification

Based on the Fluid Navigation Philosophy

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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)



输入人名，房间号，部门搜索

- 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:

426 教学机房	428 服务器机房	430 教学机房	432 党员之家	434 会议室
418L 教授办公室	418R 研究生工作室	416 教学机房	414 办公室	419 教学机房
417 会议室	412L 教研室	410 教研室	408 多功能阅读室	409L 研究生工作室
409R 研究生工作室	407 研究生工作室	442L 教务办公室	442R 学院办公室	444 档案室
446 学生工作办公室	448-1 副书记办公室	448-2 副书记办公室	448-3 院务助理办公室	450L 党委书记办公室
450R 院长办公室	441 会议室	443 实验中心	451-1 副院长办公室	451-2 副院长办公室
451-3 副院长办公室	455 会议室	456 党委办公室		

- **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.

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417 会议室	412L 教研室	410 教研室	408 多功能阅读室	409L 研究生工作室
409R 研究生工作室	407 研究生工作室	442L 教务办公室	442R 学院办公室	444 档案室
446 学生工作办公室	448-1 副书记办公室	448-2 副书记办公室	448-3 院务助理办公室	450L 党委书记办公室
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- **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.

The screenshot shows a search interface for room locations. A search bar at the top right contains the placeholder text "输入人名, 房间号, 部门搜索". Below the search bar is a grid of room details:

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417 会议室	412L 教研室	410		
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A modal window is open for room 410, labeled "济事楼410 教研室". It lists the staff members: 王冬青, 李江峰, 夏波涌, 张颖. To the right of the modal is a map of the Jishi Building, color-coded by area: Teaching Area (green), Experimental Area (blue), and Residential Center (grey). Various rooms are marked with red location pins.

The detailed view for room 410 shows the following information:

济事楼410 教研室

人员:

- 王冬青
- 李江峰
- 夏波涌
- 张颖

A photograph of the room's exterior door is shown to the right of the text.

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.

Floor	Room Number	Description
1F		
2F	426	教学机房
3F	428	服务器机房
4F	430	教学机房
5F	432	党员之家
	434	会议室
	418L	教授办公室
	419	教学机房
	417	会议室
	412L	教研室
	410	教研室
	408	多功能阅读室
	409L	研究生工作室
	409R	研究生工作室
	407	研究生工作室
	442L	教务办公室
	442R	学院办公室
	444	档案室
	446	学生工作办公室

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- 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.