IE418: UX Design for Mobile Applications
Laws of UX For
M-Indicator App

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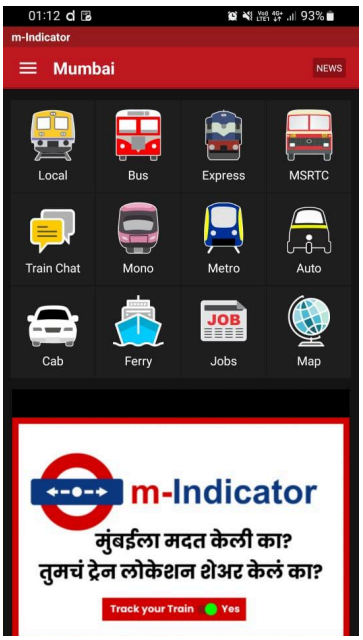
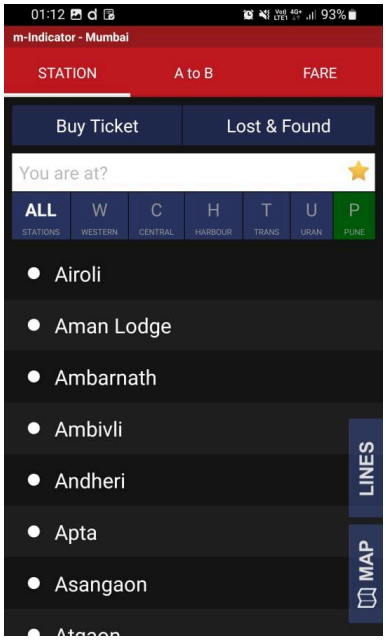
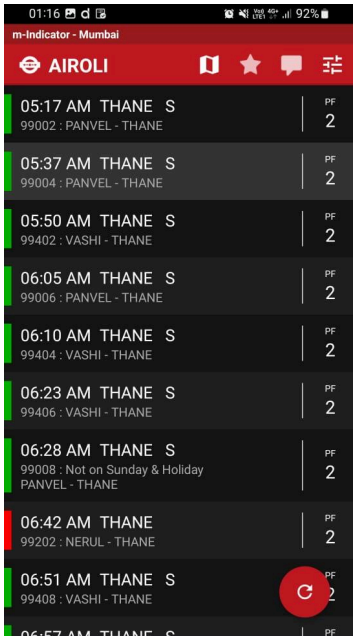
M-Indicator is a transportation related mobile application that primarily provides information about public transportation in the cities of Mumbai and Pune.

1. Hicks Law:

Simplify choices to make decisions easier for users.







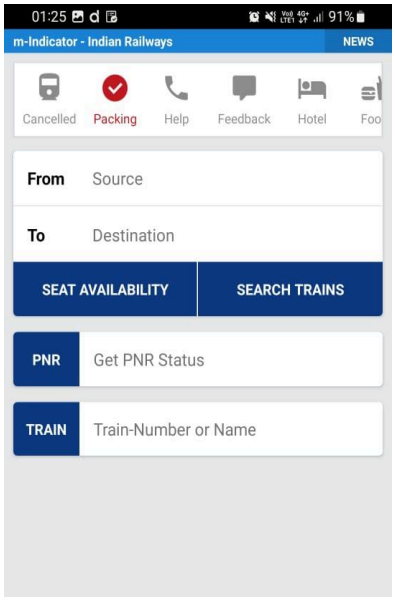
Valid: The app categorizes information fairly well (trains, buses, metro, etc.) so that there is less to choose from in the first round. It also allows users to filter by specific routes or stations, further reducing options.

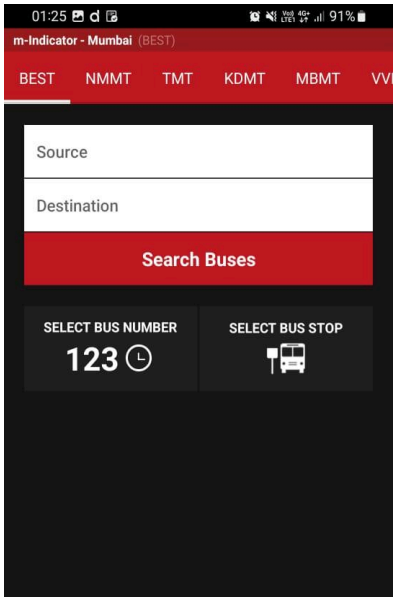
Invalid: In certain screens, particularly those showing minute details of schedules or routes, information density may offer too many options at one glance, thereby possibly increasing decision time. For example, showing the train timings for several trains running at slightly different times may be overwhelming.

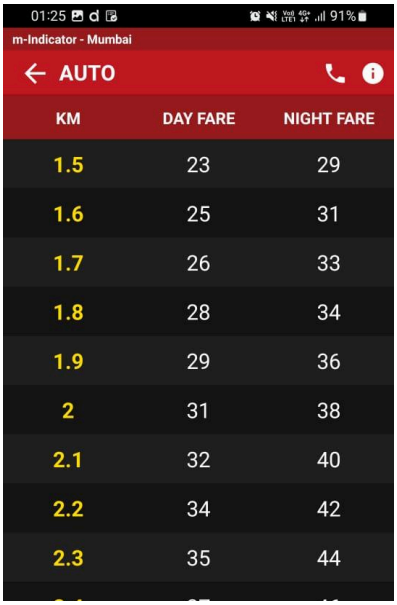
Conclusion: Mostly Valid. While the app does its best to limit choices, there are areas that could be simplified further.

2. Fitts's Law

Larger and Closer buttons make interaction faster.







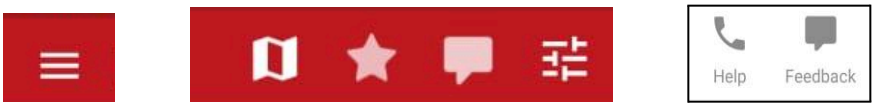
Valid: The m-Indicator app effectively applies Fitts's Law in features like "Search Buses" and "Search Trains." These sections use large input fields for source and destination, along with prominent search buttons. The size and placement of these elements make them easy to interact with, allowing users to access key information quickly and efficiently.

Invalid: The app struggles with applying Fitts's Law in the "Auto Fare" section. The buttons and input fields here are smaller and less noticeable, requiring more precision to use. This makes the feature less accessible, particularly on smaller screens or for users in a hurry.

Conclusion: While the app simplifies interaction for main features like buses and trains, smaller elements in sections like Auto Fare hinder usability and could be improved with larger, more accessible designs.

3. Jakob's Law

Follow established design conventions to improve usability.

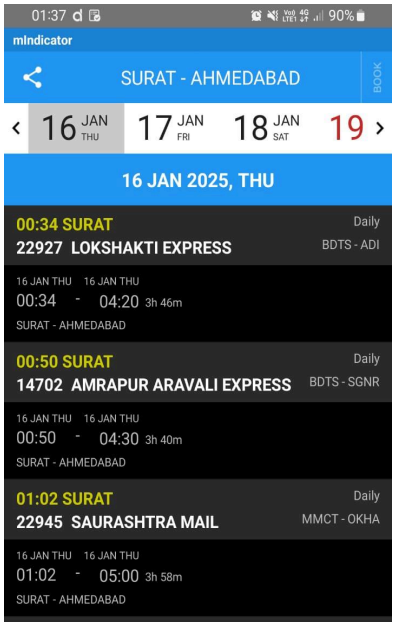


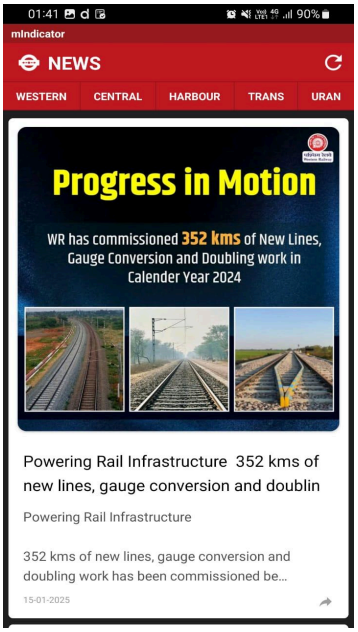
Valid: The app uses standard mobile UI patterns for navigation (tabs, menus), search (search bars, filters), and information presentation (lists, maps). This makes it easier for users to understand and use the app without needing to learn new interaction paradigms.

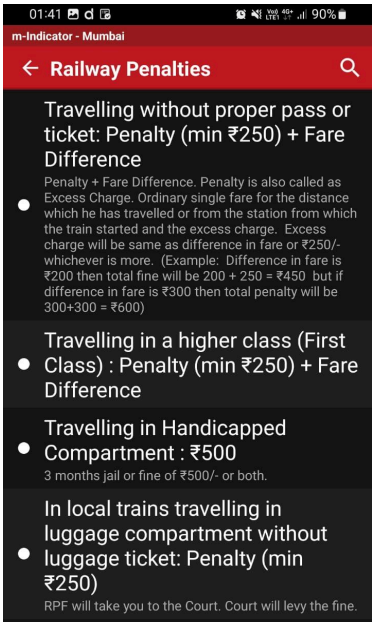
Conclusion: Valid. The M-Indicator app uses well-known mobile UI conventions, which explains its ease of use.

4. Miller's Law

One of the most impactful we can do is chunk our information into related groups.







Valid: The m-Indicator app follows Miller's Law well in sections like "Available Trains" and "News." The "Available Trains" section presents information in well-structured chunks—each train's details (timing, station, etc.) are grouped together, making it easy for users to scan and understand quickly. Even though the "News" section contains random updates, the information is still displayed in short, digestible blocks that help users process each piece individually without feeling overwhelmed.

Invalid: The "Railway Penalties" section, however, could benefit from better grouping. The information is scattered across multiple lines and paragraphs without clear visual grouping, which can make it harder for users to find and absorb the details efficiently.

Conclusion: While the app does a good job of visually grouping information in some areas like train details and news updates, sections like "Railway Penalties" would benefit from more effective visual grouping to make the information easier to process.

5. Tesler’s Law

Simplify where possible, but guide users through necessary complexity.

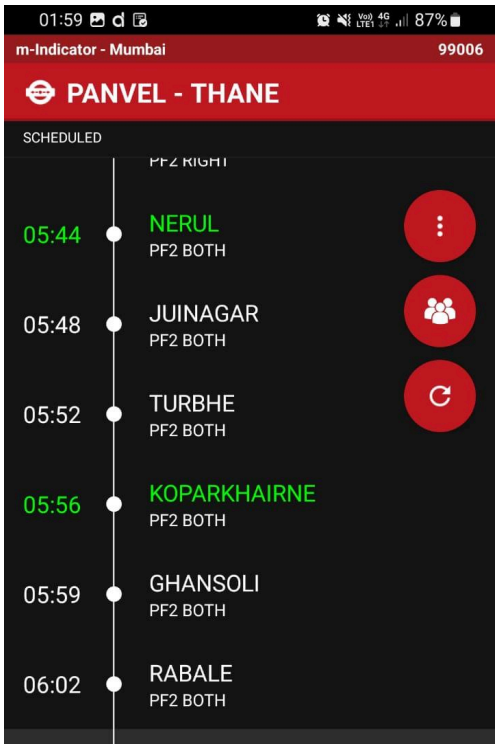
Valid: The m-Indicator app simplifies complex travel information, like train schedules, by offering filters to narrow down results. Users can easily search for specific trains or buses with minimal effort, guiding them through the complexity of public transport systems.

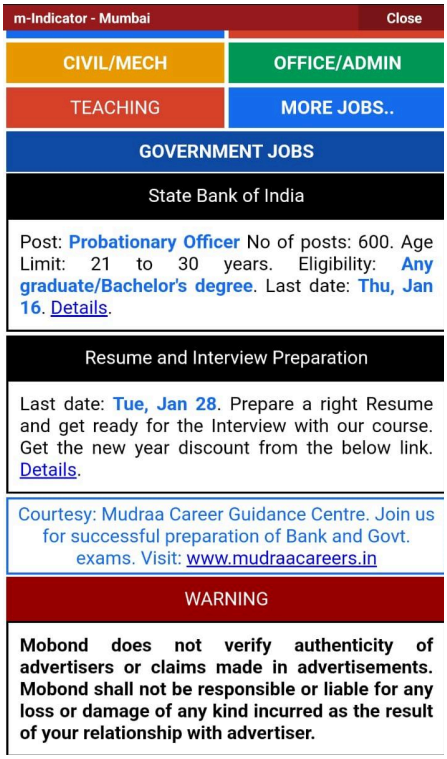
Invalid: However, some sections, like fare calculations for different routes, can feel more complex than necessary. The app could simplify these by providing clearer, more concise fare breakdowns to avoid overwhelming the user.

Conclusion: The app simplifies many aspects well, but certain complex features, like fare calculations, could benefit from more user-friendly guidance.

6. Law of Proximity

Users perceive elements that are close together as related.





Valid: The m-Indicator app effectively applies the Law of Proximity in sections like "Available Trains" and "Route Details," where related information such as train schedules, stations, and timings are grouped together. This organization helps users find all relevant details easily and quickly.

Invalid: In the "Railway Penalties" and "Job Indicator" sections, unrelated information is placed too closely together.

Conclusion: While the app does a good job of grouping related information, the "Railway Penalties" and "Job Indicator" sections would benefit from clearer separation of unrelated content to improve user experience.

7. Peak-End Rule

Focus on delivering positive peak movements and endings.

Valid: The m-Indicator app provides a positive experience with fast, accurate information and smooth transitions. Completing a booking or finding transport options gives users a sense of accomplishment and satisfaction.

Invalid: However, frequent ads at the end of a session disrupt the experience and leave users with a less satisfying conclusion.

Conclusion: The app offers a good design overall, but reducing ad interruptions would improve the final moments of user interaction.

8. Aesthetic Usability Effect

Users tolerate minor usability issues in a visually appealing design.

Valid: The app has a relatively clean and functional interface, which contributes to a basic level of perceived usability.

Invalid: The visual design of the app is not very modern or even finished-looking. Users may therefore find it less user-friendly than more aesthetically impressive competitors, although its core functionality is otherwise solid.

Conclusion: Mostly Valid. The app works, but improvement in visual design could make it look much better to the eye of the user.