Heuristics Analysis of Trip 'n Dip and Tripadvisor

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Summary

This report analyses the user interface (UI) design of two mobile applications. Specifically, the apps that were chosen are *Tripadvisor* and *Trip 'n Dip*. First, this report will introduce the apps, as well as the heuristic they will be evaluated on. Second, the relevance of each of these heuristics will be explored in the context of Tripadvisor and Trip 'n Dip. Finally, the conclusion will explore relevant improvements that could be made to both of the apps, as well as important takeaways for developers.

Trip 'n Dip is an in-development mobile application with the goal of making trip planning easier. Its specific niche is to assist users in discovering new cities to visit globally. This is accomplished by providing a brief overview of each of the cities, followed by user-made reviews of the places (Trip 'n Dip, 2025).

The second app that is being evaluated is Tripadvisor, a popular travel app that offers similar functions. Included in this list of functions are: saving locations and user-made reviews. Tripadvisor is a well-designed app that exemplifies the design heuristics that will be explored (Tripadvisor, 2025).

The two usability heuristics that were analyzed in this report are: *Consistency and Standards*, and *Aesthetic and Minimalist Design*. These heuristics were chosen as they are important for creating the framework for a well-designed UI. Appropriately utilizing them enables the creation of a UI that decreases cognitive load and enhances important features. This creates an environment that is easy for the user to learn and understand how to interact with.

Trip 'n Dip *does not* meet these heuristics to the extent that Tripadvisor does. This can be explained by it being an app that is still in early development. This is most notable in the headers and the bottom navigation bar. *Many* of Trip 'n Dip's elements are larger than they need to be, with icons and fonts of a heavy line weight. These elements become a focal point, shifting attention away from the page's main

content. In Tripadvisor, the menus and headers are less intrusive and distracting, allowing the user to stay focused on the content for prolonged periods of time. This pattern can be seen again in the colour choices made by each app. Trip 'n Dip uses more, brighter colours than Tripadvisor. The distractions caused by these colours are magnified by the larger and more noticeable UI elements.

A *very* interesting choice made by Tripadvisor is to intentionally break the Consistency and Standards heuristic. This is done by the use of circles in place of stars to represent a rating number. The unique character created by this design choice allows the app to stand out from the many other apps that use a similar "*out of five*" rating system.

A key takeaway for future developers is to consider these and other heuristics during the *early* stages of an app's development. Design choices made based on these heuristics can have major positive impacts on a user interface. It is very important to consider the design early in the software development life cycle. If made at a later time, without the internal consistency and aesthetics to support it, these decisions can cause more harm than good. It will lead to a lack of visual unity and an increase in the effort required to navigate the application. These are things that can *majorly* affect users, potentially causing them to become disinterested and avoid an app.

Overall, the consideration of these usability heuristics is very important when designing a UI. When properly implemented, it allows for a user's experience to be as intuitive and painless as possible. This *user-friendly* environment is important for building brand recognition and trust.

Introduction

The in-development web app, Trip 'n Dip, is a simple trip planning app that helps tourists discover places that could be interesting to visit. This is done through having pages of information on a variety of cities available to the user. A second

major part of the app's design is that it is possible for users to leave reviews on said locations. The reviews allow users to make decisions based on other people's personal experiences and recommendations. Trip 'n Dip aims to enable its users to discover new and interesting locations quickly and with minimal effort.

In this report, the user interface of Trip 'n Dip and the interface of a popular app with a similar purpose, Tripadvisor will be analysed. Tripadvisor has been around for over two decades and has become widely used by travelers. The app annually achieves over 6 *million* downloads on mobile devices. The interface designs of both applications will be compared to two digital design heuristics, as well as to each other (Business of Apps, 2024).

We will give clear explanations for each heuristic, followed by analytical comparisons using images from both Tripadvisor and Trip 'n Dip. The two specific heuristics that are being analysed originate from *Jakob Nielsen's 10 Usability Heuristics for User Interface Design*. They were chosen because when appropriately used, they provide a solid foundation for the design of a UI.
In order of appearance — arbitrarily decided — the heuristics are:

- Consistency and Standards, and
- Aesthetic and Minimalist Design

The first heuristic, Consistency and Standards, is the idea that user interfaces (UI) should follow *similar* design principles that are widely used on the internet. This allows the user to learn the new site or app quickly by using past experiences (Nielsen, 1994).

The second heuristic, Aesthetic and Minimalist Design, focuses on providing only information that is *necessary* to the user, to prevent information overload. This increase in clarity and conciseness, or reduction in informational noise, enables the user to focus their attention on the important elements of the app (Nielsen, 1994).

This report aims to paint a clear picture of how both apps incorporate these design heuristics into their UI's. The apps will also be contrasted with each other to explore

how a long-time industry member compares to an app that is being designed from the ground up to follow these design philosophies.

App Heuristics Comparison

Jakob Nielsen's 10 UI design heuristics are guidelines that, when followed, lead to user-friendly design. This is done by *minimizing* cognitive load, *reducing* unnecessary complexity, and *utilizing* preexisting knowledge. By implementing these heuristics, apps allow users to be empowered and to have an improved experience (Nielsen, 1994).

In this section, Trip 'n Dip and Tripadvisor will be compared and evaluated on the design heuristics of Consistency and Standards, and Aesthetic and Minimalist Design. The meaning of each heuristic will be explained in depth, as well as the relevance it has in modern UI design. Furthermore, the ways in which these two apps adhere to and utilize these standards will be compared to each other. Finally, some potential shortcomings of *both* apps, and relevant key takeaways for developers will be outlined.

Consistency and Standards

When a user interacts with a product, they bring with them an accumulation of habits and expectations. These are patterns that they have gained by spending time on *many* other websites. The first time someone interacts with a new interface, they will try to utilize preexisting knowledge. Therefore, in user interface design, it is important to ensure that a website aligns with the user's expectations. When an interface is *simple* for a person to use, it is less likely for them to have a negative experience and leave the webpage (Krause & Moran, 2021).

Understanding these UI patterns is important for maintaining consistency within an application. Internal consistency reduces the effort required by the user to understand the entire interface. This allows them to focus a greater amount of their attention on the product, enhancing their experience. However, whichever internal

design patterns are followed, it is *paramount* that they are in line with what is used in the wider digital ecosystem.

While it is important for an application to be cohesive, external consistency is something that should be considered when designing an interface. A website should work the same way as the rest of the web, where people can interact with it and have a familiar experience. For example, placing a logo on the top left of a site's header bar which when clicked, takes the user to the home page. The interactions with these elements by users become *second nature*. This design heuristic is directly tied to Jakob's Law - the idea that users spend more time on sites that are not yours. This idea suggests the importance of sharing design principles and standards by having external consistency with the rest of the web. (Norman Nielsen Group, 2017).

External Consistency and Standards

As a *dominant* industry member, Tripadvisor has followed many common external standards and practices. Figure 1 demonstrates how Tripadvisor orders and groups information about a location.
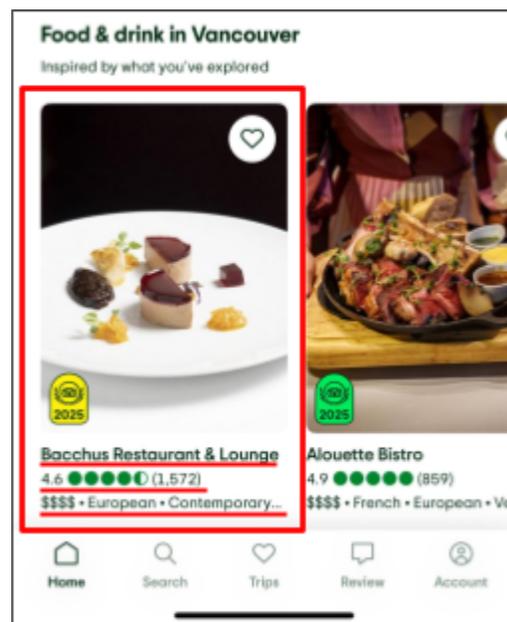

Figure 1. Basic Tripadvisor location card
(Tripadvisor, 2025).

The order followed is: image, place name, rating out of 5, in both numerical and visual formats, and basic information. This specific arrangement of information is a format that can be seen in many other apps. It prioritizes an *eye-catching* image before providing relevant information to the user. For example, a restaurant will have price ranges and cuisines shown, whereas a museum will have ticket prices and a relevant attraction type. This consistency of presentation extends beyond the location card and into the subpage itself. By utilizing an expected format such as this, the user's expectations of the content are *fulfilled*, and the experience feels *intuitive*.

The header design on Tripadvisor's subpages is consistent with many other applications. Most noticeably, the placement of the share and save buttons in the top right corner, as shown in Figure 2.
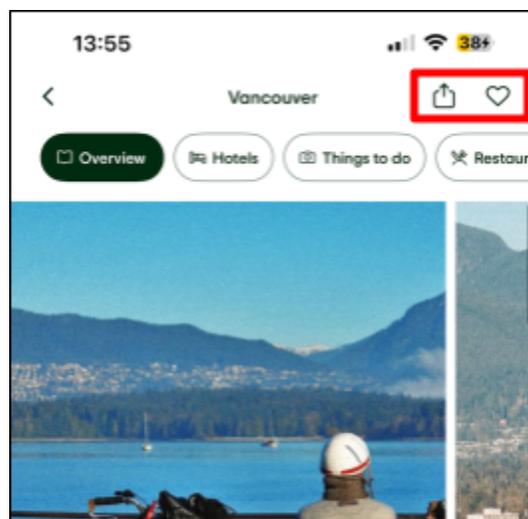

Figure 2. Tripadvisor menu bar share and save icons on iOS (Tripadvisor, 2025).

This location for the share button has become a consistent fixture in mobile web app design. The icon representing this button is dynamic, changing visual styles based on the operating system of the user. The placement choice of the heart is more novel, however, Tripadvisor is anything but unique in this regard. This grouping of content in the menu bar is expected by the user and will decrease confusion when looking for either of these icons.

There is a very notable standard that is *not* followed by Tripadvisor. When displaying the rating for a location visually, *circles* are used in place of the expected stars as displayed in Figure 3.
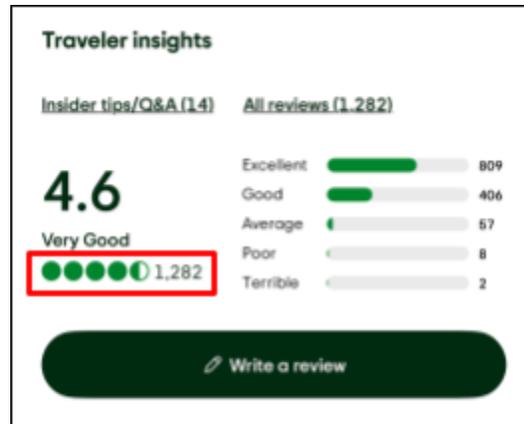

Figure 3. Tripadvisor's use of circles in place of stars to visually display ratings (Tripadvisor, 2025).

This is a very interesting choice, as stars are used *so* frequently for this purpose that the word is often used interchangeably with "rating" in many contexts. However, because the "out of five" scoring system is so commonplace, it has allowed for Tripadvisor to minorly change it, while *still* allowing new users to understand its purpose.

Trip 'n Dip follows many of the same standards as Tripadvisor. When visiting the home page, the location cards pictured in Figure 4 are immediately noticeable.

Figure 4. Trip 'n Dip home page location displays (Trip 'n Dip, 2025).

Trip 'n Dip's location cards are arranged in a horizontal row, where the right-most is slightly visible from off the screen. This design practice has become more common with the rise of mobile devices. The partially visible card suggests that it can be brought onto the screen by swiping or scrolling. This interface design choice allows for content to be displayed and browsed utilizing a *second* axis that is perpendicular to the vertical layout. By categorising these content displays, it allows the user to quickly scroll past undesired sections while viewing more content from the category they desire.

Trip 'n Dip further meets external standards by having the icons in the navigation bar in a commonly encountered order. Figure 5 showcases this order.
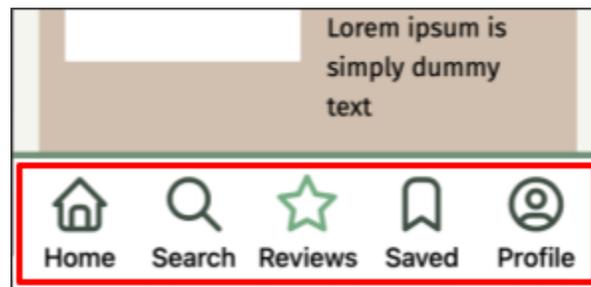

Figure 5. Trip 'n Dip navigation bar (Trip 'n Dip, 2025)

The home icon can be found on the left of the navigation bar, and the profile on the right. This placement is *widely* used on mobile platforms. By remaining consistent with this design choice, it allows new users to navigate the app while utilizing pre-built muscle memory. This is important as it *reduces* frustration for the user while interacting with the UI, increasing retention and product satisfaction. This consistency can also be found on Tripadvisor's navigation bar.

While these patterns of external consistency are important to allow users to quickly understand a new app, it is also very important for the app's UI to be cohesive.

Internal Consistency and Standards
Both applications make use of a navigation bar that is pinned to the bottom of the screen across all internal pages. This bar is composed of *simple*, visually consistent

SVG icons, accompanied by *single-word* descriptions. As shown in Figure 6, the icons used in both cases are not unique to the menu bar and can be found throughout the rest of the app.
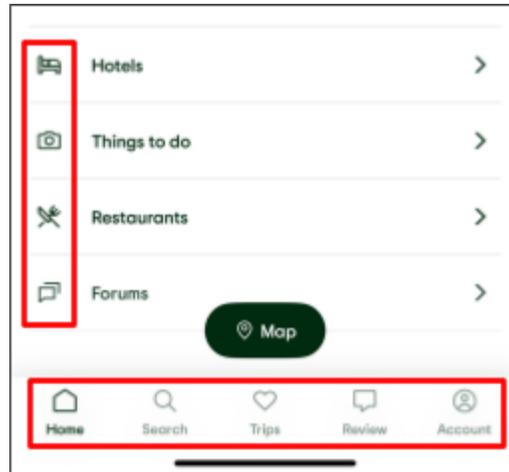

Figure 6. Tripadvisor's navigation bar with other app icons (Tripadvisor, 2025).

In Figure 6, the heart icon used by the "Trips" menu in Tripadvisor's navigation bar is not the only time it is used in the app. This same icon can be found on the location cards shown in Figure 7.1, as well as located in the top menu bar while visiting the page of a specific location, as demonstrated in Figure 7.2.
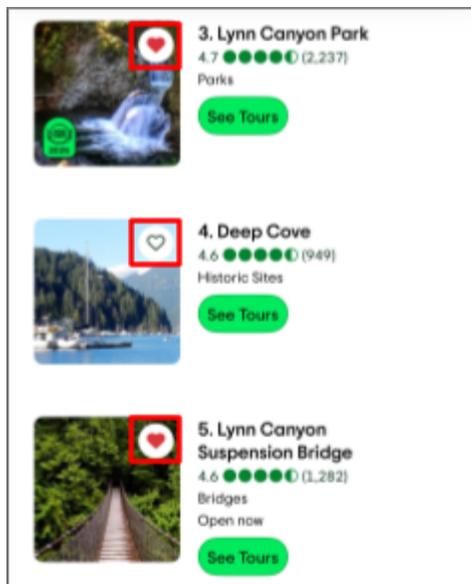

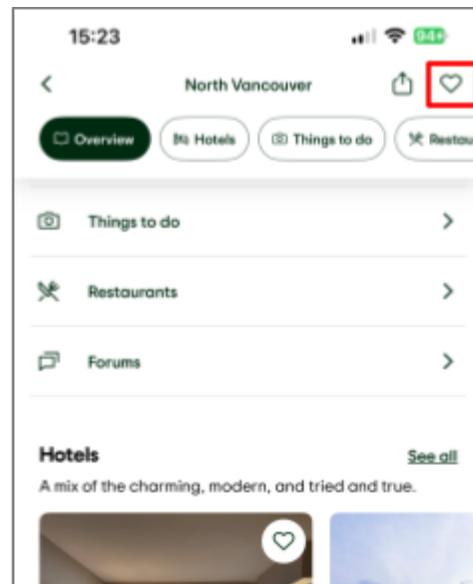Figure 7.1 Tripadvisor's use of heart icons on location cards (Tripadvisor, 2025).

Figure 7.2 Tripadvisor's use of the heart icon in the top right of a page (Tripadvisor, 2025).

In both situations, when the heart is clicked, it brings up a small menu, allowing the user to save the location to a "Trip". This pattern of repeated use of symbols shows up multiple times across the app. This consistency is important as it allows the user to develop an intuition around the functions of the app. Without it, an increase in cognitive load is applied to the user, creating a *less appealing* experience.

Most icons used in the navigation bar, as well as on a location page in Trip 'n Dip, are of a consistent style. This is highlighted by Figures 8.1 and 8.2.
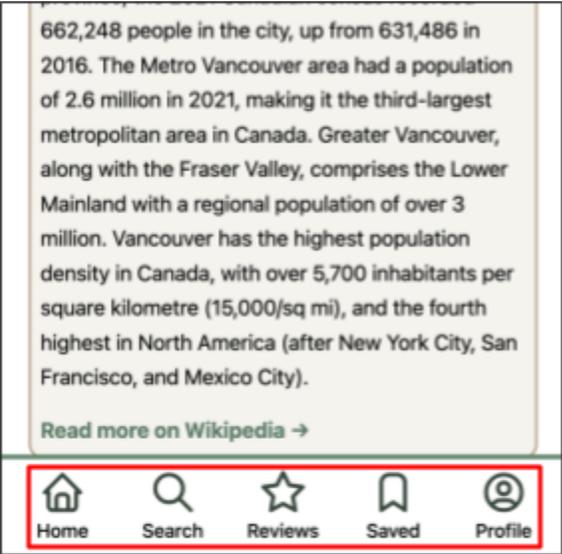

Figure 8.1 Trip 'n Dip's navigation bar icons (Trip 'n Dip', 2025).

Figure 8.2 Trip 'n Dip's dynamic page header bar icons (Trip 'n Dip', 2025).

This internal design standard helps users quickly recognise what parts of the interface are interactable. It also creates a feeling of app-wide *coherence* and *consistency*. Tripadvisor shares a similar design philosophy, where all icons used are of a consistent size, style, and line weight.

Other considerations

Tripadvisor has several inconsistencies with its UI. Some of the location cards do not have a heart on the top right, despite being able to favourite them in other ways. The header photos on locations have *multiple* different ways of indicating that they

can be swiped through. These factors require more effort from the user to be able to properly understand how to interact with these specific UI elements.

A major improvement for Trip n' Dip's interface could come in the form of *standardizing* the visual styles used throughout the application. Currently, as depicted in Figures 9.1 and 9.2, several of the pages use different colour schemes.
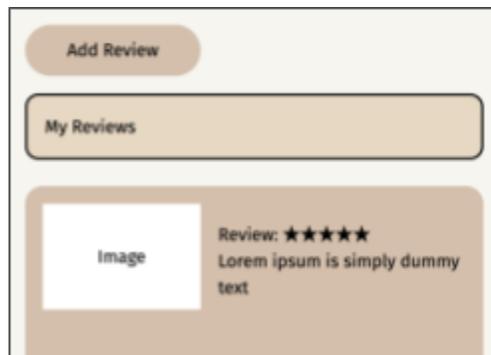

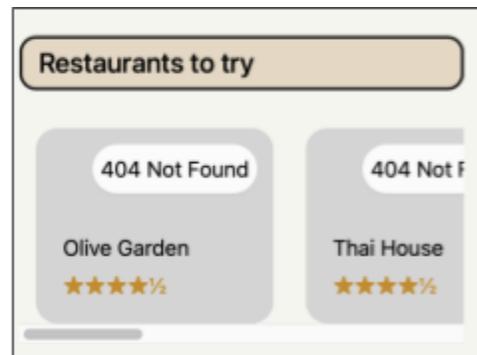Figure 9.1 Trip 'n Dip's Review page's styling (Trip 'n Dip', 2025).

Figure 9.2 Trip 'n Dip's Home page's styling (Trip 'n Dip', 2025).

This creates a sense of disjointedness and a *lack* of unity between the pages. Several of the icon choices could also be improved. Most notably, the lack of empty stars on the home page. This would make the rating system clearer to the user and increase visual consistency with external sources.

Overall, *both* apps achieve this design heuristic to varying degrees of success. This is important as to get people to use an app, they need to be comfortable interacting with it. The best way for someone to be comfortable doing something is if it is something that they already know well.

The most important consideration when developing an app should be making it as *simple* to understand as possible. This can be done to great success by ensuring the app's features are internally *and* externally consistent. It is important to utilize *any* prebuilt understandings or expectations that they may have, as well as to reinforce the new ones. Reducing the required effort for a new user to understand how to interact with the app on a fundamental level is very valuable. People like to do what comes *naturally* to them.

Aesthetic and Minimalist Design

In UI design, as of recent, It has become a trend to make websites as minimalistic as possible for the sake of *aesthetics* and *usability*. Over time, the users have adapted to this minimalist design, and the majority of interactions done on websites require almost no thought from the users. This heuristic follows Jakob's Law, where the idea of familiarity leads to more user satisfaction and faster task completion (Nielsen, 2023). In terms of Trip 'n Dip, this means that the reviewing system should use stars, which everybody recognizes, and use a card layout to display areas.

What is *minimalistic design* in UI? Minimalism is the idea of eliminating as much noise as possible, which will be the core focus of my topic. I will be splitting the topic of noise into two separate sections, limiting and how to limit noise, and dynamic noise.

Limiting Noise

Noise in UI design is when there are unnecessary details on a page, and the goal for developers should be to always limit it (Chen & Moran, 2018). Tripadvisor applies this idea by splitting its menus into submenus, and the support page takes you to an external website, instead of just displaying blobs of information right on the app, as seen in figures in 10.1 & 10.2.

Figure 10.1, Tripadvisor
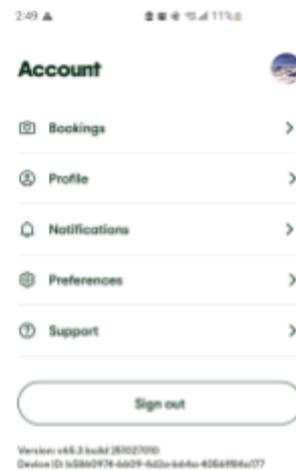2025. This image shows
Tripadvisors support
page

Figure 10.2, Tripadvisor
2025. This image shows
the account page when
user is logged in.

In figure 10.2, you can see how Tripadvisor clearly indicates the usage of an external site with an SVG. Figure 10.3 shows a clear indication of submenus existing with the use of SVGs. Both pages follow a minimalist design by using very minimal colors, and by using basic transitions between submenus. What is interesting however, is that clicking the profile picture icon, and clicking the "profile" menu does the same thing, which causes a slight confusion for the user.

Trip 'n Dip, follows this heuristic by splitting menus into submenus as well, but what differs from Tripadvisor, is the *list-view* style submenu as shown in figure 11.1 & 11.2.

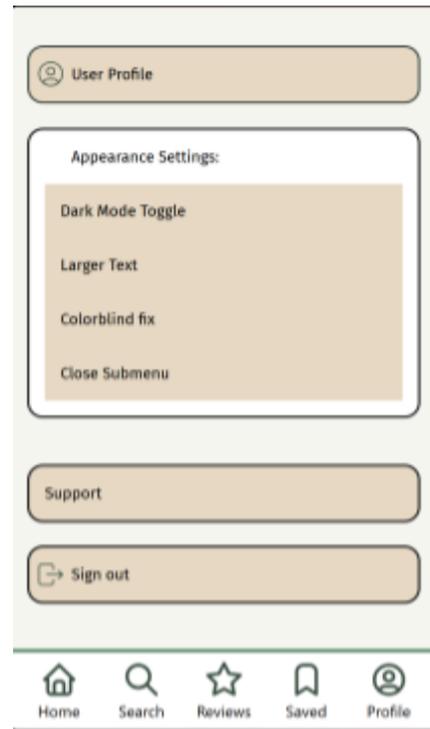Figure 11.1, Trip 'n Dip 2025. Showcasing list-view

Figure 11.2, Trip 'n Dip 2025. Showcasing list-view

The reason for this list view design is that we found it to be easier for the user, as the action is instantaneous.

Dynamic Noise

Dynamic noise in UI design refers to any interface behavior that changes over time. An example of this is the nav bar and footer elements of a page. The user is *focused* on the page content, but the nav bar can take up 10-20% of the space. However, as the user wants to leave (navigate) to a new page, the nav bar suddenly becomes useful (Chen & Moran, 2018). Figure 12 showcases this idea of dynamic noise.
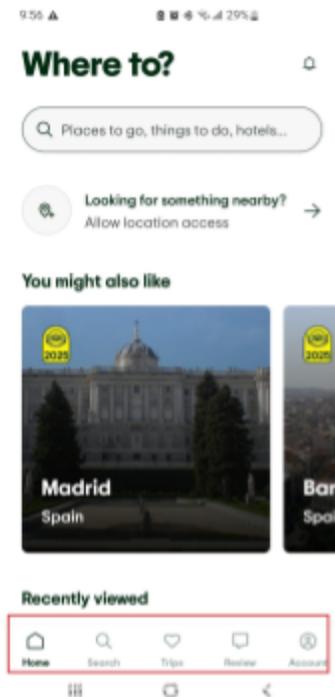
Figure 12, Tripadvisor 2025.
showcasing footer of Tripadvisor

In figure 12 you will notice that Tripadvisor's buttons have a very light shade of gray, and only the page you're in, is displayed with a dark green. This choice allows the user to completely forget about the footer, and focus on the core app, solidifying the idea that minimalism and familiarity leads to more user satisfaction (Nielsen, 2023).

Conclusion

With that being said, Tripadvisor keeps a consistent minimal design throughout their app and manages noise in an understandable manner. This standard makes it easy for new users to understand and navigate the app, which helps user satisfaction. A key takeaway for developers would be to look from the users' perspective, and design the app with users' needs in mind.

Conclusion

This document will be concluded by stating the following: both Tripadvisor and Trip n Dip demonstrate strong user-friendly design, as each fulfills the two heuristics in their own unique way. Both apps align well with the heuristics discussed, which ultimately show that Tripadvisor and Trip 'n Dip provide reliable and efficient experiences for users.

Visually, Tripadvisor maintains a consistent minimalistic design throughout its app, carefully managing both static and dynamic noise which provides a clean interface. By splitting menus into submenus, using subtle color schemes, and providing clear visual cues for external links, Tripadvisor ensures that the users will only focus on the core contents.

As for consistency, both Tripadvisor and Trip 'n Dip succeed in maintaining internal and external standards, which allows users to interact with the apps easily. Internally, repeated use of icons, navbars, and visual styles helps users build familiarity. Externally, the placement of home and profile icons, swipeable content cards, and predictable content layouts allows users to navigate and understand the interface quickly. While minor inconsistencies exist, such as varying location card indicators in Tripadvisor or differing color schemes in Trip 'n Dip, both apps follow this heuristic, preventing confusion, and creating a user-friendly experience.

In terms of following usability heuristics, Tripadvisor did everything quite well. As new users to Tripadvisor, the app was easy to understand. A slightly infuriating thing that was noticed during this analysis was, the "sign in" option takes up half the screen in the account page, with no way of clearing it.

For Trip 'n Dip, the same consistency and similar aesthetics to Tripadvisor were followed, adhering to the usability heuristics by Nielsen. However, Trip 'n Dip does not offer any customizability, support, or accessibility options.

The key takeaway for future developers is that thinking from the users' perspective is the best way to understand the flaws in an app. By using previous technical knowledge, and the 10 usability heuristics, it enhances the user-focused design.

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