User Interaction Analysis Using Microsoft Clarity

1. Introduction:

This report presents a detailed analysis of user interactions on the flight booking website using Microsoft Clarity. The primary focus was to identify the most clicked-on features/buttons and provide actionable insights to optimize feature usage and enhance the overall user experience.

2. Research on Microsoft Clarity:

Clarity is app analytics tool that helps you understand how users interact with your digital product

Key Features:

- **Session Recordings**: Watch real user sessions unfold, seeing every click, scroll, and tap. Analyze how users navigate your website, identify pain points, and validate findings from other tools.
- **Heatmaps**: Visualize user engagement through click and scroll heatmaps. Understand which areas attract attention, and which might be getting ignored.
- **ML Insights**: Leverage machine learning to surface the most important recordings and heat maps based on your website activity. Get AI-powered recommendations and insights without sifting through endless data.
- **Copilot**: This AI-powered assistant uses natural language processing to help you understand your data intuitively. Ask questions about sessions and heatmaps, get summaries of key findings, and uncover trends easily.
- **Masking**: Protect user privacy by masking sensitive information like passwords and credit card numbers. Customize what Clarity captures to comply with data regulations.
- **Team Collaboration**: Share recordings, heatmaps, and insights with your team, fostering data-driven decision making and improving teamwork.

3. Identified Key Features:

- Site i used for data analysis. https://flightfarecompare.onrender.com/

Through interface analysis of the Flight booking website. The following key features/buttons were identified:

- **Departure Airport**
- **Arrival Airport**
- **Search from (date)**
- **Search to (date)**
- **Search Button**
- **View Details**
- **Book Button**

4. Setup and Configuration:

Microsoft Clarity can be set up and configured in different ways.

- **Install manually:** This involves adding a small script snippet to your website's code directly.
- **Install on a third-party platform:** You can integrate Clarity with certain platforms like Google analytics, WordPress, Shopify, or Wix through their app stores.

Custom smart event tracking can be implemented for each identified feature/button to accurately capture clicks and interactions. Flight booking web app uses script tag for integration of clarity.

5. Data Analysis overview

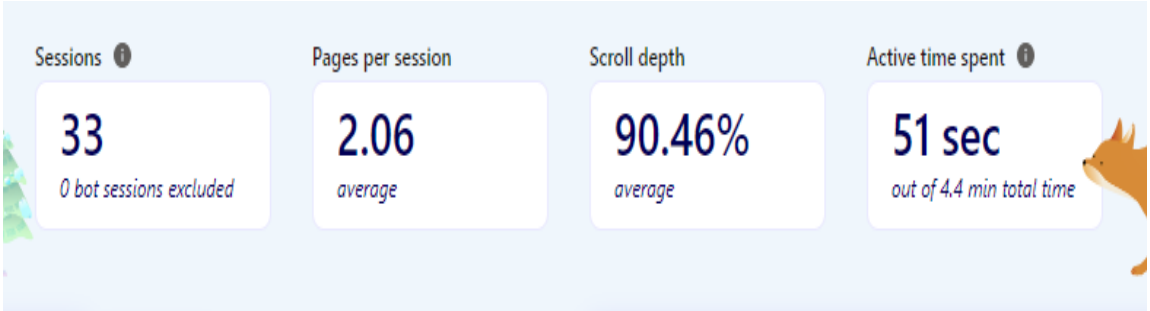
Data collected from Microsoft Clarity provided valuable insights into user interactions.

- **Popular Pages:**
    - Home: 48%
    - Flight: 27.60%
    - Info: 14%
    - Support: 7%

- **Users overview:**
    - Total user:30
    - Total session:35
    - New session:30
    - Old session:5

- **Session Overview:**
    - Total Sessions: 33
    - Pages per Session: 2.06 (average)

- Scroll Depth: 90.46% (average)
- Active Time Spent: 51 sec out of 4.4 min total time



- **User Insights:**
  - Rage Clicks:2.86% (1 session)
  - Dead Clicks: 14.29% (5 session)
  - Excessive Scrolling: 0 sessions
  - Quick Backs: 5.71% (2 sessions)

- **Performance Overview:**
  - Performance Score: 90/100
  - Largest Contentful Paint (LCP): 1.9s (good)
  - First Input Delay (FID): 10ms (good)
  - Cumulative Layout Shift (CLS): 0.91s (poor)
    - Cause of poor CLS: Results are loaded after the initial page load, they can cause layout shifts if their dimensions aren't pre-defined.

- **Referrer and Channels:**
  - Referrer: flightfarecompare.onrender.com, com.slack
  - Channel: Direct, Organic Search
  - Campaign: Not specified

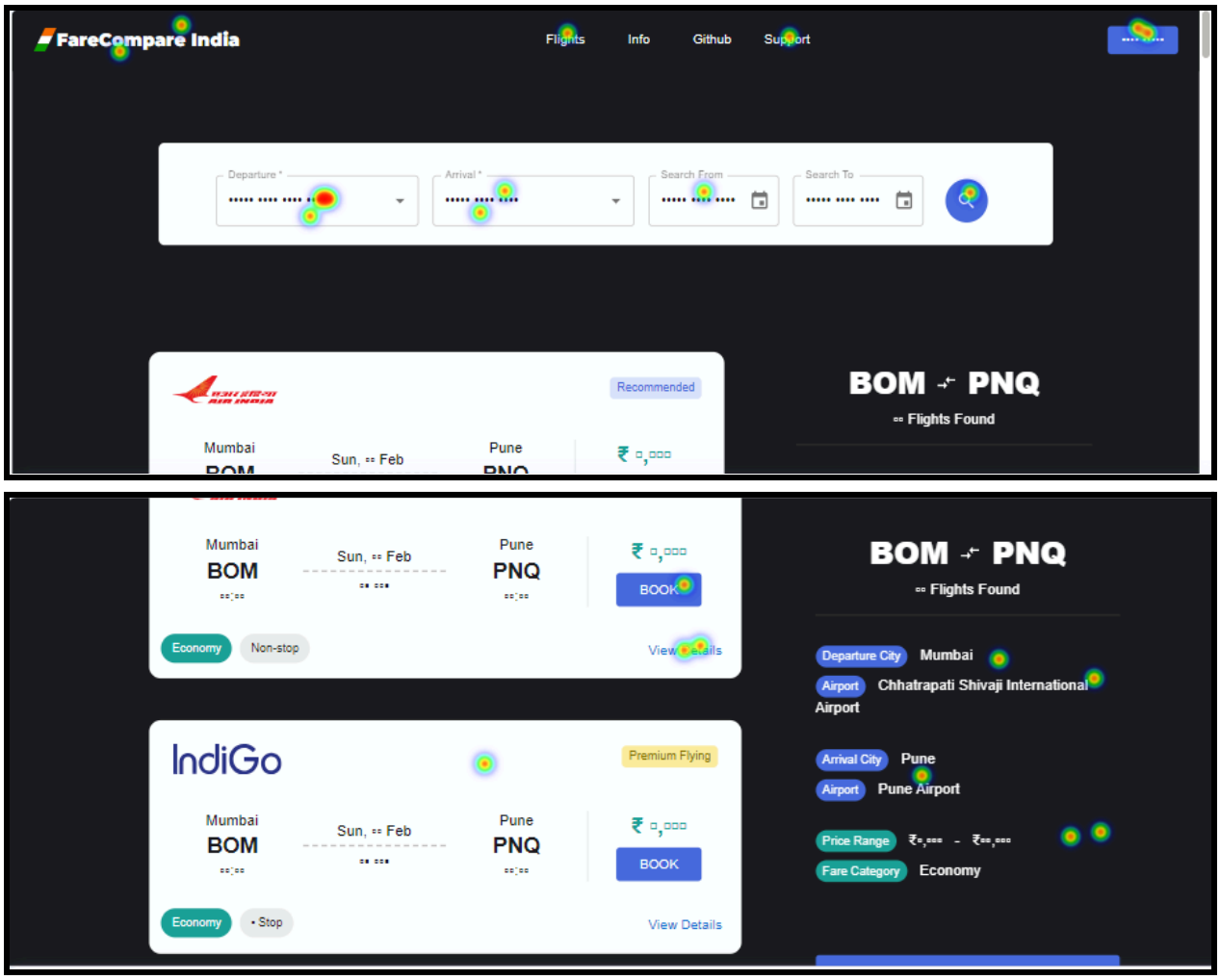
- **Browsers:**
  - Chrome: 80% (28 sessions)
  - ChromeMobile: 20% (7 sessions)

6) Heatmap:

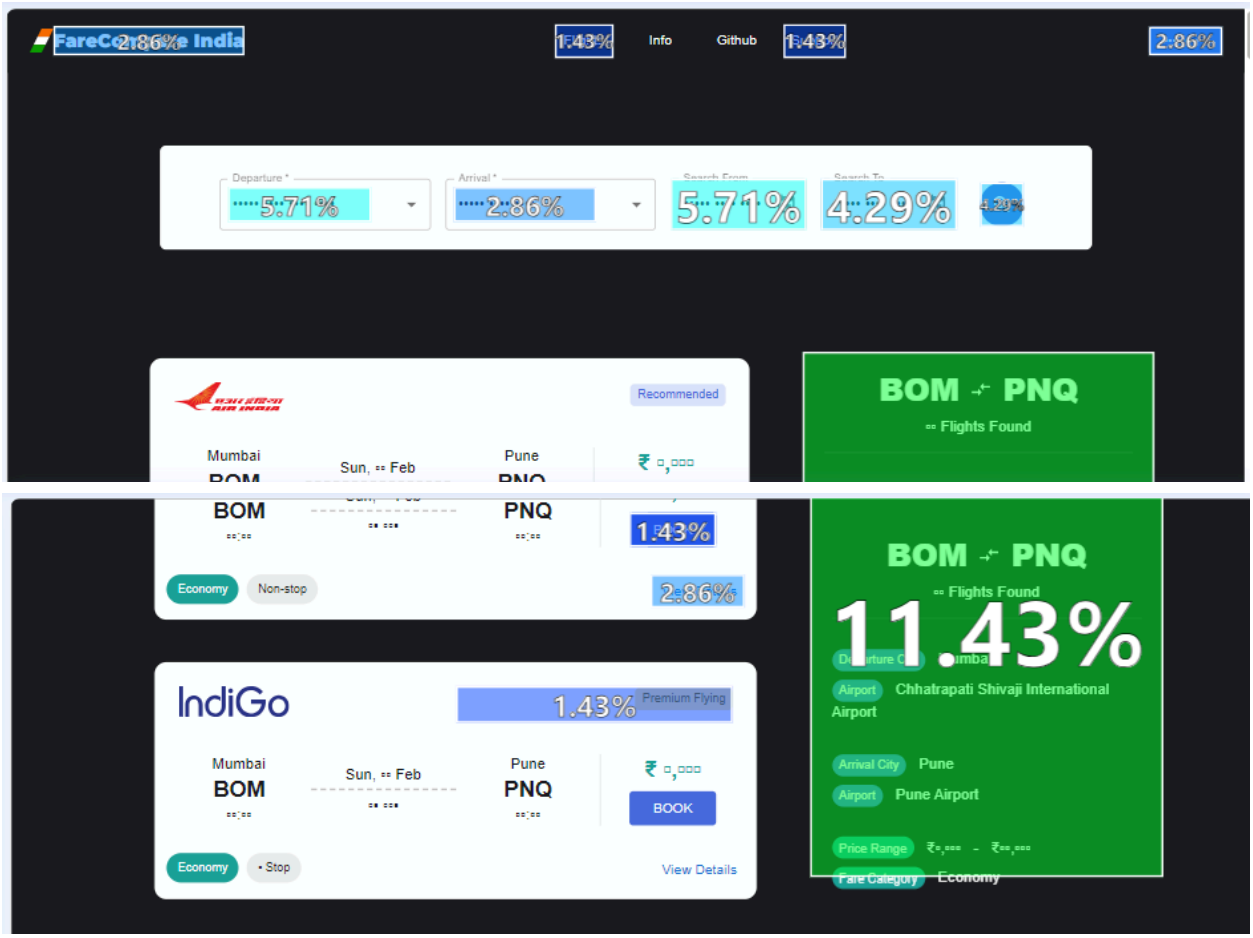
Heatmaps Insights

- **Areas of interest:** Departure/Arrival inputs, dates input, route cards, popular routes section.
- **Areas needing improvement:** Homepage images/text (potential confusion).
- **Desktop User Behavior**:
    - Scrolled down to view flight options, but 77.8% didn't reach the bottom
    - Initially used departure and from inputs
    - Ended sessions by clicking on scroll to top button
- **Mobile User Behavior**:
    - Scrolled down fully
    - User has to fill a form on every search.
    - Ended sessions by clicking search buttons
- **Key Takeaways**:
    - The website could avoid using a dead element that looks like a button but does not perform any action, as it may confuse or frustrate users.

Flight Page Heatmap



Area Heatmap



7) session recording overview

New User: They usually spend some time at the home page to get some knowledge about the site.

Old User: They usually go to the flight page to search flights and spend less time with the home page.

Key Takeaways:

- To reduce bounce rates and retain users, the website could optimize the page load time, especially for the flights page, and avoid reloading the page when the user clicks on the logo or the back button.
- To increase conversion rates and bookings, the website could provide more information and guidance on the flight details page, such as the total price, the cancellation policy, and the booking process.

8) User engagement overview

- **User Engagement Patterns:**
  - **Desktop Users:**
    - 80% scroll down to view all flight options.
    - 50% click on route cards and stop icons.
    - Conversion rate from search to booking is 15%.
    - **Pain Point:** User has to navigate back for booking.
    - **Recommendation:** Add a "Book Now" button at view detail model.
  - **Mobile Users:**
    - 100% scroll down to view all flight options.
    - Conversion rate from search to booking is 5%.
    - **Pain Point:** Search flight form
    - **Recommendation:** Simplify form to search flights.

- **User Behavior**
  - **New Users:**
    - **Exploration:** Spend more time on the homepage, likely familiarizing themselves with the website and its features.
    - **Learning Curve:** Might take longer to fill the flight search form, suggesting unfamiliarity with the layout or options.
    - **Cautious Engagement:** Less likely to click "Book Now" immediately, indicating potential hesitation or preference for further research.
  - **Returning Users:**
    - **Focused Navigation:** Spend less time on the homepage, demonstrating familiarity and a clearer intent.
    - **Efficient Searching:** Navigate directly to the flight search page and use form elements confidently.
    - **High Engagement:** More likely to click "View Details" and "Book Now", suggesting stronger intent and trust..
  - **Common for all user:**
    - Users input departure and arrival airports by typing a few characters and then selecting from the provided list, indicating they prefer the autocomplete feature for convenience and accuracy.

9) Recommendations

- **Optimize Page Performance**: Improve the performance and responsiveness of the website, especially Cumulative Layout Shift (CLS)

- **Add "Book Now" Button in View Detail Modal:** Add a "Book Now" button directly within the flight detail modal. Ideally, place it above the fold and highlight it visually for easy discoverability. This reduces clicks and streamlines the booking process, potentially increasing conversion rates.

- **Implement Filter and Sort Options:** Introduce filter and sort functionalities to improve user engagement and facilitate easier navigation through the available flight options. Users can filter by criteria such as price, departure time, duration, and number of stops, and sort results according to their preferences.
- **Retain Input Field Values on New Searches in Mobile View:** Avoid clearing input fields on new searches in mobile view to reduce friction and improve user experience. Retaining input field values allows users to easily make adjustments to their search criteria without having to refill the form repeatedly.

10) Conclusion:

Integrating insights from both user behavior analysis,session recording and heatmaps insights provides an understanding of user interactions on the flight booking website. By implementing the recommended strategies, Web App can enhance user engagement, improve the overall user experience, and optimize conversion rates.