CASE STUDY

IRCTC

App Redesign

ROLE
UI & UX Design

TOOL USED
Figma

ABOUT IRCTC

- **Government-backed Commitment:** The IRCTC app, created by a government-backed organization, prioritizes user convenience and security in India by providing a platform for tickets to be purchased and real-time information to be accessed.
- **Complete Travel Assistance:** With the ability to book tickets, check PNR status, and more, this app is a must-have for anyone travelling by train. It also simplifies the entire train journeying process.
- **Mass Adoption:** The IRCTC Rail App has become the go-to option for millions of travellers all over the country thanks to its streamlined procedures and services.

OBJECTIVES

- **Ticket Booking and Management:** The IRCTC app allows users to book, modify, and cancel train tickets securely, simplifying the ticketing process. It also offers secure payment options, including digital wallets and payment gateways, for added convenience.
- **Real-Time Train Information:** Users can access up-to-date train schedules, including departure and arrival times, to plan their journeys effectively. Additionally, it provides information about train routes and stops.
- **PNR Status and Seat Availability:** The app provides PNR status checks and real-time seat availability information, helping users make informed booking decisions. It also offers seat maps for different train classes.
- **Tourism Services:** It offers tourism packages, hotel bookings, and travel-related services, promoting travel experiences beyond train tickets. Users can explore detailed itineraries for tour packages.
- **Customer Support and Notifications:** Users have access to customer support and receive timely push notifications about train updates, while data security and user feedback are prioritized for an enhanced user experience. The app also includes a comprehensive FAQ section for common queries.

PROJECT OVERVIEW

Problem Statement - Why I am re-designing ?

In the past, IRCTC was the go-to platform for Indians to book train tickets. However, due to its outdated user interface and unreliable servers, people started turning to other websites and apps like MakeMyTrip, Ixigo, Yatra, and Paytm. To provide users with a better and easy interface experience, I plan to redesign the IRCTC mobile app.

Target Audience

The target audience for the IRCT app includes adults aged 18-64, with secondary user groups being senior citizens (60+) and youth/ students (16-30)

My Goal

I aim to craft a user-friendly and intuitive interface for the IRCTC app, ensuring a seamless and effortless user journey. This involves designing a sleek and contemporary appearance that incorporates all essential UI elements, creating an elegant and visually appealing user interface.

Minimal Design | User-friendly UI | Engaging Design

COMPETITIVE ANALYSIS

Company Name	IRCTC	Ixigo	makemytrip	yatra	paytm	RAILYATRI
Established	1999	2007	2000	2007	2010	2015
Total Services	6	5	8	6	5	4
Train Booking	✓	✓	✓	✓	✓	✓
Hotels Booking	✓	✓	✓	✓	✓	✗
Flights Booking	✓	✓	✓	✓	✓	✗
Cabs Booking	✗	✓	✓	✓	✓	✗
Website	✓	✓	✓	✓	✓	✓
Mobile App	✓	✓	✓	✓	✓	✓
User Ratings	2.10	4.42	1.75	1.69	1.6	

DESIGN PROCESS

- Background Research
- Competitive Analysis

- Site Flow
- User Journey
- Low-Fidelity Wireframes

- User Flows
- Mid-Fidelity Wireframes
- Architecture
- Brainstorming

- Design System
- UI Kit
- High-Fidelity Wireframes
- Prototype

- Usability Testing

Some Common Reviews Of IRCTC App

Key Insights

- The user interface is confusing.
- Navigation is inadequate, making it hard to find ticket options or cancel tickets.
- The app frequently crashes.
- User-created travel itineraries are not saved.
- The interface includes unnecessary features like offers and upcoming bookings, duplicating functionality found in other pages.
- The review interface appears disorganized and untidy.

SITE MAPPING

USER PERSONA (Experienced)

Prashant Upadhyay

Age : 25yrs old
Profession : Software Developer
Education : B.Tech
Location : Gurgaon, India
Status : Unmarried

About

Prashant, a 25-year-old software developer, has been employed at Appsquad for the past five months. He recently earned his B.Tech degree in 2023 from the Indian Institute of Information Technology in Raipur, West Bengal. Despite leading a hectic schedule with his demanding job, Prashant maintains a vibrant social life, actively participating in various hobbies and spending vacations with his family. Prashant is also an avid animal enthusiast and enjoys indulging in movie watching activities.

Key characteristics

- Ambitious and ambitious employee
- Tech-savvy
- Frequent traveller and adventurer
- Enjoys spending time with family and friends
- Frequent movies with friends and family members in various cities

Pain points

- The home screen feels overcrowded, with too much information competing for attention.
- It's not straightforward to find and access train tickets within the app.
- The app lacks a dedicated section for saved travel itineraries, requiring users to search manually.
- The app fails to provide a seamless booking experience due to cumbersome user interfaces, which complicates the ticket purchase process.

Goals

- Implement an elegant and clean visual theme.
- Enhance the overall usability to provide a smoother and more intuitive experience.
- Ensure seamless accessibility to cater to a broader range of users.

USER PERSONA (New User)

Shikha Sinha

Age : 21yrs old
Profession : Student
Education : B.des
Location : Surat, India
Status : Unmarried

About

Shikha, a recent graduate from Surat, Gujarat, holds a 12-year stint at the esteemed National Institute of Fashion Technology in Kankaria. She is currently pursuing a Bachelor's degree in Fashion Communication. There's little doubt that Shikha's spirit is endearing, her intense love of travel and her unwavering zest for exploring new places. She has a wide range of hobbies, including the aforementioned travel, as well as photography, listening to music, and going shopping.

Key characteristics

- A dedicated and hardworking student.
- Tech-savvy individual.
- Enjoys watching and listening to music.
- Frequently watches movies, series, and books every 3-4 months.
- Spends her free time with friends and family members in various cities.

Pain points

- The app's interface is overloaded with an excessive amount of information, making it overwhelming for users.
- The checkout process is not intuitive and lacks transparency, leaving users uncertain about where to click.
- The app's search functionality is limited, requiring users to manually scroll through extensive lists of options.
- Both the interface and the login page lack visual appeal, resulting in a monotonous and unengaging user experience.

Goals

- Enhance visibility with high-contrast and large fonts.
- Simplify the checkout process with clear instructions and guidance.
- Improve user experience with clear language and straightforward organization.
- Ensure compatibility with screen reader language, alt text, and keyboard-friendly navigation.

EMPATHY MAPPING

USER FLOW

USER Journey

NEW USER | TASK 1: Book a ticket from Delhi to Lucknow on 10th october 2023

EXPERIENCED USER | TASK 1: Book a ticket from Delhi to Lucknow on 10th october 2023

NEW USER | TASK 2: Check the running status of Padmavat train on 11th october 2023

Experienced USER | TASK 2: Check the running status of Padmavat train on 11th october 2023

DESIGN SYSTEM STUDY

COLORS

#C14B4B | #F8F4E3 | #2B2A4F | #6F6F6

GRID SYSTEM

Laptop grid | 1.5 rem
Gutter space | 20 px
Margin | 25 px

TYPOGRAPHY

BOLD | MEDIUM | REGULAR

ROBOTO
ROBOTO
ROBOTO
ROBOTO
ROBOTO
ROBOTO

PROBLEM STATEMENT

After doing all research I found some necessary problem that need to be solved , and the problems are :

1. Too much stuff on the screen makes it hard to understand the important info.
2. Important things like the type of train or date changes are easy to miss because they don't stand out.
3. It's tricky to move between booking steps, especially when trying to figure out how much money to pay on the last step.
4. The system gets slow, or fill captchas on every single page and feels heavy during use.
5. Things don't look or work the same way all the time, making it confusing.

SOLUTIONS

After specifying the problems according to the research , here is some possible solutions to solve it:

1. **Simplify the interface**
   - Remove unnecessary elements from the screen to reduce visual clutter & prioritize essential information to make it stand out.
2. **Enhance visual hierarchy**
   - Use bold fonts, contrasting colors, and ample whitespace to highlight important details like train type and date changes & employ a consistent color scheme.
3. **Streamline booking flows**
   - Improve the user flow by a more seamless experience & Provide clear navigation buttons and indicators to guide users through the process.
4. **Optimize performance**
   - Use minimal captcha for necessary pages such as sign in and log in page.
5. **Provide Clear Payment Information**
   - Display the total amount prominently on the review page, ensuring users can easily understand how much they need to pay.
6. **Avoid distractions**
   - Keep the design clean & minimal & provide transparency in the billing process.
7. **Ensure consistency**
   - Conduct usability testing with real users to identify specific pain points in the booking process.
8. **Responsive Design**
   - Ensure a consistent user experience and works well on various devices, reducing frustration for users accessing the system from different platforms.
9. **Educational Elements**
   - Provide tooltips or information pop-ups to guide users through the booking process, explaining any unfamiliar terms or steps.

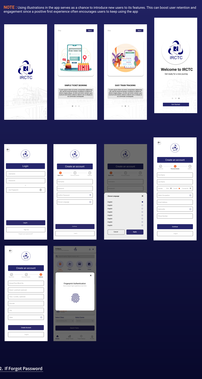
LOW FEDILITY

TICKET BOOKING SECTION

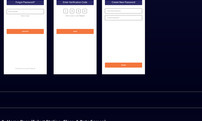
I've designed the ticket booking screens with a primary focus on the train reservation process. Users can easily choose their train, select a departure date, navigate the train options, manage passengers, and complete the payment.

1. Onboarding, Signup Screens

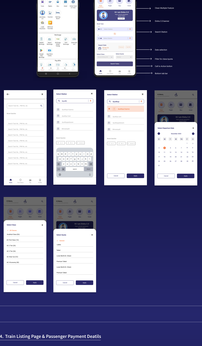
NOTE - Using illustrations in the app serves as a chance to introduce new users to its features. This can boost user retention and engagement since a positive first experience often encourages users to keep using the app.



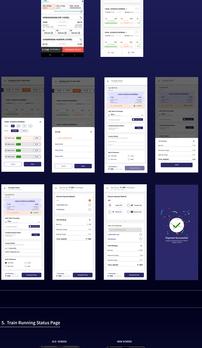
2. If Forgot Password



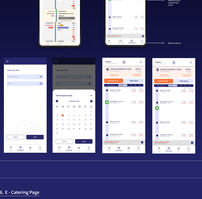
3. Home Page (Select Station, Class, & Date Screen)



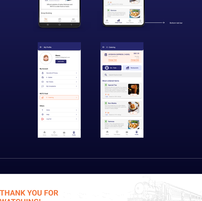
4. Train Listing Page & Passenger Payment Deatils



5. Train Running Status Page



6. E - Catering Page



THANK YOU FOR WATCHING!