Human Computer Interaction

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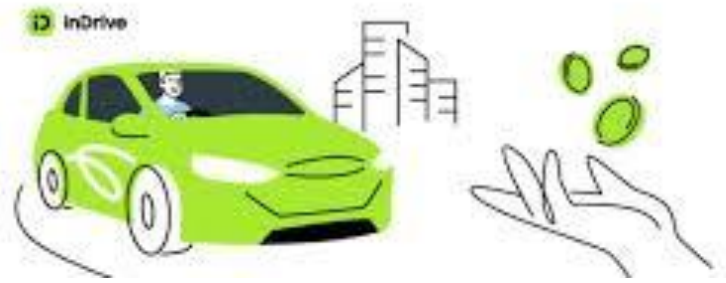
Selected App: InDrive



SECOND PHASE REPORT

Report on Phase 2a Deliverables: Running Prototypes and Design Rationale for inDrive App Redesign

Introduction:

In Phase 2a of the inDrive app redesign, our focus was on creating running prototypes for distinct user groups and providing a comprehensive report on the design choices made. The overarching goal was to address user-identified issues from the first phase and deliver a more user-friendly and intuitive interface.

Prototype Overview:

The running prototypes in Figma were meticulously crafted, incorporating innovative changes to enhance user experience. One notable redesign involves the relocation of profile management to a separate screen, transitioning from a vertical display to a dedicated page. This page integrates icons for quick access to essential features such as city information, ride history, city-to-city rides, FAQs, support, safety, and settings.

Rationale for Novel Idea:

The novel idea of segregating profile management emerged from the invaluable feedback received during the first phase. Users encountered several challenges, including the explicit requirement to type pickup addresses, ambiguities in live location marking, and difficulties in managing their profiles efficiently. The decision to shift profile management to a distinct screen was guided by the need to streamline user interactions and provide a more accessible and organized interface.

Addressing Identified Problems:

1. **Addressing Explicit Pickup Address Entry:**

- Problem: Users faced difficulties in explicitly typing pickup addresses.

- Solution: By segregating profile management and introducing icons for city information, users can now seamlessly input and manage pickup addresses through an intuitive interface.

2. **Improved Live Location Marking:**

- Problem: Live location access was not clearly marked.

- Solution: The redesigned interface ensures a more accurately marked path, addressing the previous ambiguity and enhancing user confidence in utilizing live location features.

3. **Enhanced Profile Management:**

- Problem: Users encountered challenges in managing their profiles.

- Solution: Shifting profile management to a dedicated screen simplifies user interactions and provides a centralized hub for accessing key profile-related functionalities.

4. **Streamlined Fare Selection:**

- Problem: Difficulty in navigating fare options on the main screen.

- Solution: Notification pop-ups for fare selection were moved to a separate screen, reducing clutter on the main interface and making fare choices more user-friendly.

5. **Improved Driver Contact Details:**

- Problem: Users faced issues accessing driver contact details.

- Solution: The redesigned interface incorporates a more intuitive approach to accessing and displaying driver contact information, ensuring a smoother user-driver interaction.

6. **Voice Assistant Integration:**

- Problem: Users expressed a desire for voice assistant features.

- Solution: Considering user feedback, voice assistant features were introduced, enhancing ease of use and accessibility for a wider range of users.

7. **Icon Size Adjustment:**

- Problem: Users suggested increasing icon size for better visibility.

- Solution: Icon size was adjusted to improve visibility and ensure a more user-friendly visual experience.

8. **Introducing New Safety Features:**

- Problem: Safety concerns were identified.

- Solution: New safety features were introduced to address these concerns, enhancing the overall security and reliability of the inDrive app.

Conclusion:

The running prototypes for inDrive app in Phase 2a reflect a user-centric design approach, integrating novel ideas derived from user feedback. By addressing the identified problems from the first phase, the redesigned interface aims to deliver a more intuitive, accessible, and user-friendly experience, meeting the diverse needs of the user base. The incorporation of new features and a streamlined

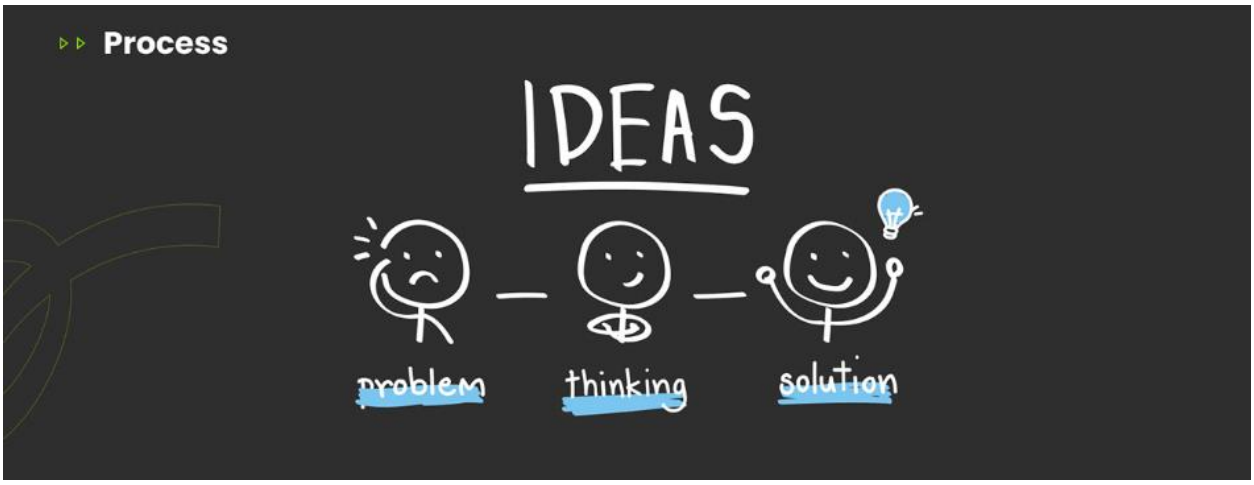
design positions inDrive as a cutting-edge and responsive transportation application.

Deliverables for Phase 2b:

What type of Evaluation methods you have used?

a) Evaluation Methods Used:

we employed a combination of evaluation methods to comprehensively assess the usability of the inDrive app. The primary methods utilized were Heuristic Evaluation and Usability Testing.



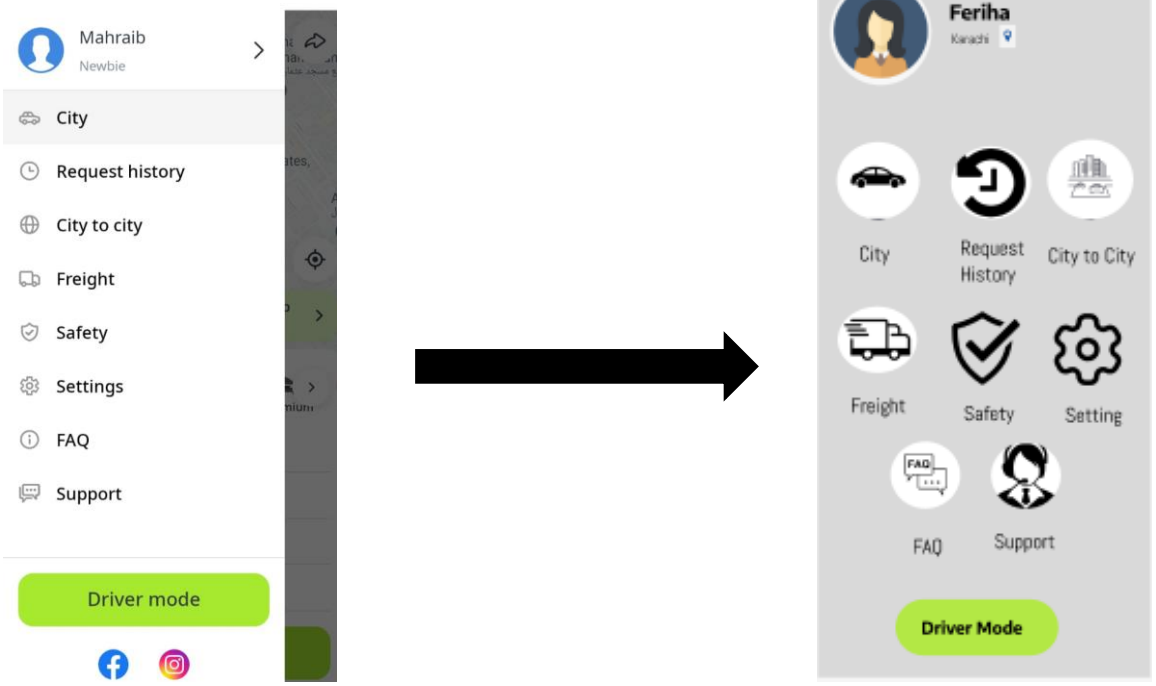
- **Visibility of system status and matching between system and real world:**

ISSUE:

user profile management in inDrive app only includes left navigation bar for displaying related features accessible to users small icons.

Recommendation:

we designed a separate screen for user profile and each icon for city , recover history , city to city rides , safety , support and FAQ etc



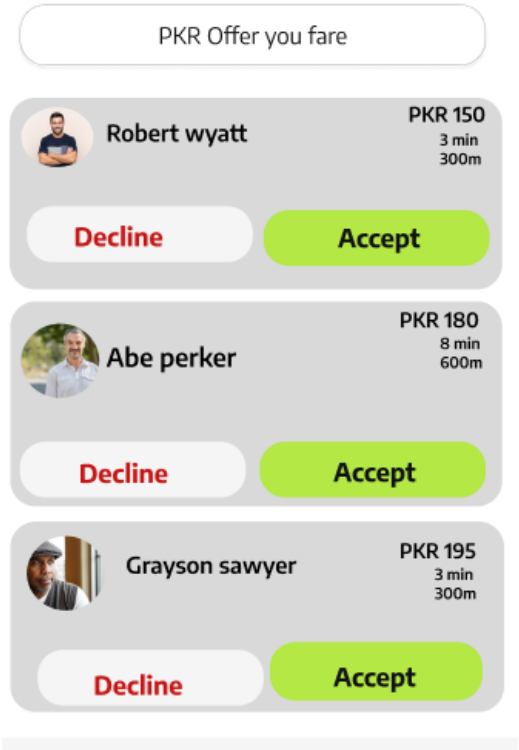
- **User control and Freedom :**

ISSUE:

The app allows users choose their favorable amount to book a ride but the notification pop-up could be disturbing to unintentionally selecting or canceling a ride that increase cognitive allow for users to make decisions.

Recommendation:

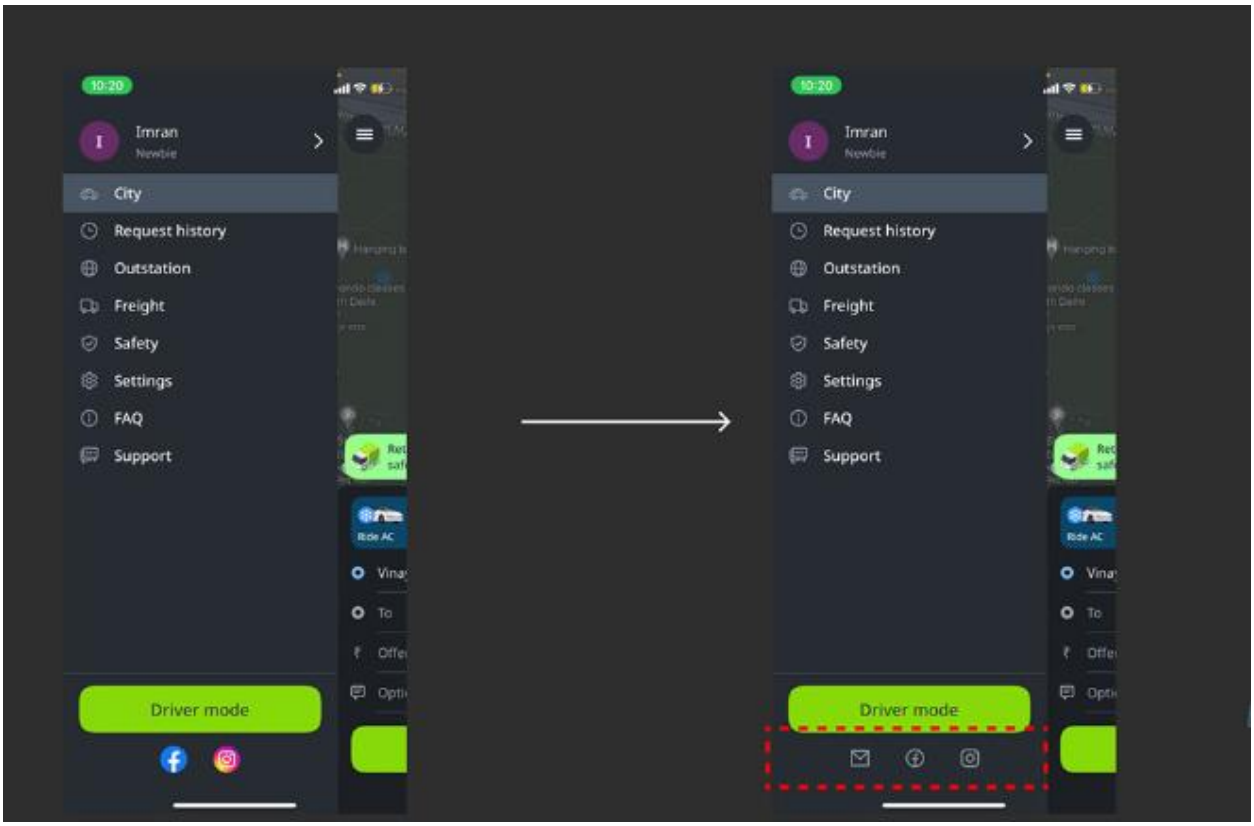
The competitor does not follow this approach so we came up with idea to for first option would be selecting a fare by user then related (riders) notifications pop-ups on screen allow more visibility and riders time and how much mile it took to reach also included.



- **Consistency and Standard and Aesthetic design.**

ISSUE: On this screen the app highlights the prominence of social media icons over other icons.

Recommendation: As a solution, we made changes to the social media icons to make them consistent with other icons within the app.

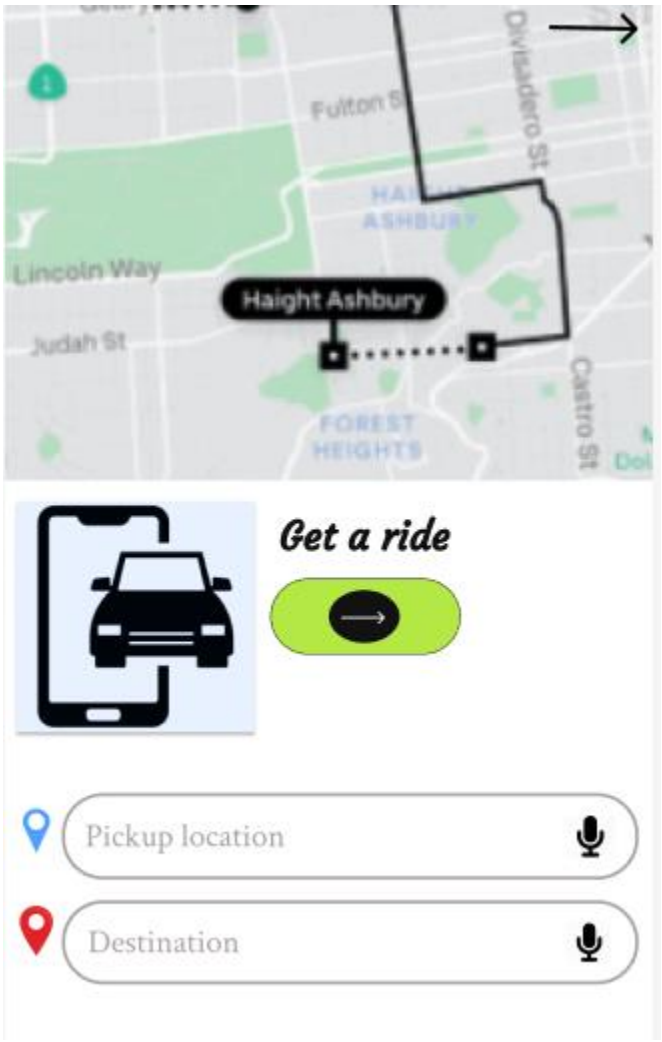


- **Error Prevention:**

ISSUE : user faced difficulty while entering address location in text box , the particular user group who is less educated to find it more difficult to type particular address explicitly.

Recommendation:

For ease of user Voice assistant feature is introduced and icons for pickup location and destination location is specified.



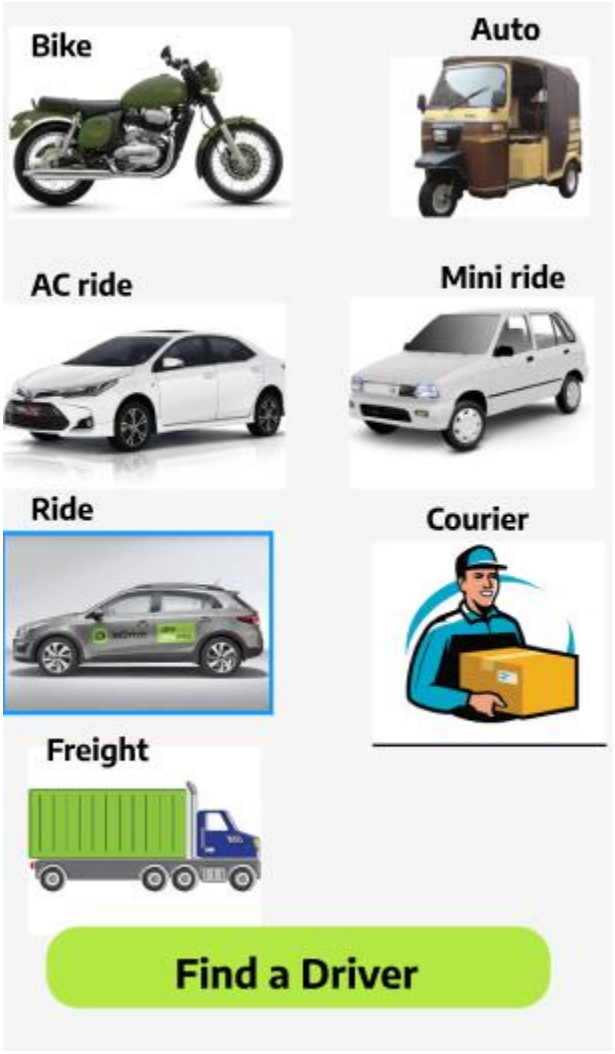
- **Flexibility and Efficiency of Use:**

  ISSUE:

  Most of the elder group of users and those have blurred vision found it difficult to identify icons while selecting a ride.

  Recommendation:

  for this sake of purpose button is introduced and large icons on separate screen has displaced**.**



- **Help Diagnose and Recover history:**

  ISSUE: user found issue of safety and there is no way of maintain history about previous rides of the user .

  Recommendation:

  This issue has been resolved by adding recover history option on user profile that could further also enhanced by adding more features as it could include how many rides per month user has taken based on them they could avail discount on rides too.

a) Description regarding material you used for evaluation i.e. questionnaire, scenarios or observation statements.

I) Evaluation Methods Used:

Heuristics Evaluation:

Description: Expert evaluators assessed the redesigned InDrive app against recognized usability heuristics such as visibility of system status, match between system and real-world, and user control and freedom.

Rationale: Heuristics evaluation is essential for identifying potential usability issues and violations of design principles early in the design process.

Cognitive Walkthrough:

Description: Users from diverse user groups, including senior citizens, disabled individuals, and illiterate users, performed specific tasks in the app. The focus was on evaluating the ease of task completion.

Rationale: Cognitive walkthrough provides insights into users' understanding and interactions with the app, helping identify potential challenges and improvements.

Think-Aloud Protocol:

Description: Users interacted with the redesigned InDrive app while verbalizing their thoughts and emotions. This provided qualitative insights into their cognitive processes and emotional responses.

Rationale: Think-aloud protocol helps in understanding users' thought processes and emotional reactions during app usage, contributing to a holistic evaluation.

Usability Testing Questionnaire:

Description: After completing specific tasks in the app, participants filled out a questionnaire assessing factors such as efficiency, satisfaction, and learnability.

Sample Questions:

On a scale of 1 to 5, how would you rate the ease of completing tasks in the app?

Did you find the app interface visually appealing?

How likely are you to recommend this app to others based on your experience?

Rationale: Usability testing questionnaire provides quantitative data on user satisfaction and perceptions, offering valuable insights into the overall user experience.

II) Description of Materials Used for Evaluation:

Heuristics Evaluation:

A checklist of recognized usability heuristics was used by expert evaluators to systematically assess the app's interface for adherence to established design principles.

Cognitive Walkthrough:

Scenarios were created to guide users through specific tasks, and evaluators observed interactions, focusing on users' understanding of the app's functionality.

Think-Aloud Protocol:

Users were given scenarios to complete while verbalizing their thoughts, providing qualitative insights into their experience and emotional responses.

Usability Testing Questionnaire:

The questionnaire included items covering factors such as efficiency, effectiveness, satisfaction, and learnability. Participants rated their experience on a Likert scale.

II) Description of Materials Used for Evaluation:

For the redesign of the InDrive app, we utilized several evaluation methods to ensure an effective and user-centric outcome. Each evaluation method was chosen strategically to address different aspects of usability and user experience.

Heuristics Evaluation:

Description: Expert evaluators assessed the redesigned InDrive app against established usability heuristics such as visibility of system status, match between system and the real world, and user control and freedom.

Questions for Users:

Can you easily understand the status of the system while using the app?

Does the app's interface resemble real-world interactions?

Were you able to navigate freely and undo any actions if needed?

Cognitive Walkthrough:

Description: Users from various demographics, including senior citizens, disabled individuals, and illiterate users, performed specific tasks in the app. The focus was on evaluating the ease of task completion.

Questions for Users:

Were the steps involved in completing the task clear to you?

Did you encounter any difficulties in understanding the app's instructions or options?

How confident do you feel about using this app for your daily needs?

Think-Aloud Protocol:

Description: Users interacted with the redesigned InDrive app while verbalizing their thoughts and emotions. This provided insights into their cognitive processes and emotional responses during app usage.

Questions for Users:

Can you express your thoughts as you navigate through the app?

Were there any moments of confusion or frustration?

What emotions did you experience while using the app?

Usability Testing Questionnaire:

Description: After completing specific tasks in the app, participants filled out a questionnaire assessing factors like efficiency, satisfaction, and learnability.

Sample Questions:

On a scale of 1 to 5, how would you rate the ease of completing tasks in the app?

Did you find the app interface visually appealing?

How likely are you to recommend this app to others based on your experience?