**Name:** Prathamesh Rajesh Ingole

**Roll No. :** TYCOA77

**No of Screens in the Interface:** 5

**Interaction Styles used**:

1)Form Filling

2)Menus

3)Direct manipulation

4)Point and Click

5)WIMP Interface

**Principles of HCI**:

| Sr No. | Principles | Achieved | Justification |
| --- | --- | --- | --- |
| 1. | Usability | Yes | Users can easily operate the icons and labels on UI like create ride logo. For Example, ‘+’ Icon for Create Ride, ‘🔍’ for Search, Use of English Language, etc. |
| 2. | Compatibility | Yes | Compatible on various mobile phones, tablets with different versions. |
| 3. | Responsiveness | Yes | Quickly responds to create ride, book ride, login, signup . |
| 4. | Safety | Yes | User safety: Warning for incorrect username, warning for invalid password.  Data safety: User data is not disclosed to anyone like the password, ride details,payment details.. |
| 5. | Effectiveness and efficiency | Yes | Fast retrieval of results for searching the ride and booking the ride by user. Colors and the size of the button and menus are generalized. |
| 6 | Flexibility | Yes | New updates won’t affect the current application; all the functions will be working the same. |
| 7. | Memorability | Yes | Buttons are logically grouped together at the specific location (register and login also home, about, bookings are located at the same locations) |
| 8. | Logical Grouping | Yes | All related elements are grouped together,Profile tab contains all profile related information,Home page contains all the related information of the app,Payment page contains all the payment methods,etc. |
| 9 | WYSWYG | Yes | By clicking the particular button the user should reach the desired page like by clicking on the create ride button ,it should display the create ride page.  Icons or buttons which you click will  give the result as per the name of the button or icon. |
| 10 | Utility | Yes | High Utility used in the application.All the objects, functions,buttons have the specific work.For example, Payment ,Create Ride,Book Ride ,etc all have their own functions |
| 11 | Cater to Universal Usability | Yes | All the symbols,logos and icons used are the universal symbols,icons and logos such as Home page icon,Settings Icon,Profile icon, Phone icon,Notification ,Help,etc. |
| 12 | Strive for Consistency | Yes | Same theme ,color scheme,same navigation bar, same font are used all over the application. |
| 13 | Offer Informative Feedback | Yes | Message of every action successful or unsuccessful is displayed to the user.For example After sign up,login ,booking user is notified. |
| 14 | Design Dialogs to yield closure | Yes | Dialog to be displayed while canceling the ride ,while exiting the application, while canceling the payment. |
| 15 | Prevent Errors | Yes | Errors such as the invalid login credentials are not allowed. |
| 16 | Permit Easy Reversal of Actions | Yes | Users can cancel the booking if he/she doesn't want the ride after booking.Users can also cancel their created ride if they are changing the route or having any problems. |
| 17 | Support internal locus of control | Yes | Users have the full control on the system.For example, User can create his own ride or get a ride to college he can be both a Passenger or Rider he has full control to do so. |
| 18 | Reduce Short Term Memory Load | Yes | As the UI of the application is simple users can easily spot what they want to do with no extra load on short term memory for searching the required function. |

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| --- | --- | --- | --- |
| Sr. No | Element | Observation | Improvement/ corrections |
| 1 | Login  **a. Labels**  i)Login to continue  ii)Forgot your password?    **b. Buttons**  i)Login  ii)Google  iii)Facebook  iv)More | Size and colors    130.94 x 21.14 Bg: White Fg:Red  122.45 x 14.75 Bg:White Fg:Black      216 x 33.97 Bg: Yellow Fg:White  38.2 x 36.51 Bg: White Fg:Red  38.2 x 36.51 Bg: White Fg:Blue  71.62 x 37.87 Bg:White Fg:Black | Login with Phone number can be added to the login page to make it more comfortable for users to use it. |
| 2 | Register Page  **a.TextField**  i)UserName  ii)Email  iii)Password  iv)Mobile No    **b. Buttons**  i) Sign up  ii)Way to Login  **c.Labels**  i)New User! | Size and colors:  86.4x13.78 Bg:White  86.4x13.78 Bg:White  86.4x13.78 Bg:White  86.4x13.78 Bg:White  74x12 Bg: Yellow Fg:White  30x6 Bg:White Fg:Black  72x16 Bg:White Fg:Yellow | Register with Google option can be added to it. After registration, an email can be sent to the user for confirmation and a message to be displayed to the user to confirm the email. |
| 3 | Home Page  **a. Labels**  i)Welcome User!  ii)Want a ride?  iii)Want to create your own?  **b. Buttons**  i) Home  ii)Settings  iii)Information  iv)Profile  v) Create Ride  vi)Search  **c. Lower Navigation Menu**  i) Profile  ii) Create Ride  iii) Search | Size and colors:  90.3 x 16.22 Bg: White Fg:Red  61.72 x 13.97 Bg:White Fg:Black  125.4 x 13.97 Bg:White Fg:Black  18.22 x 15.49 Bg:Yellow Fg:White  12.93 x 12.93 Bg:Yellow Fg:Black  13.59 x 13.59 Bg:Yellow Fg:Black  16.99 x 13.19 Bg:White Fg:Black  29.23 x 29.32 Bg:White Fg:Yellow  11.85 x 11.85 Bg:White Fg:Black  19x14 Bg:White Fg:Black  32x33 Bg: Yellow & White  13x13 Bg:White Fg:Black | Animation can be added to the homepage to make it more attractive and interactive maps should be implemented on the home page. |
| 4 | Create Ride  **a. Labels**  i)Symbol  ii)Vehicle Type  iii)Landmark  iv)Timetoreach  **b. Buttons**  i) Create  ii)Profile | Size and colors  11.671x11.671 Bg:White  86.4x13.7784 Bg:White  86.4x13.7784 Bg:White  86.4x13.7784 Bg:White  81x37 Bg:Black Fg:White  86x13. Bg:Yellow |  |
| 5 | Available Rides  **a. Labels**  i)Create Ride  ii)Symbol  **b. Buttons**  i)Details  ii)Book  **c. Lower Navigation Menu**  i) Profile  ii) Create Ride  iii) Book | Size and colors  28x28 Bg:Yellow & White  50x9 Bg : Yellow  42x11 Bg: Yellow Fg:Black  24x11 Bg: Yellow Fg:Black  19x14 Bg:White Fg:Black  32x33 Bg: Yellow & White  13x13 Bg:White Fg:Black | More than three available rides can be shown to the user. |
| 6 | Settings  **a.Labels**  i)Username  ii)Notifications  iii)Payment  iv)History  v)Help  vi)About us  **b. Buttons**  i) Home  ii) Invite a Friend | Size and colors  136x37 Bg:Black Fg:White  174x37 Bg:Black Fg:White  119x37 Bg:Black Fg:White  98x37 Bg:Black Fg:White  63x37 Bg:Black Fg:White  122x37 Bg:Black Fg:White  42x35 Bg:Black Fg:White  122x37 Bg:Black Fg:White | No changes needed in setting page. |
| 7 | History  **a.Labels**  i)History  ii)Payment History  **b. Buttons**  i)Settings  ii)Information  iii)Created Rides History  iv)Booked Rides History  **c. Lower Navigation Menu**  i) Profile  ii) Create Ride  iii) Search | Size and colors:  55.51 x 20.82 Bg:Yellow Fg:Black  134.6 x 22.24 Bg:White Fg:Yellow  17.75 x 17.75 Bg:Yellow Fg:Black  17.75 x 17.75 Bg:Yellow Fg:Black  99.9 x 36.9 Bg:Yellow Fg:Black  100.74 x 37.6 Bg:Yellow Fg:Black  19x14 Bg:White Fg:Black  32x33 Bg: Yellow & White  13x13 Bg:White Fg:Black | User’s name can be displayed to whom the money has been sent or received |
| 8 | My Rides  **a.Labels**  i)My Rides  ii)Time  iii)Date  iv)Start  v)End  vi)Via  vii)Fare  viii)Seats  **b. Buttons**  i)Settings  ii)Info  iii)Repeat Ride  **c. Lower Navigation Menu**  i)Profile  ii)Create Ride  iii)Back | Size and colors  77.31x23.84 Bg:White Fg:Yellow  64.42x18.7 Bg:Black Fg:Grey  76.4x18.4 Bg:Black Fg:Grey  27.96x15.77 Bg:Black Fg:Grey  21.82x15.89 Bg:Black Fg:Grey  17.73x15.89 Bg:Black Fg:Grey  28.21x15.77 Bg:Black Fg:Grey  33.57x15.77 Bg:Black Fg:Grey  19.19x19.19 Bg:Black Fg:Yellow  20.17x20.17 Bg:Black Fg:Yellow  64.6x15.16 Bg:Blue Fg.Grey  25.21x19.57 Bg:Black Fg:Grey  43.37x43.5 Bg: Yellow & White  24.59x24.59 Bg:Black Fg:Grey | Distance traveled can be displayed per ride |
| 9 | Booked Rides  **a.Labels**  i)My Rides  ii)Time  iii)Date  iv)Start  v)End  vi)Via  vii)Fare  viii)Seats  ix)By: Username  **b. Buttons**  i)Settings  ii)Info  **c. Lower Navigation Menu**  i)Profile  ii)Create Ride  iii)Back | Size and colors  77.31x23.84 Bg:White Fg:Yellow  64.42x18.7 Bg:Black Fg:Grey  76.4x18.4 Bg:Black Fg:Grey  27.96x15.77 Bg:Black Fg:Grey  21.82x15.89 Bg:Black Fg:Grey  17.73x15.89 Bg:Black Fg:Grey  28.21x15.77 Bg:Black Fg:Grey  33.57x15.77 Bg:Black Fg:Grey  69.89x15.77 Bg:Black Fg:Grey  19.19x19.19 Bg:Black Fg:Yellow  20.17x20.17 Bg:Black Fg:Yellow  25.21x19.57 Bg:Black Fg:Grey  43.37x43.5 Bg: Yellow & White  24.59x24.59 Bg:Black Fg:Grey | Distance traveled can be displayed per ride |
| 10 | Profile  **a.Labels**  i)Name  ii)DOB  iii)Phone  iv)Gender  v) E-Mail  vi) Profile Image  vii)Profile Page  **b. Buttons**  i) Edit Button  ii) Logout  iii)Change Photo | Sizes & Colors  283.83x36.4 Bg:Yellow Fg:White  282.83x36.4 Bg:Yellow Fg:White  282.83x36.4 Bg:Yellow Fg:White  282.83x36.4 Bg:Yellow Fg:White  282.83x36.4 Bg:Yellow Fg:White  103.19x103.19 Fg:White  177.13x24.21 Bg:Yellow  13.89x 13.89 Fg:White Fg:Black  56.31x15.14 Fg:White Fg:Black  12.47x10.42 Fg:White Fg:Black | Linking Social Media should be added |
| 11 | Payment  **a.Labels**  i)Payment  ii)Wallet  **b. Buttons**  i)Ride Wallet  ii)Paytm  iii)UPI  iv)Card  v)NetBanking  vi)Cash  vii)Pay Now | Size and colors:    56.64x17.64 Bg:Yellow Fg:White  21.09x09.43 Bg:White Fg:Black  133.27x14.75 Bg:White Fg:Black  133.27x14.75 Bg:White Fg:Black  93.07x14.75 Bg:White Fg:Black  130.68x14.75 Bg: White Fg:Black  133.27x14.75 Bg:White Fg:Black  125.23x14.75 Bg:White Fg:Black  164.86x23.51 Bg:Yellow Fg:Black | Limited timer can be added for a specific payment method else the payment must fail. |

**Navigation**-

* Local Navigation:
  + Local Navigation used in various pages of application.
  + Example: Profile page, ahead of every textbox there is an edit button which has the local navigation which allows the user to edit his profile within that page.
  + The info icon is also local navigation,when clicked on that the tab of help,about us opens on the same page as Pull-down menu.
* Global Navigation :
  + Global navigation is used all over the application.
  + For example:
    - Login page itself has the global navigation when clicked on the Login button user is directed to the home page when login successful.Also when clicked on register now directed to the registration page i.e sign up page.
    - The navigation bar below also have the buttons like when clicked on create ride user is directed to the create ride page.
    - When a user clicks on the settings page he is directed to the settings page.
    - Similar to above when clicked on the History button the user is directed to the history page. Same for the payment, search,etc buttons.

**Input and Output Channel: -**

Input Channel:

|  |  |
| --- | --- |
| Human | Mobile |
| Vision | Touch Screen |

Output Channel:

|  |  |
| --- | --- |
| Human | Mobile |
| Hands | Display |