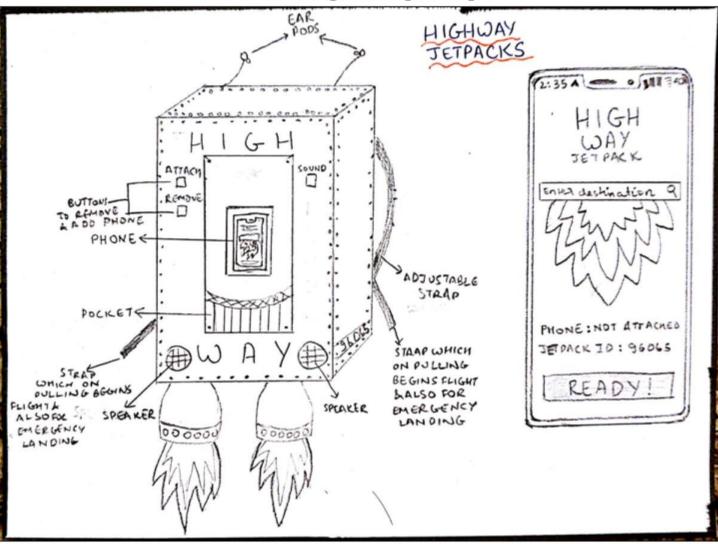
Informatics 131 Homework

sketching and Reflecting

Transportation

Ankit Join

Sketch: Highway Jetpack

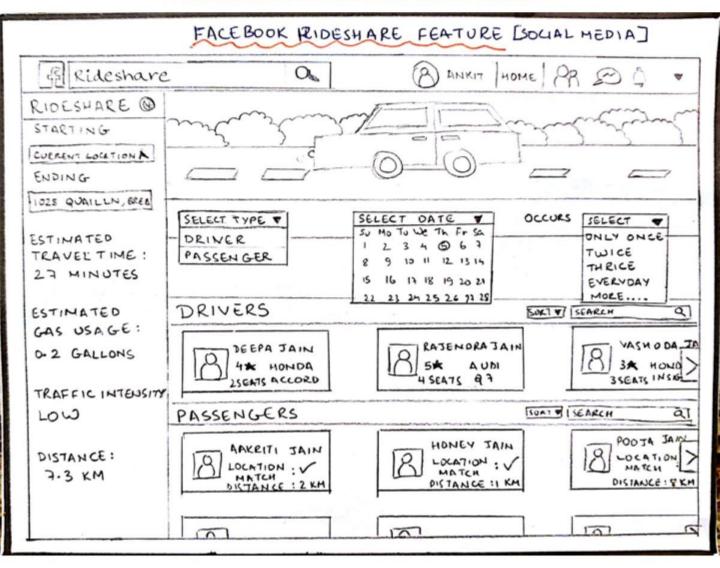


Highway Jetpack is a jetpack which works with its accompanying mobile application. The jetpack is activated by means of the application and after entry of the desired destination, the phone is then attached to the designated area on the jetpack body which is then ready for flight upon the pulling of straps which also serve as a medium for emergency landing. For entertainment, there is presence of ear pods which shuffles music from radio stations and phone music, or the speakers. The jetpack is powered by solar power and also has the option of electronic charging then takes the user to the desired location which was entered into the mobile application.

Reflection: Highway Jetpack

Highway Jetpack is form of good HCI because of its compliance with many of the eight golden rules of usability. Control mainly lies in the hands of the user, as the user has the freedom to enter their desired location. One of the shortcomings of this design is that there is involvement of recall over recognition specifically pertaining to the beginning of the flight that the user has to pull a strap to begin the flight and the strap also serves as a medium for emergency landing, which may serve confusing for the user and increase their short term memory load and hence isn't favorable. To solve that I would suggest that the designer uses a different approach to differentiate between the emergency landing affordance and ready for flight affordance, maybe through a button or different colored straps. The usage of the jetpack along with the mobile application encourages universal usability mainly due to the fact that the user can easily use the interface with a strong mental model as opposed to having complex controls which may complicate the users mental model leading to errors. Reversal of actions is also easy, such as in the case if the desired location entered is wrong, the user can easily detach or attach the phone onto the jetpack body and make changes. It is also good to note that the 'Ready' button on the mobile application is not available for use till all details are complete and the phone is attached, by using a fade over the button as a signifier, hence preventing any errors. Overall, the design for Highway Jetpack is favorable but it has couple of tweaks here and there which can be easily rectified.

Sketch: Facebook Rideshare

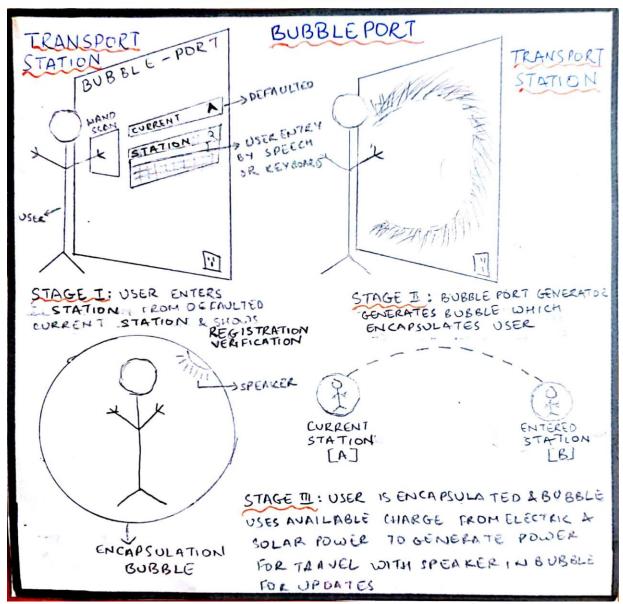


Similar to the selling feature Facebook has, this is a rideshare feature where people can post about their upcoming travels and possibly find individuals who might be available to carpool with them based on their starting location and final destination. It will give an estimate of their travel time, gas usage, distance and traffic intensity as well. It gives option of users of filtering out the drivers or passengers based on various categories.

Reflection: Facebook Rideshare

I believe the design for the Facebook Rideshare feature has a strong level of emotional engagement, specifically from the extension of Facebook as a brand. The design is derived from the Marketplace or selling/buying feature option offered by Facebook which the designer used as a template. Similar to the way the selling feature has buyers and sellers, the rideshare draws a parallel in form of passengers and drivers. The designer does a good job of maintaining consistency between the Marketplace option and proposed Rideshare option, as there will be a higher degree of brand loyalty as Facebook is a well known household name. The designer shows that he accounts for what users by displaying relevant details such as traffic intensity, estimated gas usage, travel time and distance etc. By giving details such as estimated gas usage and traffic intensity, which are often uncommon details, it is giving Facebook Rideshare a comparative advantage in terms of uniqueness over other Social media platforms and rideshare apps like Waze Carpool. Facebook Rideshare is a good amalgamation of social media platforms and transportation, specifically the concept of carpooling because it connects individuals with similar travel journeys in a way that both parties are benefited, such as the passenger is able to get a ride with a verified Facebook user whereas the driver possibly gets the opportunity to save on gas and even use the carpool lane. Gestalt principles of grouping can be noticed when drivers are in close proximity to one another, as well as for the passengers and as well as continuity with the many number of drivers and passengers. Overall the proposed Facebook Rideshare feature serves as a good HCI due to its great intensity of emotional engagement and personality.

Sketch: Bubble Port

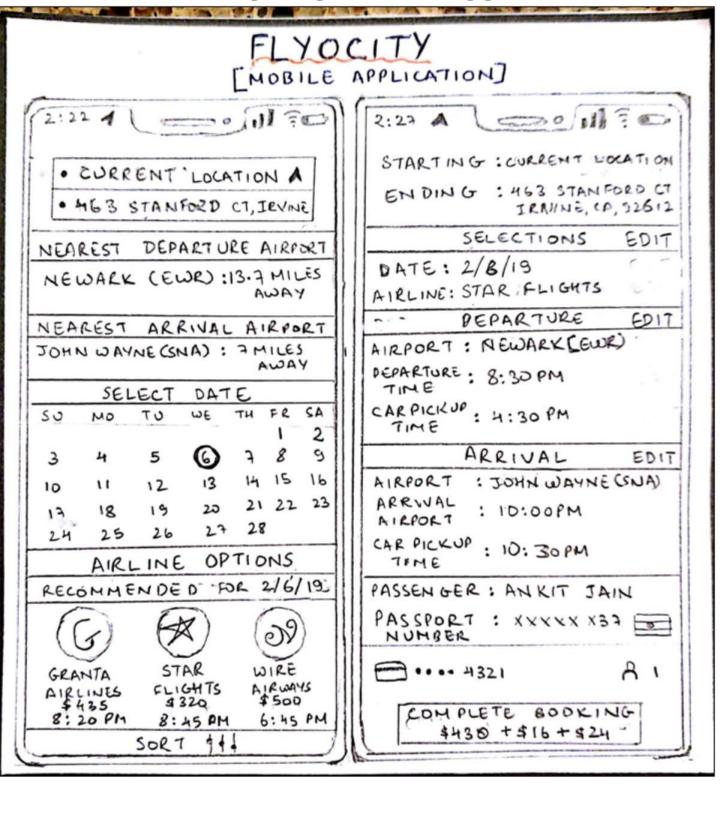


Bubble Port is a form of public transportation which will have specific stations for transportation. These stations have generators inbuilt into their walls where a user enters a specific station he/she wants to go and verifies their registration into the public transport system through a hand scan. This generator then generates an encapsulation bubble which then transports the user from the entry station to the desired ones and the user is given regular updates through the speaker present in the bubble. The bubble runs on solar power and wind energy along with electric power provided by the charge present in the generators. Upon reaching destination, bubble disintegrates in a specified location in the station.

Reflection: Bubble Port

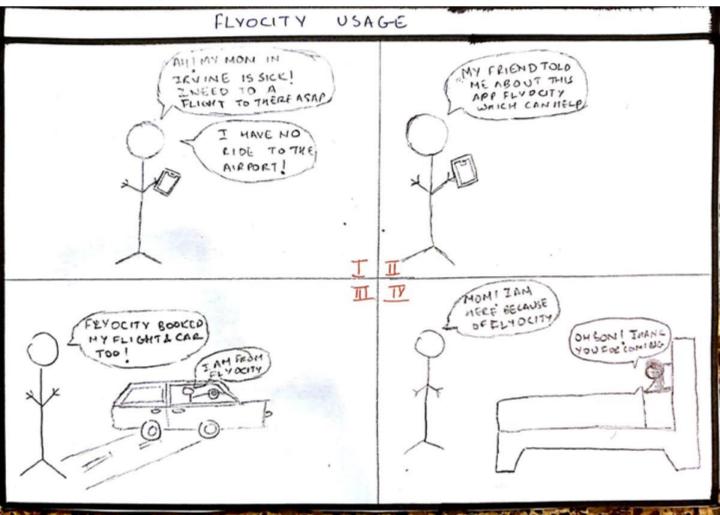
The design for Bubble Port as a form of public transportation serves as an example of good HCI due its agreement with a number of usability principles. Feedback is continuously offered back to the user by means of the speaker present inside the bubble, and there is a good degree of consistency maintained with the parallel draws from the subway system which involves specific stations as destinations as well. The system offers universal usability as it allows the destination of the station to be entered by both a text entry [form fill in] and speech recognition in different languages [natural language], allowing all verified registered users to be permitted to use the system. Having both these options also enables a short term memory load for the users as they just have to remember the name of their desired station and enter that in. The drawbacks in the system lie in the fact that there is no account or preparation for error prevention, such as when a user enters the wrong station and also that there is no easy reversal of actions, such as if a user enters a station, it is only possible to enter the actual destination by restarting the entire process. Closure is easily gained simply when the user reaches their desired destination. Overall, the HCI for Bubble Port is good but it can be improved in terms of preventing simple errors or simple reversal of actions.

Sketch: Flyocity Mobile Application



Next Page: Flyocity Mobile Application Being Used

Sketch: Flyocity Mobile Application



Flyocity is a mobile application which is meant to allow users to book flights as well book a car to go the airport at the same time. It makes use of the users location and locates the nearest airport and provides cheapest options for the flights even for the same day. The application is mainly useful for individuals who dabble in the business field and require immediate same day flights similar to people booking Ubers to go to different locations within the close vicinity of the city.

Reflection: Flyocity Mobile Application

The Flyocity Mobile application is a good example of how the ten heuristics for a user interface are applied as well how emotional design is properly showcased. In terms of emotional design, the user is given visual cues of how to move from one step to another and the design maintains a flow, making it easier for the user to use and make selections. The design makes of use the form fill in interaction styles which is often used, serving as a good way to create familiarity and understanding for the user. The Uber application is similar to Flyocity in terms of design and has clearly been used as a template by the designer for the interface design which gives the user a visual cue for brand similarity, thus encouraging the user more to make use of this design. All this design is not taking away from the actual user goal of booking a flight and a car to the airport. The application design accounts for the fact that recognition is more appropriate compared to recall, and locates the nearest airport for the user so he/she has minimal memory load. The designer has accounted for what the user wants and given the design a personality by maintaining a high degree of consistency throughout every output and input page of the interface, which engages the user to continue using the application. Gestalt laws of grouping are also applied such as with the representation of all the flight logos in forms of circles, thereby using the similarity law. Feedback and present status of the system is displayed every step of the way. Overall the HCI for Flyocity is one which can be considered as good HCI with some room for improvement with changes which can be easily done.