Assignment 1 - HCI

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Q - 1

Processor - Basic Editors

All the basic text editors like VIM/Nano follow a very processor based view of the user. They solely depend on what user types in as the input and reflect back what was typed as the output. They do not highlight any spelling errors, potential mistakes made by the user. For VIM it is difficult to figure out how to exit or save the stuff written by a new user as it is not intuitive or written anywhere on the interface when the user is typing (I had this issue the first time I used VIM). User's success in using the tool depends on the amount of knowledge the user has on how to use VIM/Nano (commands etc.).

Predictor - ATM

I think ATM's follow the predictor model of the user. The task is clearly defined and the user is guided through the process. The steps if not clear are clearly displayed on the screen and system guides the user from inserting the card into the machine to removing the money and leaving. The machine also has alerts if card is in the machine or money has not been removed. Every action taken by the user is intuitive and has clear feedback that informs user that the system has received the user input and is working on it. The ATM's however have a limited scope, as they do not account well for user privacy (others might see your screen or see you make a transaction). ATM predicts what user wants to do and guides the user to do so but does not take into account the broader context of a financial transaction.

Participant - Udacity

Udacity feels like a very well designed interface in the context of transferring information efficiently while considering the needs of the user. It considers that the user is studying and different people have different speeds so it breaks down different topics and subtopics as different videos so that the user can pause and continue from a specific subtopic rather than the one big video. The interface also has categorized list of all the content available for the course and count of how many videos from what part of the course have been finished and what is coming next. Quizzes are also embedded at the correct spots keeping the user engaged. Moreover Udacity saves the current user state, allowing the user to resume where they left or took a break. It also accounts for all the actions user might want to take watch some previous video, play pause, speed which keeps user in control of the task.

Q - 2

Personally I feel that the current payment systems available at most merchants for payments still follow a processor view of the user. The user has to figure out where to swipe their card, what direction the card needs to be in and how fast to slide the card (unless its insert card machine) and complete the payment. The user also has to have the card, which they have to carry to the facility. The user then also has to remember to take their card and keep it secure which increases the cognitive load required in order to complete the task. The machine does what it does but it strongly relies on input and output without accounting how difficult or complex it is for the user to figure out how to complete the task.

The end goal of the entire process is that user should be able to pay a certain amount to the merchant and be able to take their goods. The whole process of credit cards has been an improvement over cash transactions and then were improved even further by mobile payments but these methods still have a prerequisite of having specific tool (credit card) to complete the transaction and user also has to worry about not misplacing the tool as the person having the tool essentially has the authority to complete the transaction. An improvement on the current system would be using biometrics like fingerprint to identify a user and have a default bank account or credit card associated to that user. This way the merchant can have a simple fingerprint reader that the payee puts their finger on to get the amount deducted from the account they have set as default. User does not have to carry a card and worry about losing it or finding it

in order to be able to do what they are at the facility to do. There is only one intuitive way of placing the finger on the fingerprint reader hence the user has to worry less about the steps required to perform the task. This system will be more intuitive as now most new smartphones has some kind of fingerprint reader and it does not rely on having any special knowledge or tools to perform/finish the task.

Q - 3

Submitting an assignment on T-square is a well-defined task and the interface makes the gulf of execution and evaluation very narrow. Steps that the user needs to execute are intuitive and each step has an immediate feedback associated to it, which helps the user stay informed on their progress of completing the task. The user always sees something that is the only thing out of all things in their interface that would allow them to get closer to the goal state. Hence it is very easy to identify the actions needed and execute in the interface. The outputs by the interface are fairly clear and easy to interpret from a users perspective.

- Login to T-Square
  T-square opens
- Click on course
  All course options like grade-book, assignments, resources etc. get listed (Only assignment can get you closer to goal state which is intuitive to identify action)
- Click on assignments
  All the assignments are listed with due-dates, submission status etc.
- Select the assignment you wish to submit
  An interface opens that has assignment submission or file upload instructions on the screen.
- Upload file
  The name of the uploaded file shows up on screen with remove option specifying the file has indeed been uploaded.
- Click submit
  A page opens up confirming that assignment has been completed and the user has finished the task of submitting the assignment (An email afterwards also reiterates the successful completion of the task).

The user can easily figure out the steps needed on the interface to accomplish the goal and the interface does a good job responding and giving feedback to the user's actions and progress in accomplishing the task keeping the gulf of both execution and evaluation narrow.