Assignment P1:CS6750

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QUESTION 1

1.1 Interface selection

For the purposes of this assignment I choose Piazza as the interface of my choice as it is the most cluttered and active digital space in the course

1.2 Processor Model Discussion

Piazza being a forum there are multiple threads which are arranged on the left panel of the screen. Each Thread is an input to the user. On every thread there is an associated number which denotes the number of unread updates within the thread. We could measure the time taken on average to set the number of updates of these threads to zero upon login as a measure of efficiency. Each individual thread contains multiple comments containing answers from multiple participants. These comments will be the input to the user. The thread's validity and usefulness can be measured objectively based on the number of helpful votes it gets or if it has been answered by an instructor. So we could count the number of helpful votes per comment in the thread or the number of instructor comments in the thread as a metric to get the most important comments and posts within that thread.

1.3 Predictor Model Discussion

On Piazza on posting a new note of comment and leaving it as unresolved, I predict an instructor or fellow student will comment on it and mark it as resolved, and when marked as resolved the thread will no longer be highlighted in red. I predict on selecting a thread and navigating through a thread I set the grey update counter to zero. On using the search functionality and searching a keyword, I predict threads containing my keyword to be returned. The folder tab on the top of the forum in Piazza contains multiple folders labelled announcement, class_discussion, articles and I predict upon selecting that folders I would view a filtered set of threads containing what I clicked.

1.4 Comparison of both Models

The improvements suggested by the processor models focuses solely on the objectives and how they are met. The improvements would be focused on bettering the metrics that are measured and would therefore provide a less holistic view of the interface. The predictor model on the other hand takes the user into consideration when designing an interface so it just isn't about improving metrics but providing a more usable interface for the user. In the predictor model I discussed how the folders labelled announcements would act as filters to the post. In the processor model the improvements would be based on the positioning of the folders or the time upon selecting of the threads after the filtering (objective values that can be measured). In the predictor model we would discuss replacing folders with easier icons for better filtering for the user like using a megaphone for the announcements instead of a folder named announcements.

QUESTION 2

2.1 Select the interface

The interface that I would select for this question is that of the video conferencing application Zoom.

2.2 Different contexts surrounding the app

Zoom the video call application has found multiple use cases with different contexts in the COVID world we live in right now. Critical work meetings have moved to Zoom in this use case privacy is paramount and it is important to prevent unnecessary clutter as the cognitive load and screen real estate would be shared between work tools and the application itself. Conferences and virtual events have moved to Zoom where one would need to completely drown out audience participation unless prompted. Finally my local church has moved mass to Zoom which provides an interesting use case as it requires unmuting participants periodically and convince people to pay tithe online.

2.3 Describe how the interface can change

In the first use case where critical work has to be done, the interface could minimise and pin itself to the top of the screen so that it is easier to keep up with the calls and work with parallel tools at the same time. I personally would like to disable chat notifications here as it can be really distracting. For the use case of a conference the could provide haptic feedback when changes in event occurs like change in speakers events, etc on top of the video .For the church use case we could schedule unmutes to answer the priests calls and provide a payment link that can be pinned to the interface for the duration of the mass to pay tithings.

QUESTION 3

3.1 Gulf of Execution

In Canvas the goal is to submit the assignment. The i**ntention within the context** of this system is the ability to be able to upload the assignment to Canvas. In the Canvas homepage there is a separate button for assignments that takes a novice user to the list of assignments that are due. To upload the assignment to Canvas I will need to **specify the actions** to do so. In this context from the Canvas homepage, I would choose assignments, select the assignment from the list of upcoming assignments. Here Canvas has bridged the gulf by sorting the assignments based on the due date and providing critical information such as the dude date. Points received and if the assignment has been graded. Then we go to the assignment homepage and upload the assignment by submitting the assignment. Then we can **execute** this action by clicking the submit assignment button , choosing the file to upload and clicking submit assignment.

Figure 1— List of Upcoming assignments in Canvas

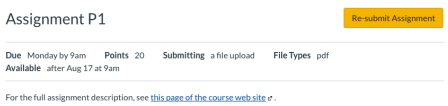

Figure 2— Assignment Homepage in Canvas

3.2 Gulf of Evaluation

Canvas bridges the Gulf or Evaluation really well as after submitting the assignment the **interface output** changes, as a temporary green banner appears after the assignment has been successfully uploaded on Canvas additionally the submission tab to the right of the assignment home screen says 'Submitted!' to indicate a successful submission..

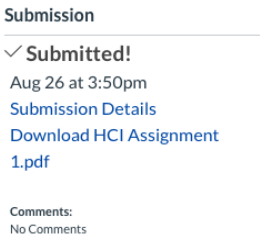

Figure 3 - Submission Tab in Canvas

One can **Interpret** this to mean that the assignment has been successfully submitted. The user can **evaluate** whether the submission has been successful as the interface changes to tell them so and the 'Submission Details' are visible under the submission tab. But the Gulf of Evaluation isn't perfect as if the upload of the assignment fails the only output received is that the submission has failed as seen below. The gulf can be better bridged if the reason for failure is also specified with the failure notification.

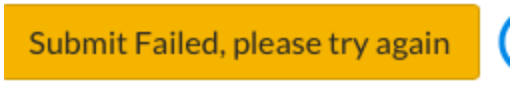

Figure 4 - Submission Failure in Canvas

QUESTION 4

4.1 Paytm

Paytm is an Indian mobile payment application. The activity that I would like to focus on is to pay another user. Within the Paytm app you can either choose pay or scan QR or Money Transfer. Upon clicking we scan QR or swipe down to choose our recent payments, then enter the amount we wish to transfer and finally enter our pin to complete the transaction.

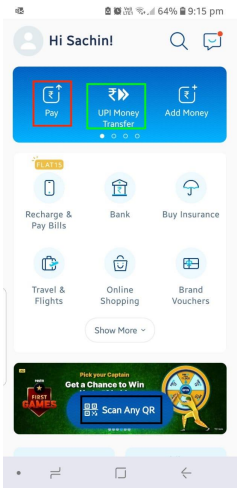

Figure 2—Homescreen of the Paytm App

I believe the gulf of execution is large here as in the home screen there are 2 buttons that provide the same functionality and third provides a subset of the functionality provided by the other two. These 3 buttons can be combined into one to prevent confusion and prevent cluttering of the interface. On selecting Pay it immediately opens the QR Scanner. Most payments are done to a fixed set of accounts and to get to those accounts I have to swipe down an additional step. So to pay a user one user I would have to undertake 6 steps.

4.2 Zomato

Zomato is a restaurant aggregator. For this application the task that I focus on is the ordering of food in a dine in setting,

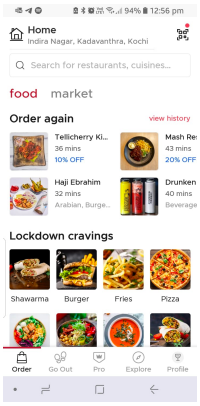

Figure 3—Home screen of Zomato.

To enforce social distancing guidelines in restaurants, once you walk in you can open the Zomato app and choose either to scan the QR code on the table for the menu or your favourite restaurants are shown right up at the top of the screen. After your dine in experience, Your bill shows up on your screen and on entering your PIN you are done. The entire dine in experience takes about 4 steps.

4.3 Lessons from Zomato that can be applied to Paytm

Paytm provides a large amount of services through its application, The lesson that Paytm can apply from Zomato is to customise its layout to individual customers. If there was a shortcut to favourite contacts in the homescreen in the Paytm app it would reduce the number of steps for payment from 6 to 3. It can also remove the default QR reading that occurs when you click on 'Pay' for a dedicated QR reader button on the home screen like zomato as opening a camera tends to slow down the phone by reducing responsiveness of the display when the camera is on.