STUDYMATCH: Connecting Minds, Shaping Futures

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Project Description:

Study Match is a user-friendly application available on both Android and iOS platforms, developed by Gwyn Lobaton and Jonas Rusiana of Team Iced Tea Pioneers. This app facilitates a connection between tutors and students, providing support in subjects where students need help. Its primary goal is to assist students struggling with specific subjects while enabling tutors to earn money by offering their tutoring services at their chosen hourly rates. The app matches students with tutors based on location, the tutor's expertise, special needs cases, and budget. Additionally, it includes a search option allowing users to find tutors by location or skill.

Requirements Summary:

		iOS	Android
MINIMUM REQUIREMENTS	Processor Cores	Dual-core Processor	Dual-core processor
	OS	iOS 12 or later	Android 8.0(Oreo) or later
	RAM	2 GB	2 GB
RECOMMENDED REQUIRMENTS	Processor Cores	Quad-core processor	Quad-core processor
	OS	iOS 14 or later	Android 10.0 (Pie) or later
	RAM	4 GB	4 GB
OTHER REQUIREMENTS	Permissions	Location, Notifications, and Storage	Location, Notifications, and Storage

Table 1. System Requirements

Study Match requires a minimum of a dual-core processor and 2 GB of RAM for smooth performance on both iOS and Android devices. The app is compatible with iOS 12 or later and Android 8.0 (Oreo) or later. For optimal performance, a quad-core processor and 4 GB of RAM are recommended, along with iOS 14 or later and Android 10.0 (Pie) or later. Permissions for location, notifications, and storage are necessary to match students with nearby tutors and securely store user data.

Overview

The team conducted the evaluation at a face-to-face medium. The people who evaluated the system through means of prototype are based on the set population of the team. Either working students who have experience in tutoring or teaching other students, or non-working students who have experience in getting tutored by someone. The team conducted a simple random sampling technique to find the participants in participating in the evaluation. The team asked for the participants' time beforehand, and then the team presented their system briefly, with the participants' task having to navigate the whole mockup based on their given task.

The evaluation of the system is split into two parts. First is the heuristic evaluation during live demonstration, and second is the survey and feedback evaluation where the answers of the participants are converted into written and measurable data. The heuristic evaluation checks for live comments of the participants in regard to the different sections of the evaluation. It also checks for how well they are able to do the said tasks without having difficulties. The survey and feedback evaluation emphasizes their experience and turns their experience into measurable data in order for us to know which part needs to be improved and which is already good.

Data Presentation

Data Analysis

Heuristic Evaluation

Visibility of System Status

The prototype effectively informed the user how to use the app and the state of the app in terms of certain features being displayed.

Match Between the System and the Real World

The prototype uses minimal words and Basic English, and all users find it easy to understand what was going on exactly.

User Control and Freedom

The users can easily navigate going in towards certain features, and they can easily navigate out with no problems. However, when changing modes in the calendar, they mistakenly pressed the button that is active as a passive button. Essentially, any switch mode feature must be changed.

Consistency and Standard

The users find no problems with consistency and standard, even with two different views from student to tutor. However, there is a difference between student and tutor when it comes to how they use space, though the difference is just the layout, not in colors and in fonts.

Error Prevention

The users weren't able to break the system easily, and due to the simplistic and ease of flow, it was idiot proof enough to not lead them to different directions.

Recognition Rather than Recall

The users can easily tell what the functions of the buttons are, and easily master the flow of navigation with no problem due to the help of the icons used. The minimal text also helped them to easily master the app.

Flexibility and Efficiency of Use

The users were able to navigate towards their preferred features with the help of the navigation bar and navigation menu. Though, it may seem to the users that the system might be wasteful due to the use of transitions.

Aesthetic and Minimalist Design

The users can easily tell what's going on in the prototype with no problem. Everything is not cluttered, and they seem to get the gist of every scene with no issues encountered.

Help Users Recognize, Diagnose, and Recover from Errors

Due to the nature of the prototype using Figma, there weren't really errors when navigating the prototype. But in cases where they do make user errors like mistakenly going to another scene, they are easily able to recover from those mistakes by going back with a button that indicates "going back to the previous page".

Help and Documentation

Due to the prototype using standard UI/UX rules, the users were able to easily relate any information in terms of help and documentation whenever such assistance is needed. There are also some small texts that indicates further information on what they are going to do on a certain page that act as help and documentation.

Heuristic Conclusion

Overall, the prototype was able to satisfactorily pass most areas of the evaluation with no issues. The users were able to do their flows with no issues and have done it well.

Question Section	Mean	Interpretation	Classification
Visibility of System Status	4.67	Highly Acceptable	Successful
Match Between the System and the Real World	5	Highly Acceptable	Successful
User Control and Freedom	4.8	Highly Acceptable	Successful
Consistency and Standards	4.78	Highly Acceptable	Successful
Error Prevention	4.47	Acceptable	Successful
Help Users Recognize, Diagnose and Recover from Errors	4.6	Highly Acceptable	Successful
Recognition Rather than Recall	4.87	Highly Acceptable	Successful
Flexibility and Efficiency of Use	4.8	Highly Acceptable	Successful
Aesthetic and Minimalist Design	4.93	Highly Acceptable	Successful
Help and Documentation	4.67	Highly Acceptable	Successful

Table 2. Survey Data Interpretation

Table 2 shows the survey data from the survey that was conducted after the live demonstration of the prototype. It is observed that every aspect of the measurable heuristic evaluation is passable to a high standard. Not only that, only one area of the evaluation that is moderately accepted, with that being error handling. Though, this is mainly due to the limitations of the prototyping tool being used (i.e. Figma). All classifications are successful with no issues presented during the evaluation. This shows that the users are highly satisfied with the prototype in terms of usability, user experience, and UI aesthetic.

As for the feedback, the issues are mainly minor issues or very specific issues that mainly act as a suggestion, otherwise a critique of the limitations imposed from Figma. Though all of the users agreed that the prototype was able to achieve the goals of satisfying the user needs of the students and of the side of the tutor with no issues in regard to their user experience.

Design Implications

- Does your prototype need to be altered in order to address the results of the analysis, or was it completely successful?
  - o Considering the success of the evaluation, the only alterations being done are the minor issues that the users pointed out in the way of their

experience. Like the feature to switch modes in the calendar view. Those alterations would be minor and not in any way huge.

- What improvements could be made to the design to address any shortcomings?
  - o The improvements that the calendar view can have, and those with similar features, is simple. They only need to switch out the button designs to know which one is the "active view" and the "inactive view".

Figure 1. Calendar Improvement

  - o Figure 1 shows what the improvement will look like in order to improve the user experience of the user when using the app. The changes are essentially to exchange the button design of the "calendar" and the "today" button.
- Did you discover any major flaws that would suggest a completely different type of design?
  - o Fortunately, there weren't any major flaws that the user have encountered most of the time. And if they did encounter some flaws, it's not enough to destroy their whole experience using the app.

Critique and Summary:

What were the advantages and disadvantages of your evaluation?

- The advantages of conducting this evaluation were that we are able to garner the perspective of people who might be able to use the app on a daily basis in efforts to perfect the supposed doctrine that this project is set on following. And that is ease of flow and navigation. Essentially, getting to the point directly. The disadvantages however is that it's a time consuming process in efforts to garner user data on how they might be able to use the app. Attaining the said number of sample was already difficult, and it does take time when conducting a single evaluation session. There might be a chance that those user data might not be worth going into. So sometimes, efforts may be wasted if followed by wrong choices.

What would you have done differently knowing what you know now (both design-wise and evaluation-wise)? Given more resources, what could you have done that would have produced significantly more insightful evaluation results (again, whether this is an improved prototype or a different evaluation path).

- I would like to delve more into the student and tutor views themselves. By improving their already shallow feature just to connect to a full on educational platform that they can rely upon. We would also like to propose a new system to make an appointment that makes it reliable for both the students and tutor to handle.

Survey Documentation

The evaluation was conducted in a face-to-face setting, allowing for direct interaction and immediate feedback. Below are several photos that capture various moments and stages of the evaluation process, showcasing how it was carried out.

Face-to-face Evaluation

Summary of the Project

In order for this project to succeed, it is important to conduct this evaluation in order to consider every issue before putting the whole system into production. Fortunately, the prototype was able to pass most of the areas in the heuristic evaluation along with some good and extended feedback. Every aspect of the prototype was a success and often pose risks of issues. Though, the team would like to have more say in the error handling once this app will be on full production. Especially with error feedback in order to know that such an error can exist or not.

The conclusions of the project within this evaluation are that people have their own different view, but often united with standard and getting the job done. And this is what the prototype does. Because almost at the end of a session, everyone's opinion deviates from what's already established. Fortunately, the standard imposed by big companies and app developers does force the consumers to accept the standard. Making them familiar with other apps even if they didn't really know about it beforehand. This does make their user experience a bit better with the skillset of essentially having to easily an app based on the standard given. It is fortunate on our end that we were able to meet those standards and pose no problem when introducing a new system, but does uses the same template of interaction with the app.