User Interface / User Experience Final Report

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CSCI 337: User Interface Design

Contents

Abstract

The GeoTasker project introduces an innovative application designed to revolutionize how individuals

manage and complete daily tasks through geolocation technology. Addressing the challenge of

optimizing productivity, GeoTasker enables users to create 'smart' task lists that are aware of both time

and location. This project was motivated by the growing need for efficiency in the fast-paced modern

lifestyle, where effective time management is crucial for personal and professional success. The

application is grounded in Google Maps' demographic data, focusing on a target audience aged 16-34

while catering to older users. The GeoTasker app empowers users to streamline their schedules and

serves as a platform for local businesses to connect with potential customers, highlighting the symbiotic

relationship between commerce and convenience. The presentation will demonstrate GeoTasker's

functionality, user engagement strategies, and potential future enhancements. The broader implications

of GeoTasker lie in its potential to foster community engagement, support local economies, and improve

overall quality of life.

Keywords: Geolocation Technology, Task Management, Productivity Optimization, Smart Task

Lists, Time Management, User Engagement, Local Business Integration, Community Engagement,

Economic Support, Quality of Life

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Requirements

User Base

The user base will target the younger 16-34 age group, but still include those aged 35 and older. This is based on the age demographics for the Google Maps application.

Customer Base

The customers are businesses and those who pay either for the app or some added functionality. They need users to encourage app improvements, pay for services and/or navigate to locations harboring paid services, and attract more users to ultimately turn into customers.

Potential Users and Survivor Bias

The current userbase is missing the older age demographic; As such, subsequent trials will need to take this into account to get their feedback.

Stakeholder "Stories"

- As a new user, I would like to create "smart" task lists.

- As a regular user, I would like to get notifications and navigation for task lists.

- As an administrator, I would like to know how much revenue is being generated from payments and businesses/advertisers.

Success Measurement

User Abilities

I would like my users to be able to schedule and complete daily tasks, with navigation and reminders to make it easier. I would also like my users to generate revenue using my service for its continued support and profitability.

Customer Needs

These goals align with my customers' needs like getting sufficient value for their time and money as well as the efficient and helpful services the app provides.

User Comfort and Reasonable Compromises

Users that are comfortable will want to stay on course. If the application performs as expected, accepts feedback, and improves QOL (Quality of Life), users will continue to utilize and support the application. However, users will have to voluntarily provide location information, payment in the form of selective services and/or advertisements, and reasonable updates that respect current functionality as well as user-requested/administrative changes.

Sketches

Figure 1.
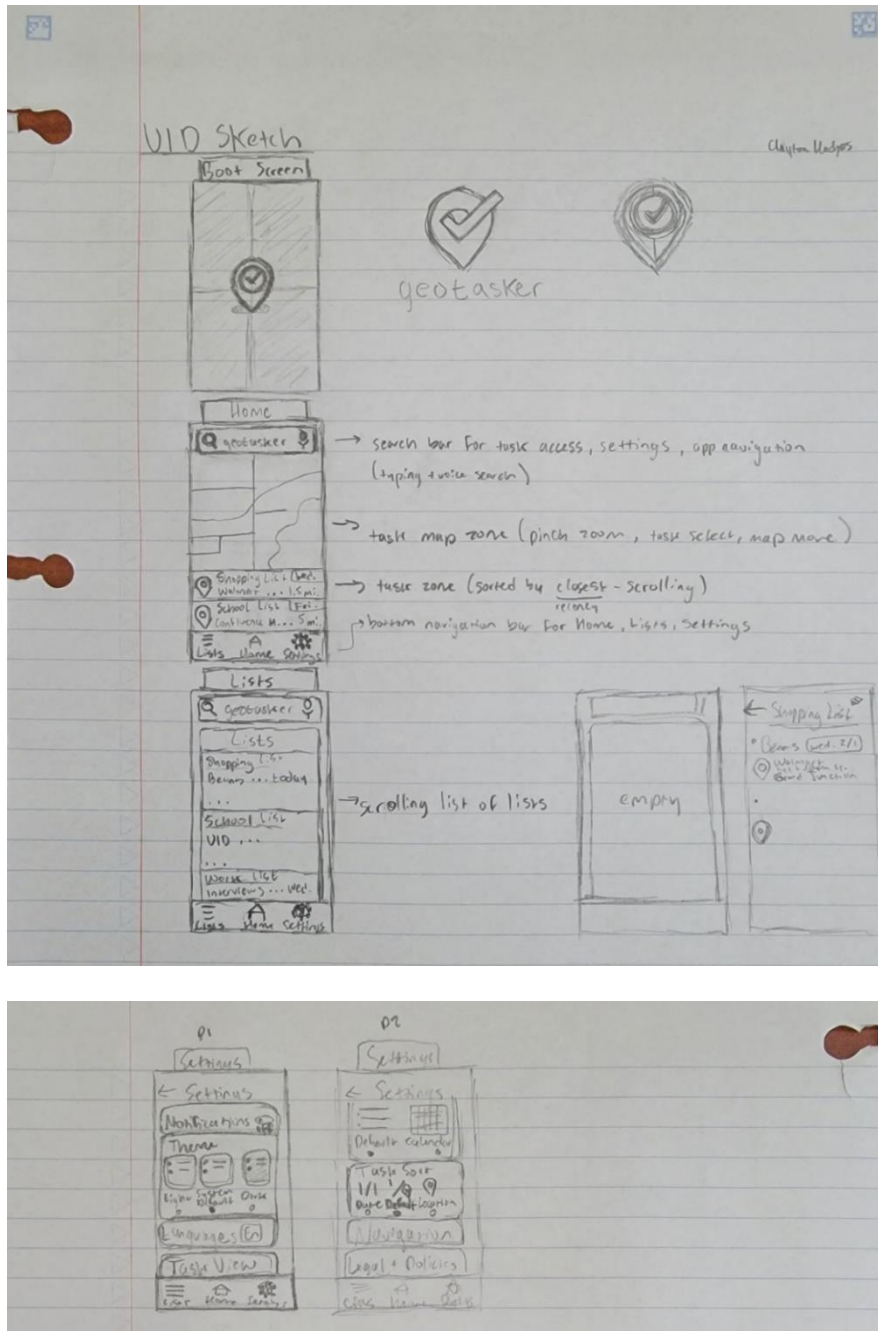
Figma Iteration

Figure 1.

*Figma simulates a boot screen that leads to the home screen following a delay.*

Figure 2.

Figma displays the connections between the app pages that are linked via the application's bottom navigation bar.

Android Studio Application

Figure 1.

The Android Studio Google Pixel 3a emulator displays the GeoTasker application with various screens

accessible via the bottom navigation bar (left to right: lists, home, settings).
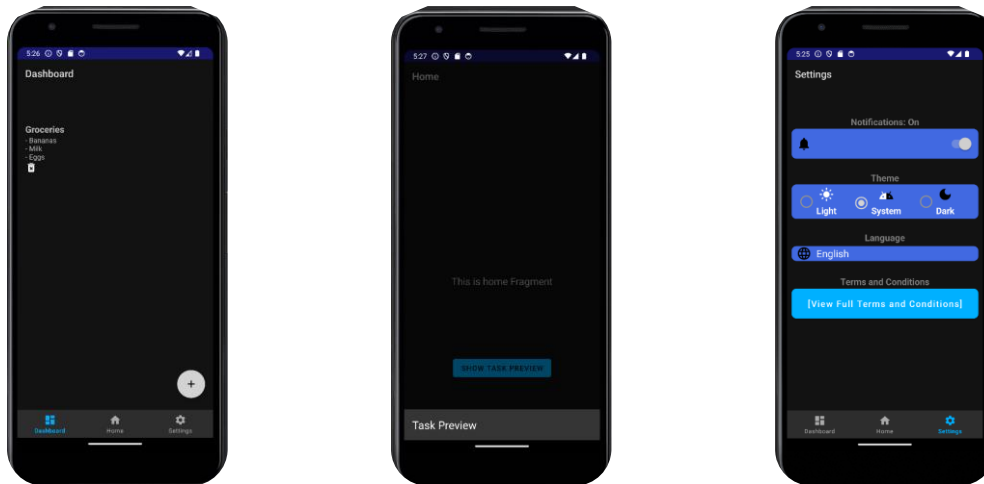
Conclusion

I have learned a lot throughout the course of the iterative design process for GeoTasker, which

continues to evolve based on user feedback and personal requirements. The complexities of the design,

implementation, and documentation for this project ensure that the app remains user-centric while also

fulfilling the commercial goals of potential stakeholders. In the future, I plan to implement a Google

Maps or similar API for maps integration and a fully functional task preview on the home screen. I also

plan to enforce note limits, scrolling, 'smart' suggestions for notes, a language support library, user

layout customization, and notifications functionality.

References

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