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Walmart Application

Introduction

The e-commerce industry has been evolving over the past decade and has become one of the successful big economies across the globe. This project will be based on Walmart online store that will enable users to do their shopping activities using an efficient mobile application. Walmart has been one of the leading e-commerce organizations since its inception in 1962 by Sam Walton. The emergence of various technological trends has enabled the virtual interaction of buyers and sellers via the internet.

In this project phase, all the user requirements, analysis, and reporting will be done. We need to develop an application that will meet the end user's specifications. In the Human Centered Design (HCD) logic, both usability and efficiency are major components when it comes to software development. When we talk about Human Centered Design, we refer to six key phases that are implemented in any software design. These phases include observation, ideation, prototyping, feedback, iteration, and implementation. Observation phase refers to close examining what the user needs to solve a problem. Ideation is all about doing research and conducting an analysis to come up with possible software solutions. Prototyping enables the production of independent small modules of the projected product of the project. Once the first module is finished, it is delivered to the users who later provide feedback. If the feedback is positive, the next module is implemented until all the modules or prototypes are finished.

The motivation for this project is the emergence of smartphone technology that enables easy interaction of web applications through mobile applications. Moreover, most of the successful online services are being conducted via mobile applications.

Research and Methods

In this phase, all the information relating to the Walmart Application was gathered to ensure all the necessary system resources are implemented. A mixed research approach was implemented as the research method. Basically, the mixed research method involves a combination of quantitative and qualitative methods. Statistics and logical reasoning form the basis of the research. Some of the merits of the mixed research are that it is conclusive, it is explanatory, and it is efficient and effective.

In any development of an online e-commerce application, it is crucial to adopt a research method that will give the full view of all activities or business processes. Mixed research enables us to have all the user requirements. The user requirements were determined using ethnography study that involved immersing into the user's activities that relate to purchase of goods and services via Walmart e-commerce site. Interviews were also conducted as a means of gathering user preferences and needs. These research methods were both cost effective and efficient as all necessary requirements were successfully gathered.

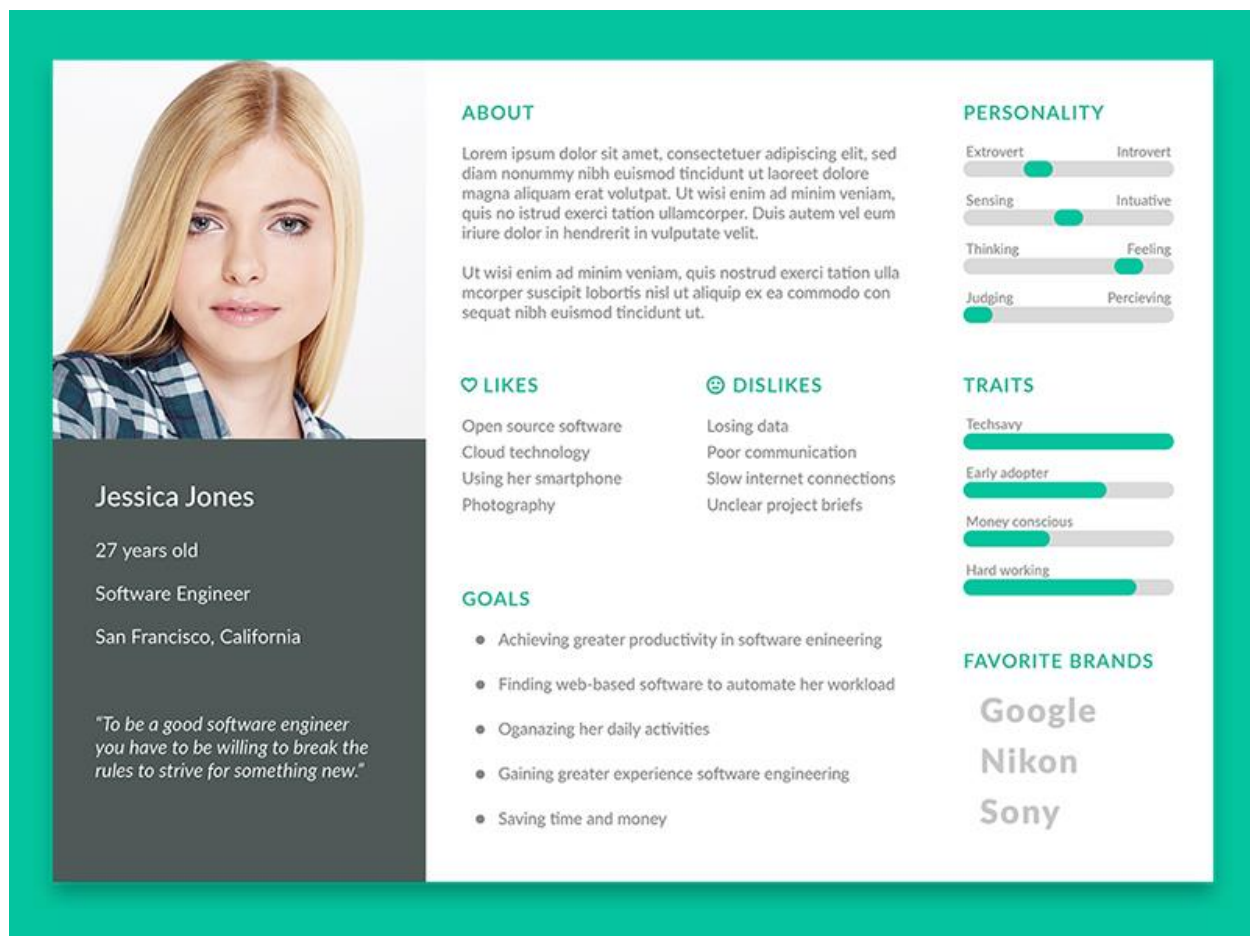
Findings

The interview questions were presented to various user demographics including age brackets. The questions specifically covered the usability aspect of the current method of products purchase. Online communication platforms such as emails were used also to broaden the target

users. The second method (ethnography) involved the purchase of products from the Walmart store as a customer and viewing other customers complete their purchases. Some of the purchases that were made covered a range classification of products offered by Walmart including electronics, clothing, stationery, and food.

However, we were faced with some issues specifically when it came to access the product. It took a longer period to have a look at some of the products and the whole purchase was very time-consuming. The purchase process involved product selection, the addition of personal and billing information. These findings gave us a better look at the user requirements as new difficulties were being identified. The whole experience was very interesting as I came to realize that most of the customers preferred a better way of completing their purchases. Some of the users in the age bracket of 20-26 even proposed an application to handle all the purchasing process. Several user needs were identified including timely processing of the payments, an easier way to complete the whole purchase process and a mobile application to replace the whole ordering process. In summary, usability and efficiency were the main findings of the research.

Persona



The above user persona was created using the Xtensio web application. It composes of the user's basic bio data (age, work, family, location and character), goals of the user, personality and the current problems the user is facing. The target group of users is the middle-class customers

since most Walmart customers fall under this class. The information displayed in the above persona was based on the key requirements necessary to develop the Walmart mobile application.

Recommendations

Considering the issues that are arising from the low system response during product purchase, it would be best to develop an application that will be more responsive to the user's actions. The pain points associated with the user include slow system responsiveness (time-consuming) and lack of usability in the product purchase process. It would be best to develop an application interface that will eliminate all the user pain points. Some of the remedies to eliminate these problems can be adopting an effective development model and using up-to-date programming languages in the implementation phase.

A mobile application will be the best solution to meet all the user requirements. Usability, efficiency, and effectiveness should be some of the building blocks of the application.

Conclusion

The requirement assessment has slightly brought some changes to the project schedule as more user requirements have been identified. A better software development model and programming language are essential in ensuring a quality Walmart Application has been developed. A better software development methodology will be needed to integrate all these changes. Prototyping will be an efficient methodology since all the changes will be incremental and tested at every level of development. The project will need additional resources including other team members to take up the new roles. The project scope will have to be more diverse to cover all these new user requirements. A change in the project scope means the overall cost or budget will be affected.

References

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