Project Proposal

Research of Messengers

Project Requestor

Margaret-Anne Storey, Professor of Computer Science
Tel: 250-472-5708 Email:mstorey@uvic.ca

Statement of the Problem

We have seen Yahoo, Skype, iMessage, Whatsapp, Slack, and many other forms of instant messengers come to light throughout the last 15 years. They quickly rose to popularity and provide users with communication services across rooms, buildings, cities and even countries. They contain many various features, including text chatting, audio calls, video calls, file sharing, private groups, and social network.

As the need for collaboration and communication increases, users come up with requirements for higher quality and more advanced features. Some of those traditional instant messengers survive and are still widely used, but many of them do not meet the evolving requirements and we move on to the next best thing. Moreover, there are no instant messengers that possess all of the features required by some users in the current market.

In our project, we will research what causes people to jump from messenger to messenger, what makes the newer apps more useful than the previous ones, and what features are required by users that do not exist in current messengers. We will apply different research methods, including surveys, user experimenting, case-studies, and observations from our past experiences, to reach a complete and precise conclusion on what features are needed by current users. Then we will try to design and prototype a new instant messenger that can provide users with higher satisfaction.

Project Deliverables and Beneficiaries

At the end of this project, we hope to generate a report about features from traditional messengers and contemporary messengers, a presentation in class about our research results, and a design report with the prototype of our new messenger. Our project will benefit the following communities:

- Students in class will have a better understanding of instant messengers and user requirements. This project might give them some inspiration on their future research topics and maybe even their master thesis.
- Lecture professors might gain a new perspective on instant messengers, or it might raise their interest in the project subject matter.
- Software development teams can use our results and reports and cooperate with us to develop a new and outstanding messenger that meets more user requirements.

Time Factors

We want to set up the milestones and decide the detailed research methods before Oct 19th. We want to finish our research and produce the research report by Nov 10th. The design and prototype of new messenger should be finished by Nov 19th.

Related Projects

This is an original and start-up project of LegIM technology group, so there are no related projects currently. In the future, there might be a related implementation project based on this project.

Assumptions and Constraints

Assumptions:

- We can get the required resources, permissions and candidates for our research.
- Research can be performed in an environment with no bias.

Constraints:

- The size of communities in which we perform our research and experiments is very limited.
- We have very limited time to do the research.

Project Expense

Research Expense: Our research is mainly performed on students of UVic. We can do our surveys on campus and set up experiments in labs, so there should be no expense.

Design Expense: The designers of new instant messengers are our group members. The context information comes from our research results. Therefore, there should be no expenses.

Implementation Expense: If we have chance to work with other development team, the cost of implementation is estimated to be
$15,000.

Post-Implementation Expense: We need to rent public servers to run our software and maintain our product and service. The total cost is estimated to be $8000 per year.

Project Leaders

Zhuoli Xiao, Master Student of Computer Science
Tel: 250-891-3238 Email:willisx@uvic.ca

Adithya Rathakrishnan, Master Student of Computer Science
Email:infogr8adithya@gmail.com

Primary Contact

Kushal Patal, Undergraduate Student of Computer Science
Email: Kush.p5874@gmail.com

Collaborators

Keith Rollans, Undergraduate Student of Software Engineering
Email: rollansk@uvic.ca

Josh Stelting, Undergraduate Student of Software Engineering
Email: stelting@uvic.ca