

Problem Statement

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Abstract

This document is briefly talking about our project. Our project relates to a very simple and easy to use social device. This device basically use Android operating system and have a unique app. This app is the only way that the device user to contact other people, such as their family and friends. Basically our client wants us to improve and redesign the dedicated app, which running on Android for a higher performance. For this purpose we should re-pick our knowledge about JSP/CSS, also need to learn some more about Angular+Ionic.

I. PROBLEM DEFINITION

Nowadays more and more young family members are doing more and more social networking by using cellphone or tablet via internet, but most of older generation feels out of connect with young people or even the outer society. So our client's company offer a special device with dedicated app for senior people. Our job is make this device and the app even better, better UI, easy to use, and easy to learn how to use any function of the device. As they already have a prototype of the device and the dedicated app, we have to find out all the flaws of this application for a senior user, and makes it easier to learn, more functions can use.

For us, we found that we need some knowledge, some of them we already know, some of them we need to learn. We have already know how to use HTML5, CSS, and JSP, but for me I first to know about Angular+Ionic. Also, as so far we haven't see the real app from client, so we don't know what is looks like of the app's UI, this is very important.

II. PROBLEM SOLUTION

My solution to the problem is to use css/html5 and jsp, to build a extremely functional web page as the apps user interface, so this app can easily run on different devices, also we need to learn how to use Angular, this platform will transform our code to adapt other device, so we only need to write one version code.

Basically the front page will as the app's main menu, will include log-in button, power switch and register button, after log-in, the first page should be the friend list that include friend status such as the most important thing for friend list is friend is online or not, this can let user know whether they should contact their friend at that moment. And the most important thing for this app is the communication window, I prepare to design both text and sound are the ways to make a dialogue in the app, so we need to get the specific api. Because of assuming that most of our computing code will run on the sever not local, so the network choose page will be significant important part, some senior don't even know how to connect to wireless network such as a a wifi, so there must be a function to automatically have a signal test ability, and offer a notification to user, let them know they need to ask the wifi host for a password.

Our solution actually will bring limited new functions to the original version of the dedicated application, but will makes it looks totally different to a non-technical person, because basically this is a social network software, senior use need to join the tendency of their family and friends, so this new version application will offer a much easier way to achieve the goal. Also, we will detecting other social networking apps' functions, then use the 'senior way' to add it into our application, because this is why the client wants to improve his app, to let senior user also can enjoy the convenience and joy of the social networking community, let them not to feels "left in station".

III. PERFORMANCE METRICS

This application need to have multiple kinds of devices platforms, but all of these devices' operating system is Android. Our application user interface need a extremely simple out look, that the senior can easily find out all the function, and all the instruction must be written as a non-technical version, because if we use too much technical words, this instruction means nothing to the senior. Also we need to have a survey for senior people, we need to offer multiple user interface version to them, and let them pick the best one. About the application performance, is also very important, we need to reed the JSP code time after time to reduce its time and space complexity to improve the app's performance.