Mobile Voting for Android - GUI design and usability

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1 Purpose

The purpose of this document is to describe the design, implementation and live testing of the Graphics User Interface in the Mobile Voting for Android application created as the mobile part of the Voting system. The document is to be used when designing future versions, adding new functionalities or porting to a new platform. It should give the reader a full understanding of the principles of the GUI.

2 Introduction

2.1 Basics

The purpose of the application is to provide a the voting functionality to the system. The application in summary connects to a voting point - server, displays the questions and provides a mean to answer them. A simple principle, but this makes it only harder to design. The basic needs of the GUI is to:

- Provide the user a means to login to the application - not the voting points/servers.

- Provide the user a means to connect to a server, save server details.

- Provide the user a meant to see question text, details and discreetly vote.

- Be extensible and be able to accommodate future changes with minimal effort.

- Be simple, intuitive and minimalistic.

- Be consistent with the operating system "Look & Feel".

2.2 Design principles

The design principles are to be inspired the "User Interface Guidelines" for Android applications[?]. They will be a little bit tweaked for our use, because as a voting system, it will have to take into account some safety precautions. Predominantly vote confidentiality and password unreadability.

3 Analysis of the GUI

This section discusses the basic need of the user and how abstract ideas how the GUI should cope with them.

When looking at applications for devices using touchscreens and their review, one observation can be made. The more simplistic and straightforward the application as a whole is, the more popular it is among the user. People do now want over complicated features and often are willing to sacrifice usability for simplicity. Swiftness of the GUI is another trait that is often neglected in the design. One example that comes to mind and has these traits is a Czech made application called "Pubtran" from Frantisek Hejl [**?**]. One idea, simple interface and undisruptive helper features made this, in my opinions one of the best applications for Android on the Market.

Our design should take this ideas as a kind of inspiration and build itself on the above principles.

3.1 What the users will need

As a voting application the user will obviously need a way to connect, vote and see the results of his actions. These are basic functionalities that are given by the nature of the application and make the application usable. Next the users will need a communication channel between them and the application.