myVerein

Software Requirement Specification

Student Research Project

for the

Bachelor of Science

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at the Cooperative State University Stuttgart

by

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Author's declaration

Unless otherwise indicated in the text or references, or acknowledged above, this thesis is entirely the product of my own scholarly work. This thesis has not been submitted either in whole or part, for a degree at this or any other university or institution. This is to certify that the printed version is equivalent to the submitted electronic one.

Stuttgart, September 2014

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Frank Steiler

Preliminary note

Abbreviations or technical terms are not specially marked, but can be found in the list of abbreviations respectively in the glossary. While characterizing or enumerating persons I will relinquish the feminine and just use the masculine form. This is because of simplification and should not be seen as any kind of discrimination.

Contents

Chapter 1

Product purpose

The system is intended to simplify the management of a club by unifying the communication channel between the representatives of the organisation and the members. This goal is going to be achieved by using modern technology. The product should be implemented as a server client architecture, where the client is an iOS running smartphone or tablet.

1.1 Obligatory requirements

The fulfilment of the following criteria is mandatory:

User

- The user needs to be able to log himself into the server provided by his club at the start of the application

- The user needs to be able to check the upcoming schedule of the club

- The user needs to be able to send and receive messages of all members of the club

Administrator

- The administrator needs to be able to modify the server according to the clubs name etc.

- The administrator needs to be able to modify the access rights of all members of the club

- The administrator needs to be able to schedule an event

Application (Client)

- The application needs to be optimised for the operation with an iPhone 6

- The application needs to ensure an intuitive operation

- The application needs to have a logic menu structure

- The application needs a basic graphical user interface

System (Server)

- The system needs to ensure a fault tolerant, consistent operation.

- The system needs to be configurable

- The system needs to provide a secure user authentication

- The system needs to handle the login of multiple users at the same time

- The system needs to handle several messages at the same time

- The system should be configurable through a web interface, that enables the administrator to manage user and publish relevant information.

- The system needs to be developed in Java 8

- The system needs to operate according to the data privacy act

- The system needs to be designed in a way that a user can only access a minimum amount of private data of the other users

- The system needs to be designed to be easily extensible

1.2 Optional requirements

The following requirements are optional, but their implementation is nice to have.

- The application should have a sophisticated graphical user interface

- The administrator should be able to create divisions

- Each user should be able to be part of one or more divisions, to only receive relevant information.

- The system should support private chats for each division

- The user should be able to request access to a division, this access is granted by a higher level user

- The user should be able to share photos that are relevant to the club

- The application should use push notifications to effectively alert the user about incoming messages, news or upcoming events

- The system should be designed to ensure extensibility

- The application should be developed using Swift

- The user should be able to optional create a public profile containing contact information

- The application should be created according to the Apple Developer Guidlines

1.3 Additional requirements

The following requirements would improve the overall user experience, but their implementation is not business critical.

- The application could have a central news feed, which contains the latest information provided by the administrator.

- The application could be implemented multilingual.

- The system could have a second member type, that is allowed to publish news and events.

- The application could be able to send and receive attachments in messages, like photos or audio messages

- The application could handle multiple accounts on different or on the same server

- The application could support the native resolution of different devices, like the iPad or the iPad mini.

- The system could send an Email newsletter for members that are not owning a smartphone running iOS

- The events could support assignment of supporting roles needed during the event

- The events could support voting buttons to find the ideal date for the meeting

1.4 Non-requirements

The following requirements are not in the scope of this product.

- The system is not designed to create a homepage for the club

- The application is not designed to provide access to non-members of a club

- The application is not designed to work without a server where the user is able to authenticate himself

- The system should not be used to collect statistics about the users

Chapter 2

Product environment

2.1   Application area

The system combining a messaging app, as well as event organisation and
news publishing service. These functionalities are intended to be used in the
context of a single club or organisation.

2.2   User group

The application can be used by every registered member of an organisation,
owning a smartphone with internet connection. Concluding the application
is going to be used by a wide age group, including people that are not very
familiar with the technology they are operating.

   The setup and administration of the server environment should be done
by a person that is a skilled IT administrator.

2.3   Operation condition

Webinterface Kann Selber subscriben zu divisions

List of Figures

Listings