Requirements Document for FLOCCTUM

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Glossary

conference A conference is an instantiation of at least one plugin. 11–16

guest A user who is not a member. 16

member A member is a user that is registered to the system. 11–13, 16

moderator A moderator is a member with rights to share,close and invite new persons to an existing conference. 12–15

plugin A plugin is an application provided from the system. 12

sub-moderator A sub-moderator is a user who was given moderation rights by the moderator of the conference.. 13, 15, 16

user A user is a person who uses the system. 11–14, 16

Contents

II   System Requirements

Part I

User Requirements

0.0.0.0.1 UR001

Statement *users shall be able to register to the system .*

Priority *A*

0.0.0.0.2 UR002

Statement *member shall solve a short tutorial right after registration .*

Priority *C*

0.0.0.0.3 UR003

Statement *members shall have social profiles .*

Priority *B*

0.0.0.0.4 UR004

Statement *A member's profile shall be editable and hideable .*

Priority *B*

0.0.0.0.5 UR005

Statement *members shall have a contact list .*

Priority *B*

0.0.0.0.6 UR006

Statement *members shall be able to sort contacts in self-defined groups .*

Priority *C*

0.0.0.0.7 UR007

Statement *members shall be able to search for other members to visit their profile and add them to their contact list .*

Priority *B*

0.0.0.0.8 UR008

Statement *members shall be able to block other users. Thus users shall not be able to request a conferences with that member. .*

Priority *C*

0.0.0.0.9   UR009

Statement *members shall be able to unblock blocked users .*

Priority *C*

0.0.0.0.10   UR010

Statement *members shall be able to use the plugins offered by the system .*

Priority *A*

0.0.0.0.11   UR011

Statement *The offered plugins shall be at least: voice- and video-, chat-, whiteboard-conference, document- and screen-sharing .*

Priority *A*

0.0.0.0.12   UR012

Statement *The system shall be extendable with new plugins .*

Priority *A*

0.0.0.0.13   UR013

Statement *members shall be able to open and use several plugins simultaneously .*

Priority *A*

0.0.0.0.14   UR014

Statement *The system's interface shall be windows-based .*

Priority *A*

0.0.0.0.15   UR015

Statement *members shall be able to minimize and scale the plugin-windows .*

Priority *A*

0.0.0.0.16   UR016

Statement *members shall automatically become moderators of their self-opened conferences .*

Priority *A*

0.0.0.0.17   UR017

Statement   *moderators shall be able to give moderator rights to other members in his conference. members with moderator rights, that are not the moderator itself shall be called sub-moderators The moderator shall also be able to remove those rights from sub-moderators .*

Priority *B*

0.0.0.0.18   UR018

Statement   *moderators (and sub-moderators) shall be able to invite users to their conference .*

Priority *A*

0.0.0.0.19   UR019

Statement   *moderators (and sub-moderators) shall be able to remove other users from the conference. sub-moderators shall not be able to remove other sub-moderators. Only the moderator shall be able to remove sub-moderators. .*

Priority *A*

0.0.0.0.20   UR020

Statement   *In a voice- and video-conference a user shall be able to turn on/off his soundinput, -output and videoinput .*

Priority *B*

0.0.0.0.21   UR021

Statement   *In a voice- and video-conference a user shall be able to configure the sound and video quality .*

Priority *C*

0.0.0.0.22   UR022

Statement   *In a chat-conference a user shall be able to turn on/off an obscene language filter .*

Priority *B*

0.0.0.0.23   UR023

Statement   *In a chat-conference a user shall be able to choose a color and font for his text .*

Priority *B*

0.0.0.0.24   UR024

Statement   *In a whiteboard-conference a user shall be able to choose different tools and colors to draw/erase .*

Priority *A*

0.0.0.0.25   UR025

Statement   *In a whiteboard-conference the moderator shall be able to give/remove drawing rights to the participants .*

Priority *B*

0.0.0.0.26   UR026

Statement   *In a document-sharing-conference the participants shall be able to create and edit a text-based document .*

Priority *A*

0.0.0.0.27   UR027

Statement   *In a document-sharing-conference the moderator shall be able to give/remove writing rights to the participants .*

Priority *B*

0.0.0.0.28   UR028

Statement   *In a document-sharing-conference the participants, if they have writing-rights, shall be able to highlight text-parts with a individually chosen color .*

Priority *B*

0.0.0.0.29   UR029

Statement   *In a document-sharing-conference the participants, if they have writing-rights, shall be able to comment their highlighted text-parts .*

Priority *B*

0.0.0.0.30   UR030

Statement   *In a screen-sharing-conference the moderator shall be able to show his actual screen .*

Priority *A*

0.0.0.0.31 UR031

Statement *sub-moderators shall be able to share their conferences to other conference's participants. .*

Priority *A*

0.0.0.0.32 UR032

Statement *The conferences shall be recordable(video,voice,whiteboard) or savable(chat-log,text-document,whiteboard) All records, saved on the server, shall be accessable by the (registered) conference participants. All records, saved on the server, shall be downloadable. .*

Priority *A*

0.0.0.0.33 UR033

Statement *moderators (excluding sub-moderators) shall be able to combine their conferences to another conference. They have to be moderators of both of those conferences to combine them. This combined conference will be handled like only one conference. Functions like recording,mute,sub-moderation rights and invitation will now take effect on both conferences. .*

Priority *C*

0.0.0.0.34 UR034

Statement *No data shall be stored on local devices .*

Priority *A*

0.0.0.0.35 UR035

Statement *The system shall be as efficient as possible .*

Priority *A*

0.0.0.0.36 UR036

Statement *The system shall be hosted on a dedicated server .*

Priority *A*

0.0.0.0.37 UR037

Statement *The system shall be accessable as a website via browser .*

Priority *A*

0.0.0.0.38   UR038

Statement   *The system shall be easy to use .*

Priority *A*

0.0.0.0.39   UR039

Statement   *The system shall also allow unregistered users to take part in conferences as guests, if they were invited by a sub-moderator. .*

Priority *A*

0.0.0.0.40   UR040

Statement   *A member shall be able to open public or private conferences. Public conferences shall be accessible to every user who wants to join. .*

Priority *C*

0.0.0.0.41   UR041

Statement   *The system shall be accessible to a high amount of users .*

Priority *A*

0.0.0.0.42   UR042

Statement   *The system shall be protected against attacks .*

Priority *A*

0.0.0.0.43   UR043

Statement   *The system shall be conform with the german rights .*

Priority *A*

0.0.0.0.44   UR044

Statement   *The system shall be conform with the GI-concepts of data storage .*

Priority *B*

Part II

System Requirements

Chapter 1

Non-Functional Requirements

1.1 Product Requirements

1.1.1 Usability Requirements

1.1.2 Efficiency Requirements

1.1.2.1 Performance Requirements

1.1.2.2 Space Requirements

1.1.3 Dependability Requirements

1.1.3.0.1 NFR001

Statement *The MHC-PMS shall be available to all clinics during normal working hours (MonFri, 08.3017.30). Downtime within normal working hours shall not exceed five seconds in any one day.*

Priority *A*

1.1.4 Security Requirements

1.2 Organziational Requirements

1.2.1 Environmental Requirements

1.2.1.0.2 NFR002

Statement *Users of the MHC-PMS system shall authenticate themselves using their health authority identity card.*

Priority A

1.2.2 Operational Requirements

1.2.3 Development Requirements

1.3 External Requirements

1.3.1 Regulatory Requirements

1.3.2 Ethical Requirements

1.3.3 Legislative Requirements

1.3.3.1 Accounting Requirements

1.3.3.2 Safety / Security Requirements

1.3.3.2.1 NFR003

Statement *The system shall implement patient privacy provisions as set out in HStan-03-2006-priv.*

Priority *A*

Chapter 2

Functional Requirements

2.0.3.2.2 FR001

Statement *On the last working day of each month, a summary of the drugs prescribed, their cost, and the prescribing clinics shall be generated. (see user requirement UR001)*

Priority *A*

2.0.3.2.3 FR002

Statement *The system shall automatically generate the report for printing after 17.30 on the last working day of the month. (see user requirement UR001)*

Prioriy *A*

2.0.3.2.4 FR003

Statement *A report shall be created for each clinic and shall list the individual drug names, the total number of prescriptions, the number of doses prescribed, and the total cost of the prescribed drugs. (see user requirement UR001)*

Priority *A*

2.0.3.2.5 FR004

Statement *If drugs are available in different dose units (e.g., 10 mg, 20 mg) separate reports shall be created for each dose unit. (see user requirement UR001)*

Priority *A*

2.0.3.2.6   FR005

Statement *Access to all cost reports shall be restricted to authorized users listed on a management access control list. (see user requirement UR001)*

Priority *A*

Chapter 3

Scenarios

3.1 Scenario for a voice-and-video-call directly between two members

INITIAL ASSUMPTION: *Member1 wants to start a voice-and-video-call to Member2 on his contact-list.*

NORMAL: *He sends a request to the other user. The other User accepts the request. The System builds a P2P connection between those Users. Data is exchanged via that connection. A video-chat-window and tab opens on both Members platforms.*

WHAT CAN GO WRONG: *The request is not sent or not received.Give feedback to Member1.*
The Member1 is blocked by Member2.Give feedback to Member1 (Member2 blocked you)
The connection collapses.Give feedback to Member1 and Member2 (connection timeout)

OTHER ACTIVITIES: *There may not be more than one video-call to a single Member at the same time.*

SYSTEM STATE ON COMPLETION: *The data-stream is stopped. The video-chat-windows and tabs close on both Members platforms. The connection is cut (cancelled).*

3.2 Scenario for starting a conference with video, audio and whiteboard functionalities

INITIAL ASSUMPTION: *a member wants to start a conference with video, chat and whiteboard functionality. This member has the right to start a conference*

23

NORMAL: *the member starts a conference with the plugins he wants.*
He invites other people to this conference by sending them a link to the conference directly through the system (if they're members), or through email (if not members).
Each user, once he joins, will be able to see other people's chat messages and videos, and can hear their audio. He can also draw on the whiteboard. Users will see a video tab for the videos of other users, and a whiteboard tab where they can draw together.
Each user can choose if he wants to share his video and audio or not.

WHAT CAN GO WRONG: *A user is abusing one or more plugin the moderator or a sub-moderator can kick the user from the conference, or block the user from accessing the plugin(s) he's abusing.*
the user doesn't have a camera, or a microphone, or both.Video and audio sharing will be disabled for that user, he'll still be able to see the others though.
A user's internet speed is too low for video streaming. The user will be given the option to disbale video streaming, or lower the quality.
A user is blocked by another. The other user will not see this user's chat messages and video, nor hear his audio.
The connection collapses Give feedback to all users (connection timeout)
The moderator leaves the conference. The system assigns a sub-moderator as the current moderator, if at least one sub-moderator exists. If not, then some other member will be randomly assigned as moderator.
The server is overloaded. Show a message to the users, that they should expect issues because of overload.

OTHER ACTIVITIES: *Each user can take part in other conferences, but will have his audio and video disabled.*

SYSTEM STATE ON COMPLETION: *The conference is stopped. All the tabs close on all users' platforms. The connection is cut (cancelled).*