Requirements Analysis Document (RAD) for 121Calendar

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1 Introduction

1.1 Purpose of the system

The unique purpose of our system is to be replace the old fashioned paper calendar. That is, the system must Our system may at first glance look as a pretty generic calender-system, due to it's very simplistic setup. It is, however, not that generic, since there, to our knowledge, doesn't exist a calendar-system that does not restrict its user im some way or other in the interest of giving more functionality. We have instead focused on making it easy to create appointments with other people, and giving the user an almost autonomous power with his or her calendar.

1.2 Scope of the system

1.3 Objectives and success citeria the project

1.4 Definitions, acronyms and abbreveations

1.5 References

Changes: https://github.com/Madsen90/BDSA/commits/master

1.6 Overview

2 Current system

3 Proposed system

3.1 Overview

3.2 Functional Requirements

3.3 Nonfunctional Requirements

Category	Requirements
Usability:	90% of the 18-25-year-olds users should be able create, delete, edit appointments and account without prior knowledge, reading or education.
Reliability:	- Crashes/loss of connection must not cause loss of neither account- or appointment information, none-submitted data may be lost.
	- Should be accessible whenever a client has internet-connection.
	- Crashes should be rare - less than 1% of operations made by a user may lead to a crash.
Performance:	- The system shuold be scalable - there should only be a hardware limit to the number of appointments or accounts in the system.
	- The calendar should load fast - there should be a maximum 1-2 second delay on normal computers with 1 mbit connection.
	- Client should be able to run on a single core 500 MHz CPU.
Supportability:	- The system should be documented.
	- Updateable to new browsers and OS'.
Implementation:	- Requires internet-connection
Operation:	- None.
Legal:	- User should agree to terms of use.
	- The system should not conflict with Danish laws (Unrealistic to test).
Ethical:	- Users information will not be used or sold.

3.4 System models
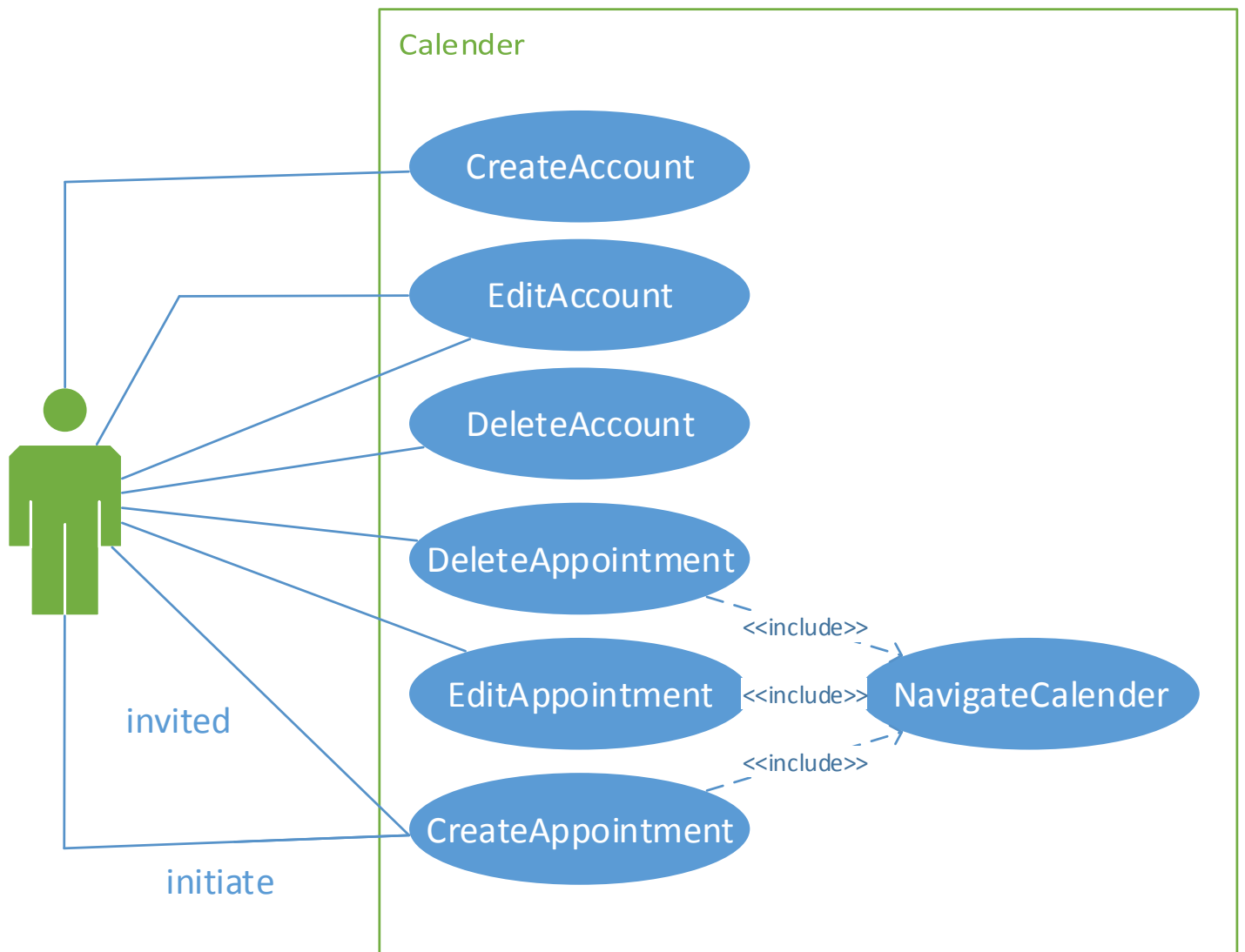
3.4.1 Scenarios

Scenario 1: Create Appointment: -

Scenario name:	HelleCreatesAppointmentWithLars
Participating actors:	Helle (Std. User) <initiator> Lars (Std. User) <participant>
Flow of events:	1. Helle wants to have a meeting with Lars on Tuesday 10:00 AM 2. Helle selects Create Appointment 3. Helle enters time, place and description. 4. Helle receives notice that appointment is successful. 5. Helle adds Lars as participant. 6. Lars receives notice that he has been added to appointment. 7. Lars reluctantly accepts invitation.

Scenario 2: Create User: -

Scenario name:	CreateHelleAsUser
Participating actors:	Helle (Std. User)
Flow of events:	1. Helle is a new employee at Statsministeriet. She needs a new calendar and accesses her calendar client 2. Helle selects Create User 3. Helle enters name and password, and confirms 4. Helle receives a notice of successful user creation.

Note: We need to figure out how to handle user-relationsship. It is unlikely everybody able to invite all users. Do we have user-friendship, groups.. etc?

3.4.2 Use case model

Use case name:	EditAppointment
Participating actors:	User wants to edit time and date of an appointment. Other users effected by changes.
Flow of events:	1. User opens Calendar. 2. Calendar shows the calendar navigation. 3. User selects the appointment he wants to change. 4. Calendar shows the appointment in normal mode that allows changes. 5. User enters submits the wished changes. 6. Calendar updates the appointment and notify potential participants about the changes.
Entry condition:	- User is logged in
Exit conditions:	- Appointment is changed. - User close the system. - Connection lost.
Quality requirements	- None
Use case name:	DeleteAccount
Participating actors:	User wants to delete her account. Other users effected by deletion.
Flow of events:	1. User opens the program. 2. Calendar shows the calendar navigation. 3. User selects edit profile. 4. Calendar shows the profile edit. 5. User select delete account. 6. Calendar asks about how to handle appointments with other participant (Delete / Leave). 7. User selects how potentiel appointments with other participants should be handled. 7. Calendar deletes account, and notifies other users about changes made to their appointments.
Entry condition:	- User is logged in
Exit conditions:	- User account is deleted. - User close the system. - Connection lost.
Quality requirements	- None
Note	- Find a smart way to handle events with other participant, perhaps someone owns an event

Use case name:	DeleteAppointment
Participating actors:	User wants to delete an appointment. Other users effected by deletion.
Flow of events:	1. User opens Calendar. 2. Calendar shows the calendar navigation. 3. User selects the appointment he wants to delete. 4. Calendar shows the appointment in normal mode that allows changes. 5. User selects delete appointment the wished changes. 6. Calendar asks how to handle other potentiel participants (Remove / keep appointment). 7. User selects how he wants deletion to be handled. 8. Calendar changes/deletes the event accordingly and notify other participants.
Entry condition:	- User is logged in.
Exit conditions:	- Appointment is deleted/user leaves event. - User close the system. - Connection lost.
Quality requirements	- None
Note	- It is possible deletion and leaving an appointment should be seperated. It might be easier for the user to understand.

3.4.3 Object model

3.4.4 Dynamic model

3.4.5 User interface

4 Glossary

4.1 Initial Analysis Objects:

Object name	Description
User	User a person who owns an account and thereby a calender. He is able to create/delete/edit appointments.
Account	An account keeps track of user information, and may participate or create in an appointment.
Calendar	An collection of appointments for one account.
Appointment	A digital representation of an appointment between 1 or more Users. It contains a time and a place for the appointment, a title and a description for the event.
Place	A digital representation of a space, migt be none-existing.
Participant:	How an account (and thereby user). Is tied to an appointment.