Smart Personal Organizer

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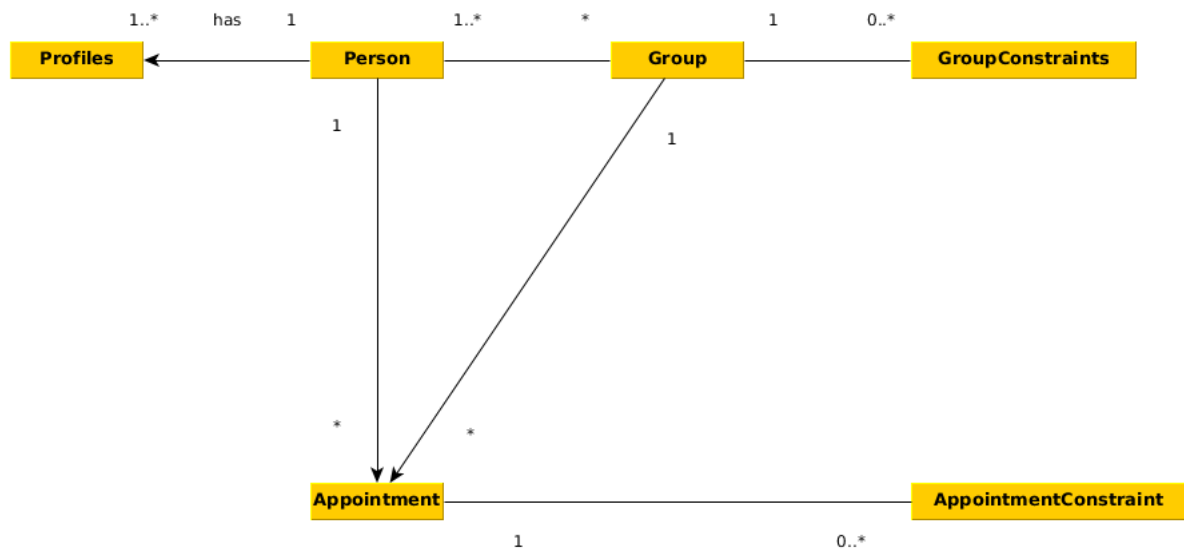|	
Project Name	Smart Organizer
Project Leader	Simon Blaha
Version	1.0
Document state	In process

Contents

1 Initial Situation and Goal

1.1 Inital Situation

Everyone has appointments, which he has to meet. A solution to that would be to write down them into a simple calendar but the fact that you can miss important dates by writing them in a simple calendar a better solution a calendar on the smartphone is needed. So that such misadventures do not happen again, people who have an appointment calendar on their cell phone, receive notifications about upcoming appointments. The existing programs for this task, which are often very simple, do not offer any possibilities for the definition of more complex ones Conditions, such as the fact that the occurrence of an appointment depends on the weather.

1.1.1 Application Domain

Many people add an important appointment to their appointment calendar after they make one out. On the day when the people have an important appointment and want to go for a barbecue, for example, they receive a notification as to whether it is optimal weather for a barbecue. Through this "Warning" the persons know whether they should go to the barbecue or not and can write by built-in group chats the other "Grillteilnehmer" that they cancel the appointment. Due to the complex conditions that can be defined and stored in the profile, it should be easier for private users, his appointments and appointments with his friends to keep under control. Furthermore, this should also help to avoid errors in appointments, for example, that you enter an alternative appointment, if the weather is not nice and no barbecue is possible. This alternative appointment should then be communicated to all participants in the group. So it is, for example easier to let everyone know right away of the new appointment, which often leads to mistakes in other ways, for example, because it is forgotten to inform a person about it.

1.1.2 Model of the Application Domain

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Profiles	←		**Person**		**Group**			**GroupConstraints**

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1

*   *

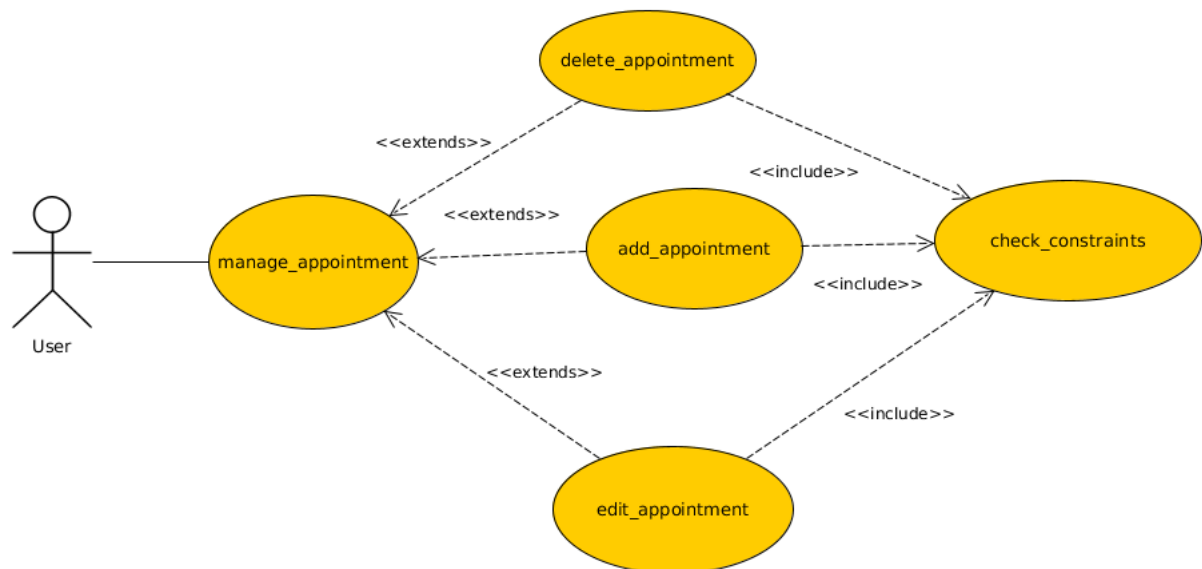| **Appointment**		**AppointmentConstraint**
1		0..*

1.2 Goal Defintion

Our goal is to create a new personal organizer that will attract the attention of many people with additional features. We want to help people who basically forget appointments. The Smart Personal Organizer have attractive new features such as weather and route, friend function, grouping function, profile and chat, rights system, dependency between appointments, lists and comments, showing birthdays of friends, editing appointments, notifying the group, matching the appointments over the whole group included. For example, with these new features, people who like go to "grill" can see the weather for this day. With complex conditions and constraints it can take people the burden of constantly having to think about there appointments.

2 Functional Requirements

2.1 Use Case Manage Appointment

2.1.1 Use Case Manage Appointment Details

Manage appointment can be used in single user and group mode. In group mode this appointment becomes visible to the whole group. Furthermore, this appointment also displayed on your own appointments. Conditions can be added to an appointment compliance is checked automatically. After an appointment has been saved, this can be still conditions to be added or removed. Furthermore, it is still possible visibility of the appointment or release for a group.

2.1.2 Characteristic Information

Goal	Creates/Edits/Deletes an appointment
Involved User	The user who wants to create/delete/edit an appointment

2.1.3 GUI to call the use case
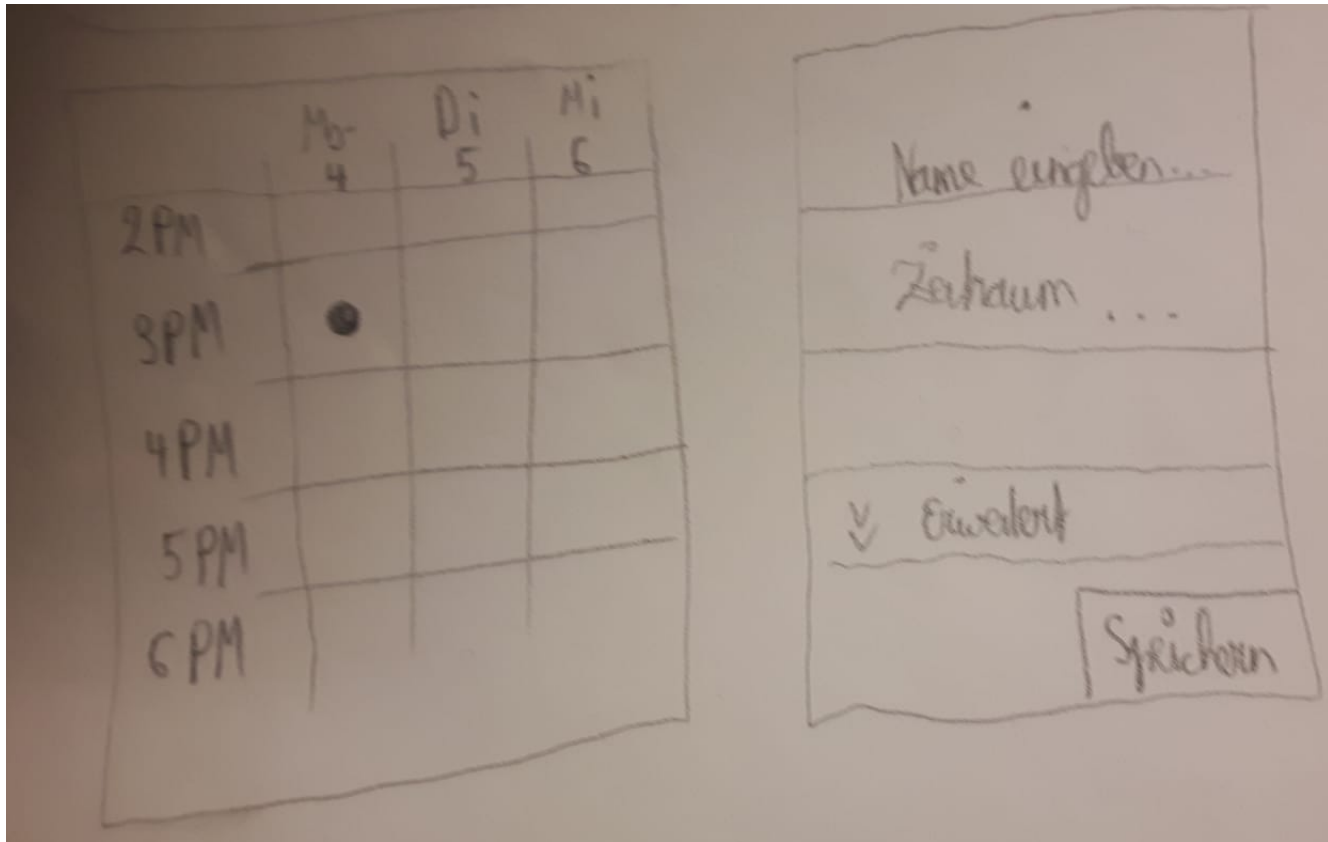
2.1.4 Scenario for the standard use

Step	Activity
Step01	Press onto the "+" button
Step02	Enter start and enddate, name and additional conditions
Step03	Press button save

2.1.5 Scenario for non-standard uses

Step	Activity
Step01	Press onto the "+" button
Step02	Enter an description longer than 2500 characters
Step03	Press button save

Step	Activity
Step01	Press onto the "+" button
Step02	Enter an appointment name which is longer than 25 characters
Step03	Press button save

2.1.6 Workflow
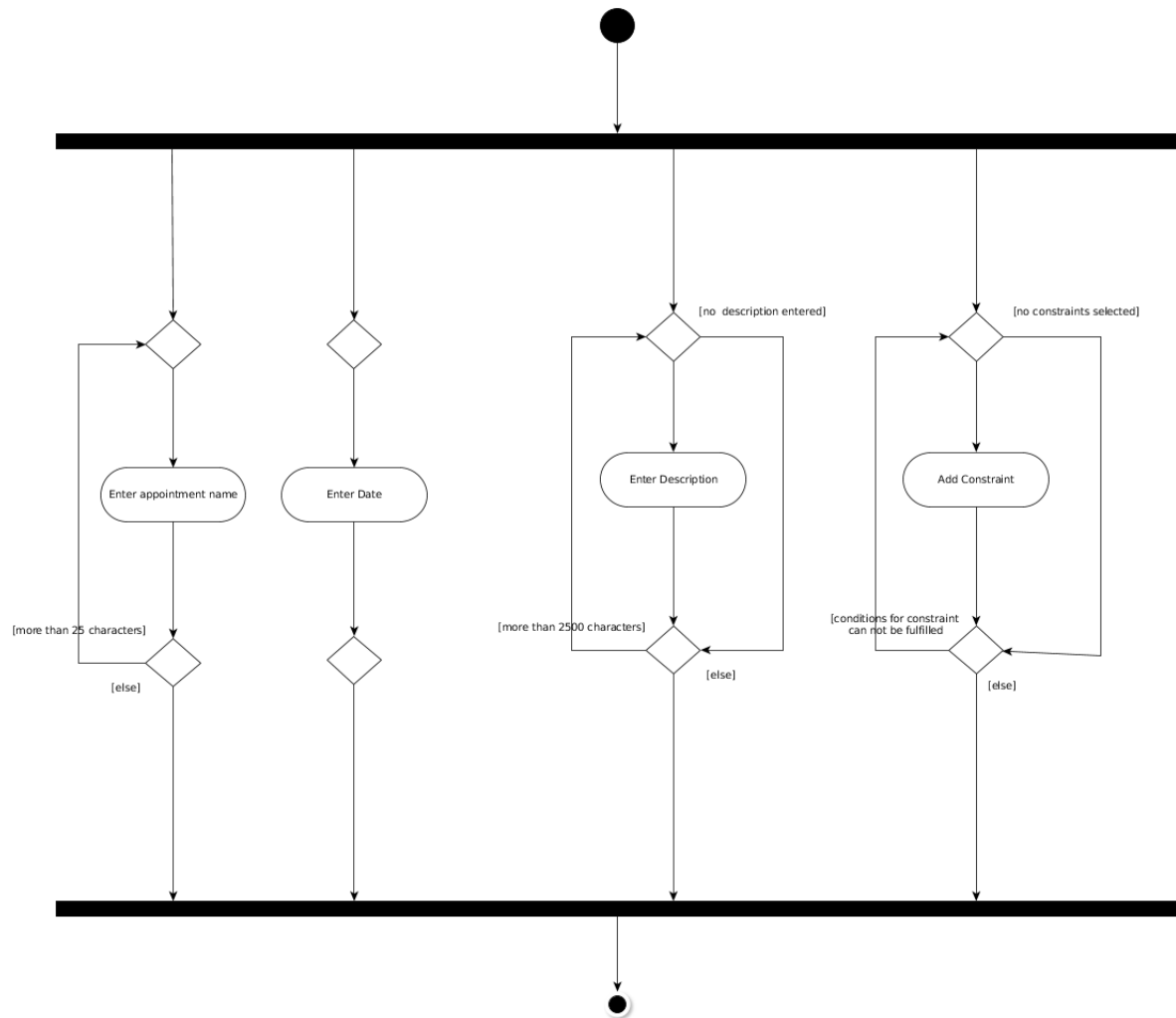
2.2 Use Case Manage Profile
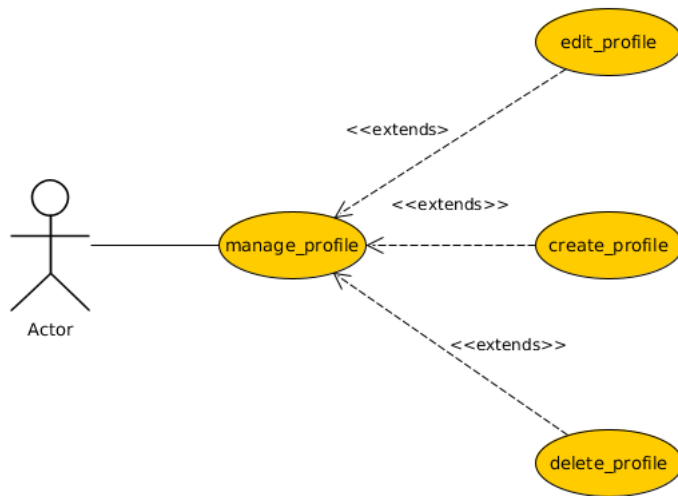
2.2.1 Use Case Manage Profile Details

If a profile is to be created, a name must be selected. With the profile Standard conditions and values can be stored when creating a Appointments can be used. Thus, the profile serves as a kind of template ,which can be used when creating groups and appointments.

2.2.2 Characteristic Information

Goal	Creates a profile for the user
Involved User	The user who wants to create a profile

2.2.3 GUI to call the use case
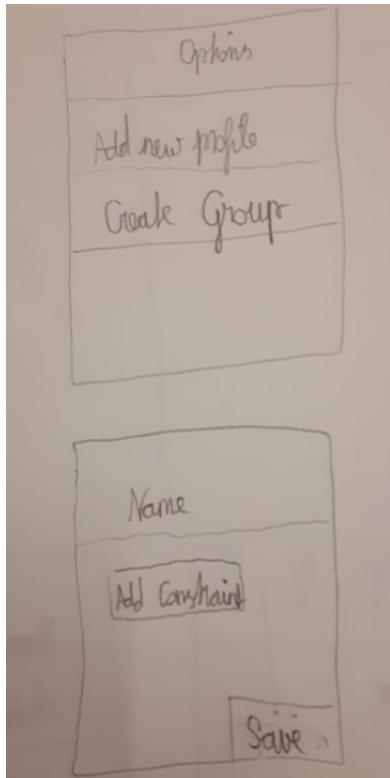
2.2.4 Scenarios for standard uses

Step	Activity
Step01	Press on "Create profile" button
Step02	Enter profile name
Step03	Press button done

2.2.5 Scenarios for non-standard uses

Step	Activity
Step01	Press on "Create profile" button
Step02	Enter profile name, which is longer than 25 characters
Step03	Press button done

2.2.6 Workflow
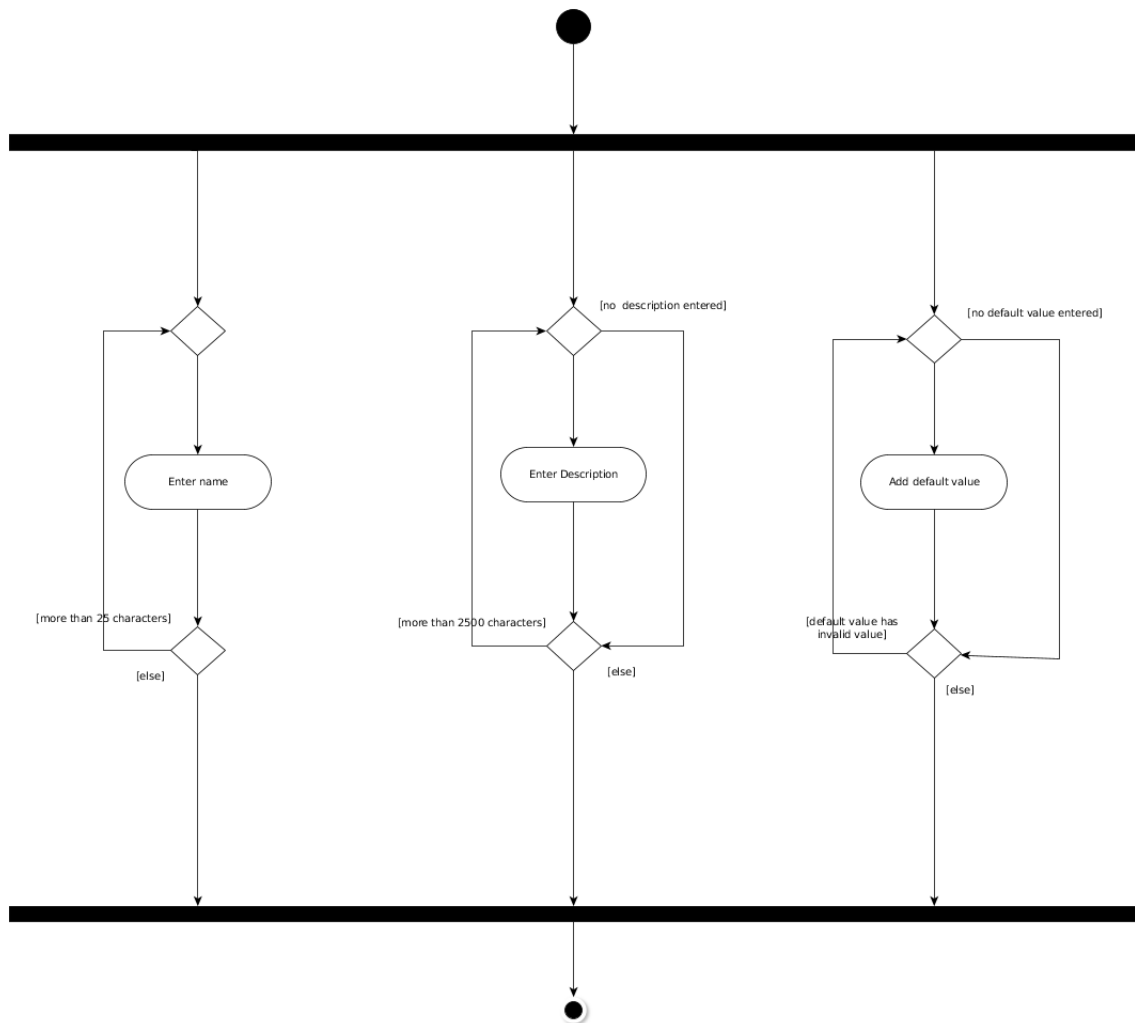
2.3 Use Case Manage Group
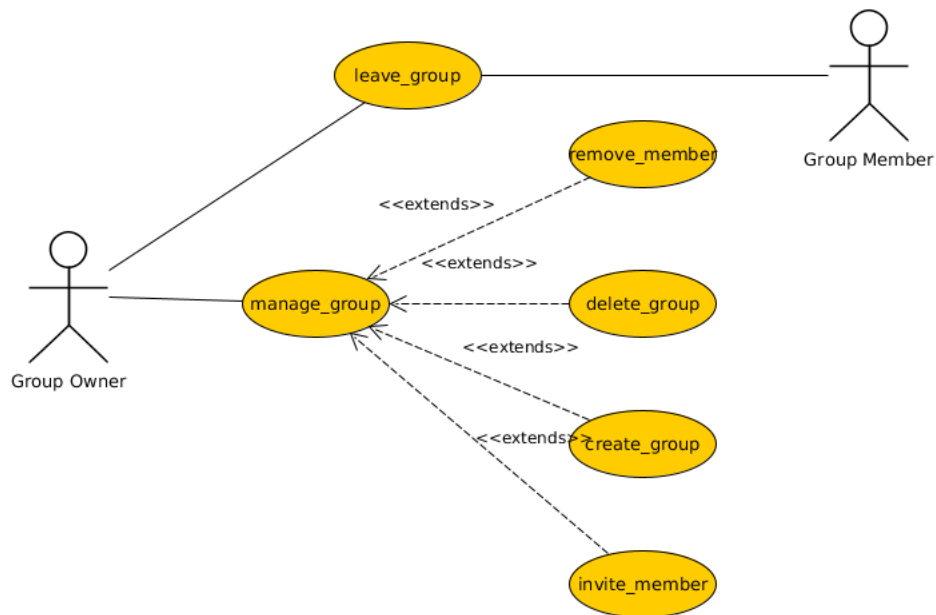
2.3.1 Manage Group Use Case Details

When a group is created a name has to be chosen. In the group can after creating members removed or added. With a group it is possible to share appointments with all group members.

2.3.2 Characteristic Information

Goal	Creates a group
Involved User	Leader of the group

2.3.3 GUI to call the use case
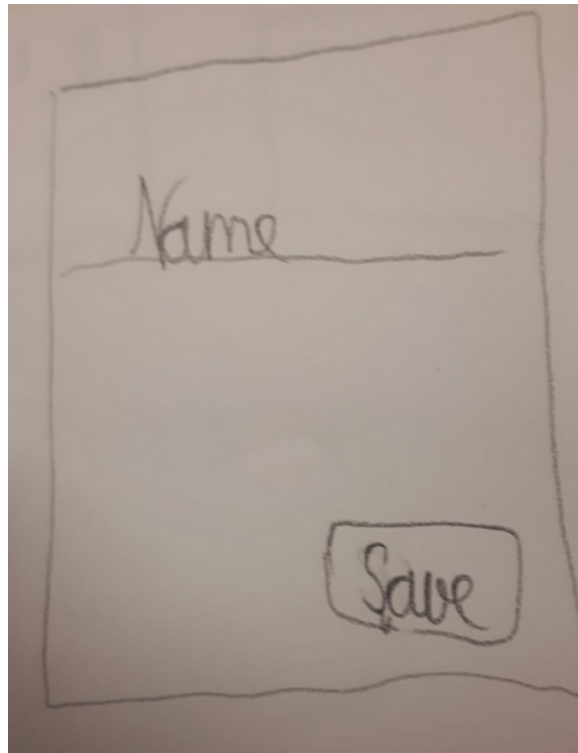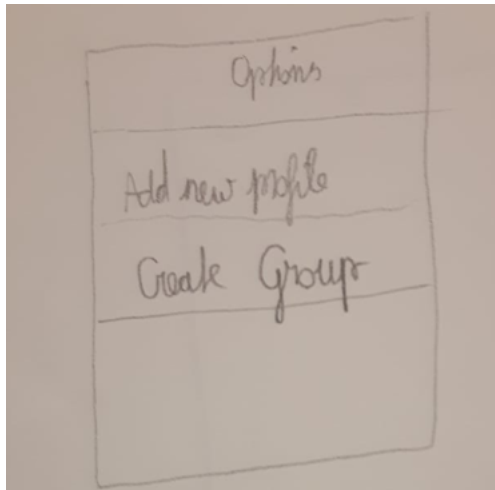
2.3.4 Scenarios for standard uses

Step	Activity
Step01	Press on "Create group" button
Step02	Enter group name
Step03	Press create button

2.3.5 Scenarios for non-standard uses

Step	Activity
Step01	Press on "Create group" button
Step02	Enter group name, which is longer than 25 characters
Step03	Press create buttom

2.3.6 Workflow

3 Non-functional Requirements
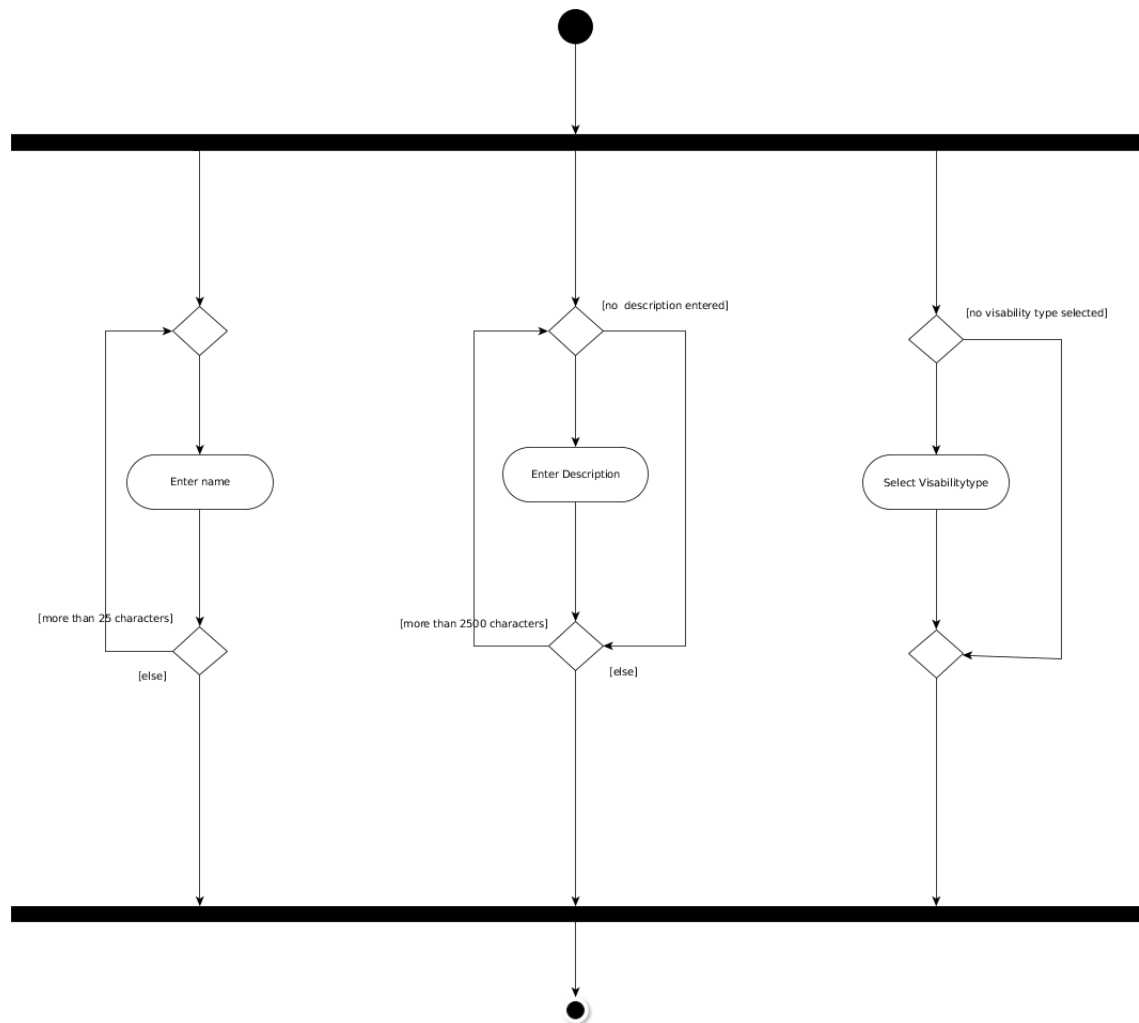
ID	NFR001
Name	Start time
Type	EFFIC
Description	The data usage of internet should be in common use under 75mb per month.

ID	NFR002
Name	Data volume
Type	EFFIC
Description	The synchronisation between the user configuration and the database should not take longer than 7 seconds. Assuming 10 Mbit/s download and 3 Mbit/s upload.

ID	NFR003
Name	Group/Appointment/Profile
Type	EFFIC
Description	Changes to a group/appointment/profile should not take longer than 7 seconds in total. Assuming 10Mbit/s upload and 3Mbit/s download.

4 Quantity Structure

The user will have an e-mail address, a password, an username and an userID and will be stored independently in a database. Additionally a user will have a list of joined group and a second list for his friends. Like a single user each group will have it's data stored in a database such as a groupID, group name, a list of its members, messages, events and its informations.

5 System Architecture and Interfaces

User

-username: String
-groups: List<Group>
-appointments: List<Appointment>
-profiles: List<Profile>

+leaveGroup(Group group)
+createGroup(String name)
+createAppointment()
+removeAppointment()
+addProfile()
+removeProfile()

Profile

-name: String
-defaultValues: HashMap<String, String>

+setDefaultValue(String defaultValueName, String value)
+removeDefaultValue(String defaultValueName)

1   *

*

*

Group

-name: String
-members: List<user>
-owner: user
-moderators: List<user>

+addMember(User user)
+removeMember(User user)
+addAppointment(Appointment appointment)
+removeAppointment(Appointment appointment)

1

0..*

Appointment

date: Date
title: String
description: String
constraints: List<Constraint>
visability: VisabilityType

VisabilityType

public
private
protected

*

1

Constraint

notify()

TravelConstraint

-startLocation
-endLocation

WheaterConstraint

-location: String
-date: Date

6 Acceptance Criteria

6.1 AC001

Test step	Expected behaviour
Try to save an appointment without a name	Appointment will not be saved and the user will be notified and asked to enter a name
Enter a too long name	Appointment will not be saved and the user will be notified to enter a shorter name.
Enter a too long description	Do not save the appointment and notify the user that he has to enter a shorter description
Enter values, which conflicts with constraints	Show the user that conflicts occurred and show the user choices, whether he wants to correct the conflict, remove the constraint or, if the conflict is not fatal, ignore it.
Try to delete an non-existing appointment	Notify the user that the appointment does not exist.

6.2 AC002

Test step	Expected behaviour
Try to create a profile without a name	Profile will not be created and the user will be asked to enter a name
Enter a too long name	Profile will not be created and shows a message to the user that he has to take a shorter name.
Enter a too long description	Do not save the profile and show the user a message that he has to enter a shorter description

6.3 AC003

Test step	Expected behaviour
Try to create a group without a name	Group will not be created and the user will be asked to enter a name
Enter a too long name	Group will not be created. and shows a message to the user that he has to enter a shorter name.
Add a too long description	Do not create the group and show the user a message that he has to enter a shorter description
Try to add an non-existend user to the group	Do not add the user to the group and show a message that the user does not exist
The user reject the invite to a group	Show the sender of the invite a message that the user, who received the message, rejected it. and do not add the user to the group.
Remove a member of the group	If the user of the command is not owner of the group then show a message that he is not able to do that and do not remove the user from the group.