**Project Requirements**

**Project Name: Mensa@Unibe**

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Revision History

| **Version** | **Date** | **Revision Description** |
| --- | --- | --- |
| .01 | 26.09.2013 | Initial documentation |
| .02 | 01.10.2013 | Andi & Sàndor merged, use cases |
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# Introduction

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Definitions

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## References

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# Overall description

## Use cases

[Diagram for use cases] (draw it with draw.io, we do it after all the use cases were described!)

### List of all mensas

1. **Actors**

User

1. **Description**

As a costumer, I want to see a complete list, with all mensas of the campus.

1. **Trigger**

User starts the App and sees the home-screen with the list.

1. **Pre-conditions**
2. First start: User has an active internet connection.
3. **Post-conditions**
4. User sees a list of all mensas.
5. User can choose one mensa.
6. **Main scenario**
7. User opens the app
8. System shows a list of all mensas
9. User choose a mensa
10. System shows brief information about the mensa and options
11. **Alternative scenarios**

2a. System has no internet connection

* 1. System tries to get a cached list of the mensas
  2. System shows the cached list of the mensas

2b. System has no internet connection

1. System tries to get a cached list of the mensas
2. No cached version available
3. System shows error message
4. **Special requirements**
5. Parse the list of mensas
6. **Notes**

* -

### Details about menu of current day

1. **Actors**

User

1. **Description**

As a user I want to see details about the menus served at a given mensa in the current day.

1. **Trigger**

User hits the “Current Day Menu” button of the actual mensa

1. **Pre-conditions**
2. User chose the mensa
3. **Post-conditions**
4. User sees the served menus of the current day
5. **Main scenario**
6. User wants to see the served menus
7. System shows details of the served menus
8. **Alternative scenarios**

1a. User has no internet connection

* 1. System tries to get a cached version
  2. Cached version available, shows it

1b. User has no internet connection

1. System tries to get a cached version
2. No cached version available
3. System shows error message
4. **Special requirements**
5. Parse the data about served menus
6. **Notes**

* -

### Details about menu of the coming days

1. **Actors**

User

1. **Description**

As a user I want to see details about the menus served at a given mensa in the coming days.

1. **Trigger**

User hits the “Coming Days Menu” button of the actual mensa

1. **Pre-conditions**
2. User chose the mensa
3. **Post-conditions**
4. User sees the served menus of the current day
5. **Main scenario**
6. User wants to see the served menus
7. System shows details of the served menus
8. **Alternative scenarios**

1a. User has no internet connection

* 1. System tries to get a cached version
  2. Cached version available, shows it

1b. User has no internet connection

1. System tries to get a cached version
2. No cached version available
3. System shows error message
4. **Special requirements**
5. Parse the data about served menus
6. **Notes**

* -

### Find closest mensa

1. **Actors**

User

1. **Description**

As a user I want to know which is the closest mensa

1. **Trigger**

User hits the “Get Closest Mensa” button.

1. **Pre-conditions**
2. User has enabled GPS
3. System has the permission to use the GPS data
4. **Post-conditions**
5. User sees the closest mensa
6. **Main scenario**
7. User wants to see the closest menu
8. System calculates the closest mensa with the GPS data
9. System shows the closest mensa
10. **Alternative scenarios**

2a. System has no permission to use the GPS data

* 1. System asks for permission to use GPS data
  2. User gives the permission to the system
  3. Back to main scenario

2b. System has no permission to use the GPS data

1. System asks for permission to use GPS data
2. User declines
3. System shows error message

2c. GPS is not enabled on the device

1. System asks to enable the GPS
2. User enables the GPS
3. Back to main scenario

2d. GPS is not enabled on the device

1. System asks to enable the GPS
2. User does not enable the GPS
3. System shows error message
4. **Special requirements**
5. Permission to use the GPS data
6. Calculate distance with coordinates
7. **Notes**

* -

### Way to reach a given mensa

1. **Actors**

User

1. **Description**

As a user I want to know how to reach a given mensa

1. **Trigger**

User hits the “Show Way” button of the actual mensa

1. **Pre-conditions**
2. User chose the mensa
3. User has an active internet connection
4. User has enabled GPS
5. System has the permission to use GPS data
6. **Post-conditions**
7. User sees the way to a given mensa
8. **Main scenario**
9. User wants to know how to reach a given mensa
10. System shows the way with on a Map
11. **Alternative scenarios**

1a. User has no internet connection

* 1. System shows error message

1b. GPS is disabled

1. System asks user to enable GPS
2. User enables GPS
3. Go back to main scenario

1c. GPS is disabled

1. System asks user to enable GPS
2. User declines
3. System shows error message

1d. System has no permission to use the GPS data

1. System asks for permission to use GPS data
2. User gives the permission to the system
3. Back to main scenario

1e. System has no permission to use the GPS data

1. System asks for permission to use GPS data
2. User declines
3. System shows error message
4. **Special requirements**
5. Use Google Maps for leading and showing the way
6. **Notes**

* --

### See current day menu of favorite canteen

1. **Actors**

User

1. **Description**

As a user I want see the current day menu of a canteen from my favorites list

1. **Trigger**

User navigates to favorites list

1. **Pre-conditions**
   1. User added at least one canteen to favorites list
   2. Favorite canteens have menu for current day
2. **Post-conditions**

Insert menu for current day to the specified canteens

1. **Main Scenario**
   1. User navigates to favorites list
   2. System lists favorite canteens
   3. System checks for current day menus of favorite canteens
   4. System inserts current day menu to every canteen in this list
2. **Alternative Scenarios**

1a. There are no canteens in favorites list

* + 1. System prompts user to add canteens to favorites list
    2. User selects favorite canteens
    3. Use Case resumes on step 2

1b. There are no canteens in favorites list

* + 1. System prompts User to add canteens to favorites list
    2. User declines
    3. Use Case finish

3a. There is no current day menu for the canteens

* + 1. System prompts user to update menu database
    2. User accepts
    3. Use Case resumes on step 3

3b. There is no current day menu for the canteens

* + 1. System prompts user to update menu database
    2. User declines
    3. Use Case finish

1. **Special Requirements**

System lookup and insert (step 4 and 5) cannot take more then 2 seconds.

1. **Notes**

What to do if alternative scenarios are finishing with user declines? - TBD

### Get notified if menu matches some criteria in my favorite canteen

1. **Actors**

User

1. **Description**

As a user I want to get notified if a menu served at my favorite canteen matches some criteria

1. **Trigger**

A menu matches some criteria set by the user

1. **Pre-conditions**
   1. User set already at least one criteria
   2. User set at least one favorite canteen
   3. A menu matches a previously set criteria
   4. Matching menu is in a favorite canteen
2. **Post-conditions**
   1. User receives a notification
3. **Main scenario**
   1. User sets a criteria for a favorite canteen
   2. System saves the criteria in interests data
   3. When menus are updated, system looks if a menu matches a criteria from interests data
   4. If a menu meets a criteria, system looks if this is a menu of a favorite canteen
   5. If it is a menu of a favorite canteen, system notifies user
4. **Alternative Scenarios**

3a. There is no interests data available

* + 1. Use Case finish

1. **Special Requirements**
2. **Notes**

Do not notify user if the availability of menu is already passed

Notify user just once

If there are more notifications, group them in one

### Read English translation of a menu

1. **Actors**

User

1. **Description**

As a user I want to be able to read the English translation of a menu

1. **Trigger**

User clicks the English language button on the menu view

1. **Pre-conditions**
   1. at least one menu has an English translation
2. **Post-conditions**
   1. system presents English translation of current menu
3. **Main Scenario**
   1. User navigates to menu view
   2. System presents the current menus
   3. System checks if English translation is available for currently viewed menus
   4. System inserts language button to presented menus
   5. User clicks language button
   6. System loads the corresponding English translations
   7. System presents the English version of the menus
4. **Alternative Scenarios**

3a. There is no English translation available for none of the menus

* + 1. Use Case finish

1. **Special Requirements**
2. **Notes**

How to get translations for menus? - TBD

### Set user name

1. **Actors**

User

1. **Description**

As a user I want to be able to set my user name

1. **Trigger**

no user name is saved

1. **Pre-conditions**
   1. the user doesn't have a user name set up
2. **Post-conditions**
   1. system saves user name
3. **Main Scenario**
   1. System prompts user to set up a name
   2. User sets up the user name
   3. System saves user name data
4. **Alternative Scenarios**

1a. User declines to set up a name

* + 1. Use Case finish

1. **Special Requirements**
   1. user name has to be unique identifier
2. **Notes**
   1. What is the best way to not annoy the user? -TBD
   2. Asking for email address? -TBD
   3. Asking for accounts data?-TBD

### Choose friends

1. **Actors**

User

1. **Description**

As a user I want choose my friends which are using the Mensa app

1. **Trigger**

User clicks choose friends button

1. **Pre-conditions**
   1. User set up already a user name
   2. User has friends in his contact list which are using the Mensa app
2. **Post-conditions**

System saves friends list data

1. **Main Scenario**
   1. User clicks choose friends button
   2. System checks user phone contacts, who are using the Mensa app
   3. System lists the matched contacts to choose from
   4. User selects contacts to add to friends list
   5. User clicks add button
   6. System saves the data to friends list
2. **Alternative Scenarios**

2a. There are no contacts using Mensa app

* + 1. System notifies user that no contacts matched
    2. System advises the user to let friends know about the app
    3. Use Case finish

5a. User have not selected any contacts

* + 1. User clicks add button
    2. System prompts user to select contacts
    3. User accepts
    4. Use Case jumps to step 3

5b. User have not selected any contacts

* + 1. User clicks add button
    2. System prompts user to select contacts
    3. User declines
    4. Use Case finish

1. **Special Requirements**

In case the system is interrupted (an incoming phone call for ex.) step 4 should be saved, to be able to resume

1. **Notes**
   1. How to find out which contacts are using the Mensa app? - TBD

### Delete a friend

1. **Actors**

User

1. **Description**

As a user I want delete a person from my friends list

1. **Trigger**

User clicks delete friend button

1. **Pre-conditions**
   1. User has a friends list
2. **Post-conditions**

System deletes person from friends list

1. **Main Scenario**
   1. User navigates to friends list
   2. System presents the list
   3. User clicks delete friend button
   4. System prompts confirm
   5. User accepts
   6. System deletes person from friends list
2. **Alternative Scenarios**

4a. User declines confirm

* + 1. Use Case finish

1. **Special Requirements**
2. **Notes**

### Enable/disable notifications for friends

1. **Actors**

User

1. **Description**

As a user I want to enable/disable which friends of mine get notifications when I plan to goo for lunch

1. **Trigger**

User checks enable/disable friends to get notifications check-box

1. **Pre-conditions**
   1. User has a friends list
2. **Post-conditions**

System enables/disables notifications for selected friends

1. **Main Scenario**
   1. User navigates to friends list
   2. System presents the list
   3. User checks the enable/disable friend check-box
   4. User clicks confirms changes
   5. System enables/disables notifications for friends
2. **Alternative Scenarios**

4a. User cancels changes

* + 1. Use Case finish

1. **Special Requirements**
2. **Notes**

### Choose where I plan to go for lunch and get notification if a friend joins me

1. **Actors**

User (primary)

Friends of the user (secondary)

1. **Description**

As a user I want to let my friends know where I plan to go for lunch. If they want to join me, I want to be notified.

1. **Trigger**

User clicks mark button on canteen where he plans to go for lunch

1. **Pre-conditions**
   1. User has a friends list
   2. Notification is enabled at least for one friend
   3. Planned canteen is open at the specified time
2. **Post-conditions**
   1. System saves planned time and canteen
   2. System notifies enabled persons from friends list
   3. If a friend confirms to join, system sends a join notification
3. **Main Scenario**
   1. User navigates to canteens
   2. System presents the canteen list
   3. User clicks mark for lunch
   4. System asks for time
   5. User sets time
   6. System validates time
   7. System saves time and canteen
   8. System sets expiration time of notification
   9. System sends join notifications to enabled friends
   10. Friend receives notification
   11. Friend confirms join
   12. System sends join confirmation
   13. User receives confirmation
4. **Alternative Scenarios**

6a. Planned canteen is closed at the specified time

* + 1. System notifies user, that the time is not valid
    2. Use Case resume at step 4

9a. Friend declines to join

* + 1. Use Case finish

1. **Special Requirements**

If the notification would arrive to a friend after the expiration time, the notification should be dropped

1. **Notes**

### Rate menu I have eaten

1. **Actors**

User

1. **Description**

As a user I want to be able to rate a menu I have eaten

1. **Trigger**

User clicks rating stars on viewed menu

1. **Pre-conditions**
   1. User has set up a user name
   2. There is a list with current and past week menus
   3. The menu is available to eat or it was available in the past week
2. **Post-conditions**
   1. System saves rating for menu
   2. System updates rating for menu database
3. **Main Scenario**
   1. User navigates to current and past week menu view
   2. System presents menu list
   3. User clicks rating stars on a menu
   4. System saves rating for corresponding menu
   5. System updates rating data for menu database
4. **Alternative Scenarios**

3a. User has not set up user name

* + 1. System prompts user to set up a user name
    2. User sets up user name
    3. Use Case resume on step 4

3b. User has not set up user name

* + 1. System prompts user to set up a user name
    2. User declines
    3. Use Case finish

4a. User rated already the same menu before

* + 1. System overwrites old rating of user
    2. Use Case resume on step 5

1. **Special Requirements**

User shouldn't be able to rate a menu which will be available in the future, hence user did not try the corresponding menu

1. **Notes**

### Check how people rated a certain menu

1. **Actors**

User

1. **Description**

As a user I want to be able to check how other people rated a certain menu

1. **Trigger**

User navigates to menu view

1. **Pre-conditions**
   1. A menu has at least one rating
2. **Post-conditions**

System presents rating of corresponding menu

1. **Main Scenario**
   1. User navigates to menu view
   2. System loads menu list
   3. System loads rating for corresponding menus
   4. System presents menu list with ratings
2. **Alternative Scenarios**

3a. Corresponding menu has no rating

* + 1. System presents corresponding menu 0 rating
    2. Use Case resume on step 4

1. **Special Requirements**

Menu rating database should contain an arithmetic mean of the overall ratings

1. **Notes**
   1. How to achieve the arithmetic mean?
   2. Compute in database, when a rating is updated?

## Actor characteristics

Actor characteristics

# Specific requirements

## Functional requirements

Functional requirements

## Non-functional requirements

Non-functional requirements