MeteoCal

Acceptance Testing Document

Pensa

Pini

Pintus

Sommario

1.INTRODUCTION

Target

This document contains the set of tests executed on the project of

https://code.google.com/p/meteocal-rotiroti-russo-stasuzzo/

The several tests have been divided into two categories: tests on minimum requirements and other tests on the application security.

Setup

First of all we downloaded all the documentation and the .war file of the project to be tested; then, following the installation manual, we started configuring all the settings needed to run the application.

The tests have been performed on Linux Ubuntu 14 with Firefox browser.

Before we could actually start deploying the application we found some issues due to a bit of confusion in the manual about the creation of the connection pool and to the lack of some specifications.

In particular there was **no instruction about the "jdbc/name"** (resolved talking with the other group) and the table names in the **JDBCRealm were in lower-case**, which does not work on Linux.

After these little changes, the application ran properly, creating the connection with the MySql database and we could start testing.

2.TEST CASES OF MINIMUM REQUIREMENTS

Legenda

Green : correct results
Yellow : marginal errors or simply considerations
Red : grave error or incoherence between application and RASD or initial requirements

Target	Registration
Operating Environment	Registration page
Input	All personal data required
Expected result	**Registration successfull**
Concrete result	**Registration successfull**
Final result	Login page
Notes	**The operation took several minutes maybe due to the absence of internet connection**

Target	Registration with already existing user
Operating Environment	Registration Page
Input	All personal data required, with an email already registered
Expected result	Registration failed
Concrete result	**Application freezed**
Final result	Registration page with loading pop up
Notes	**1)Indipendently from the inputs, if some field within the form is empty, the application starts to "validate registration" with a loading pop up never ending** **2)Uppercase emails are rejected**

Target	Login
Operating Environment	Login page
Input	Email, Password
Expected result	**Login successfull**
Concrete result	**Login successfull**
Final result	User page
Notes	

Target	Event creation
Operating Environment	Event creation page
Input	No data
Expected result	Error message
Concrete result	**Application freezed**
Final result	Event creation page with loading pop up
Notes	**Indipendently from the inputs, if some field within the form is empty, the application starts to "create an event" with a loading pop up never ending**

Target	Event creation
Operating Environment	Event creation page
Input	All data required
Expected result	**Event created successfully with correct time consistency**
Concrete result	**Event created successfully with correct time consistency**
Final result	Invitation page
Notes	**1)Sometimes is shown an error message related to some kind of "correlation between nation and city" but it is not shown everytime this kind of error really occurs (e.g. Italy,Paris = works, USA,NewYork = error)** **2)Expected "Address" field, found "Location" field instead** **3)During event creation the application tries to connect to the remote weather provider and if the connection goes down the event cannot be created. This means that the application fully depends on that service**

Target	Invitations
Operating Environment	Invitation page
Input	An email
Expected result	Invitation sent
Concrete result	Invitation sent
Final result	Invitation page
Notes	1)The operation took several minutes maybe due to the absence of internet connection 2)Not existing emails, already invited user emails,creator user email and empty fields are correctly rejected 3)SEE FURTHER COMMENTS IN THE END OF THIS SECTION

Target	Delete Event
Operating Environment	Event page
Input	Click on "Delete Event"
Expected result	Event deleted
Concrete result	Event deleted
Final result	Created events page
Notes	

Target	Edit Event
Operating Environment	Event page
Input	Click on "Edit Event"
Expected result	Event updated with correct time consistency and notifies sent
Concrete result	Event updated with correct time consistency and notifies sent
Final result	Event page
Notes	1)The operation took several minutes maybe due to the absence of internet connection 2)If the event dates are changed, every user who accepted the invitation will have that event in the new dates (also if that dates are occupied by another event) but the partecipation is set to "maybe" 3)Every modification in general, sets all users partecipation to "maybe"

Target	Notifications read
Operating Environment	Notification page
Input	None
Expected result	**Notification shown**
Concrete result	**Notification shown**
Final result	Notification page with notifies
Notes	**The only way to understand that the user has received a (certain number of) notification, is to click on the static "mail" icon in the user page, which is not very intuitive.**

Target	Answer to invite
Operating Environment	Invite received page
Input	Click on the "magnifying glass" button, select the answer and click on "answer" button
Expected result	The partecipation is confirmed or rejected
Concrete result	**The partecipation can be confirmed rejected or leaved "pending" (maybe)**
Final result	Event page
Notes	**1)"maybe" option has been specified in the RASD assumptions but it should not be a possible choice according to the initial specification** **2)Independently from the answer to the invite, the event will be visible in the user calendar in any case** **3)Time consistency is correctly checked, but there's no message warning that the invitation cannot be accepted in case of overlapped events** **4)The only way to understand that the user has received an invitation, is to click on the "Invited events" button in the user page, which is not very intuitive**

Target	Weather conditions
Operating Environment	Event page
Input	None
Expected result	**Weather forecast available for outdoor events**
Concrete result	**Weather forecast available for outdoor events**
Final result	Event page
Notes	**1)Sometimes the system sends a notification about weather changing but in the event page, the weather forecast is not changed.** **This is due maybe to a weather check on multiple days which finds a weather change (correctly) but is incoherent with the event page which displays only the worst forecast.** **2)In case of bad weather:** **Notification 3 days before sent to the creator with the closest sunny day, 1 day before sent to all partecipants.** **3)The closest sunny day is considered from the current date on: we expected the application to search the closest sunny day from the beginning of the event on** **4)Weather changes are notified also for INDOOR events but the related event page (of course) has no weather detail**

Target	Private calendar
Operating Environment	User page
Input	Search for a private user calendar
Expected result	**Empty page**
Concrete result	**Empty page**
Final result	Empty page
Notes	

Target	See event details
Operating Environment	Another public user calendar page
Input	Click on event in the calendar
Expected result	**-No details for private event** **-All details for private event after invitation** **-All details for public event**
Concrete result	**-No details for private event** **-All details for private event after invitation** **-All details for public event**
Final result	Event page, eventually empty
Notes	

Target	Import
Operating Environment	Import/Export page
Input	Click on "browse" then "import" buttons. Choose for each event (created by the user) which one should be restored (click on"restore" button)
Expected result	**-List of events in which the user is invited with details and differences** **-List of events created by the user from the .xml matching the current calendar** **-List of events created by the user from the .xml NON matching the current calendar with the possibility to restore them** **-List of events created by the user from the .xml not existing in the current calendar with the possibility to create them**
Concrete result	**-List of events in which the user is invited with details and differences** **-List of events created by the user from the .xml matching the current calendar** **-List of events created by the user from the .xml NON matching the current calendar with the possibility to restore them** **-List of events created by the user from the .xml not existing in the current calendar with the possibility to create them**
Final result	Import/Export page
Notes	**The system does not recognize an event imported twice, maybe for "id" incoherence**

Consideration on invitations

According to the **document of initial specifications** we found :
(1)*"Invited users can only accept or decline the invitation"*

For this reason we decided to check as **grave error** the possibility of anwer to an invite with "maybe" and also all the related features of the application that automatically set an invitation to "maybe".

Furthermore we found a big issue related to inviting users to an event: according to the document of initial specifications we found
(2)*"During event creation, any number of registered users can be invited. Only the organizer will be able to update or delete the event"*

In the **group assumptions**, there is the possibility to invite users to an event also **after creation**: this is not going explicity against the specification written above, but it is **only an extension** of the minimum requirements.

But in the **group assumptions**, we found:

(3)*"If an event is public, the system has to let **all the registered user** to invite other users to the event"*
This is going explicitly against (2) because "*Only the organizer will be able to update or delete the event*" and it is also incoherent with the application, which lets **only invited users** to invite other users.

(4)*"Invited users can invite other users even if the event is private"*
which is obviously the contrary of the sentence written some lines below
(5)*"The system has to guarantee that the organizer of a private event **is the only one who can invite** other users to that event."*

Furthermore, between (4) and (5), in the application development, it has been choosed (4) which goes against (2) because "*Only the organizer will be able to update or delete the event*" (Instead (4) would be a proper assumption wrt (2))

3.OTHER TESTS

In this section we want ot underline some concepts about application security that we considered during development of our application: these tests will NOT be considered as errors, because security is not part of the initial requirements.

- Some input field doesn't have a limit in characters. Simply trying to create an event with a name longer than 255 characters will freeze the application.
- It is impossible to login with a user who has registered an account with password equals to "PASSWORD" : checking the USERS table in MySql and using a SHA-256 tool, we found that the hash of the password "PASSWORD" is wrong! For this reason, during login, the passwords do not match and login fails. This is something related to the Password Encrypter in the application business logic.
- The notifications via email are sent in a non-asynchronous way: this means that every operation following the sending of emails must wait its end.
  Let's assume that, for some reason, glassfish cannot send emails (we tested this particular situation using an https proxy, or running the application without internet connection) : this means that the user will wait a long time for an operation that is not even going to success! In pratice, during registration or weather changing there is no problem because the registration is only "slow" and weather changing notifies are sent through the application anyway.
  But the notifications of bad weather 3 days before to the creator and 1 day before to all partecipants are not sent via email nor via the application. They just not work if the email sending fails.
- Weather conditions of deleted events lasts "forever" in the database.
  We think that ther is no particular reason to keep them persistent as a matter of memory saving .
- To display event pages, the application use to pass parameters in the URL: for example "**?eventID=##**" is used to identify an event. This is absolutely a bad pratice in particular for this application, because some private data should be kept in private!
  Typing http://<meteocalURL> /user/edit_event.xhtml?eventID=## anyone who is logged in the application can **MODIFY** that event no matter if the event is public or private.
  Typing http://<meteocalURL> /user/invitation.xhtml?eventID=## anyone who is logged in the application can **ADD INVITES** to that event no matter if the event is public or private.

4.CONCLUSIONS

As we say above we encountered only some error related to interpretation of requirements and in the consequent implementation.

In general the application requirements have been respected, events are created with forecast information and notifies/invitations are properly sent.

The navigation flow is coherent with the documentation and there is no big conflict (except for those reported above) between documents and implementation.

5.WORKING HOURS SCHEDULE

	Pensa	Pini	Pintus	h/sect
Test cases identification	1	1	1	3
Tests execution	1	4	3	8
Documentation	0	1	2	3
h/pers	2	6	6	14