Meteocal

Acceptance Testing

(Project to test: Calendarium)

Software Engineering 2

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Part I
Introduction

1   Objectives

This document reports all results during the test phase of the project *Calendarium* developed by Alessandro Cianferotti, Alessandro Cimbelli, Alessandro De Angelis. The Google Code repository URL of the project is

https://code.google.com/p/calendarium/

In the repositoy there is a folder containing the *.war* file and various manuals and the documentation.

2   Preparation

2.1   Preparation

To start the testing we downloaded the full documentation, manuals and source code of the project from the *Google Code* repository. Then we just deployed the *.war* file in our *Glassfish* instance file following the procedure described in the installation manual. For testing purposes we used a *Glassfish* server installed on a fresh *Ubuntu 14.04* system, and the *Mozilla Firefox* web browser.

2.2   Installation

For the installation of the application on the Glassfish server we followed the instructions from the Installation Manual, that, were almost sufficient to deploy the application correctly.

We had a problem with the connection to the database, which can however be easily solved by adding this additional property to the Connection Pool:

Name	Value
URL	jdbc:mysql://localhost:3306/calendarium?zeroDateTimeBehavior=convertToNull

2.3   Application deploy

The deploy of the application worked as expected.

We only encountered a platform specific problem : by default the names of the tables in MySQL for the GNU/Linux operative systems are case sensitive, instead on Windows they are case unsensitive by default. This causes all the queries to fail because of names mismatches. We asked for assistance to the developers of *Calendarium*, which helped us solve the issue, and found out on stackoverflow (https://dba.stackexchange.com/questions/59407/how-to-make-mysql-table-name-case-insensitive-in-ubuntu) that it's necessary to change the mysql configuration as follows:

Open terminal and edit /etc/mysql/my.cnf

```
sudo nano /etc/mysql/my.cnf
```

Underneath the [mysqld] section.add:

```
lower_case_table_names = 1
```

Restart mysql

```
sudo service mysql restart
```

Then check it here:

```
mysql −u <AdminUser> −p <AdminPassword>
```

After the deploy of the application is necessary to reach the url http://localhost:8080/MeteoCalv1 as correctly stated in the Installation Manual Application

2.4   Issues

As stated in the Known Bugs Document if a user tries to modify a past event that will be deleted.

Part II
Test cases and results

For the testing and the analysis of results we read the latest version of the RASD (in particular the use cases section) and the testing document.

For the analysis of the various test cases we used tables containing the following properties:

Goal A brief description of the test case

Environment The web page where the test has been executed, expressed as a relative URL.

Input The input data supplied to the page.

Expected output The result that we expect the application to produce according to the specifications

Obtained result:

- «Compliant» if the same as the expected output
- «Partially compliant» if the specification is only partially respected
- «Not compliant» otherwise

Final result (optional) Final result obtained as a side effect, like, for example the redirect to an other page after the completion of the executed operation.

Moreover we listed after the table the following sections:

Expected exceptions Exceptions described in the use cases and/or in the supplied test cases.

Unexpected exceptions Exception not listed in the supplied specification.

Notes Test assumptions or additional comments.

For every encountered exception we also specified if the message supplied by the application is clear and understandable or instead not useful and not comprehensible for the user.

We list in the following sections the test cases derived from the documents produced by the developers of *Calendarium*, grouped by the relevant actors of the system.

3   Guest user

3.1   Registration

Goal	Registration of a new user in the system
Environment	MeteoCal home page, without being logged in
Input	Email and password
Expected output	The user data is inserted into the system and the user can login
Obtained output	**Compliant**
Final result	The user is redirected to the homepage without any positive feedback

Expected exceptions

- We verified that if the inserted email is already present in the system, or the two passwords the user has to insert do not match, the system correctly generates an error, clearly notifying the user of the ongoing problem.

Notes

- Even if the registration goes well, neither a confirmation message is shown to the user nor a confirmation email is sent to the supplied email address.

3.2 Login

Goal	Successful access to the user homepage
Environment	MeteoCal home page, without being logged in
Input	Email and password
Expected output	Successful authentication
Obtained output	**Compliant**
Final result	The user is redirected to her homepage

Expected exceptions

- According to the supplied specifications, if the provided data is not correct, the system generates an error of incorrect password.

4 Logged User

4.1 Logout

Goal	Return to the Home Page as a visitor
Environment	MeteoCal user home page. User is logged in.
Input	Hit logout button
Expected output	The user is correctly logged out from the system and it's unable to perform any operation
Obtained output	**Compliant**
Final result	The user is redirected to the homepage and it's a visitor

4.2   Event Creation

Goal	Event created succesfully
Environment	MeteoCal user home page, being logged in
Input	Event title, Start Date, End Date, Description, Public, Outdoor
Expected output	The user data is inserted into the system and the event is created
Obtained output	**Compliant**
Final result	The user is redirected to the homepage with a positive feedback

Expected exceptions

Exception	Day Occupied(Overlapping)
Caused by	The event to be created is going to overlap another event
Expected output	Event not Created, message "Found Overlapping"
Obtained output	**Compliant**
Final result	The user is redirected to the homepage and the event is not created

Exception	Date not Correct
Caused by	The start date is setted to be after the ending date
Expected output	Event not Created, message "Date not Correct"
Obtained output	**Compliant**
Final result	The user is redirected to the homepage and the event is not created

Exception	Input not Complete
Caused by	Correct Date , free day or title missing
Expected output	Event not Created, with the error message displaying the missing information
Obtained output	**Compliant**
Final result	The user is redirected to the homepage and the event is not created

4.3   Event Editing

Goal	Event modified if and only if date is correct, free day and all input insert, the user who edit is the owner
Environment	In user HomePage , logged in , Event Dialog ,own event
Input	Correct Date , free day , input insert
Expected output	Event Created, message "event modified"
Obtained output	**Compliant**
Final result	The user is redirected to the homepage and a positive message feedback is displayed

Expected exception

Exception	Day Occupied(Overlapping)
Caused by	The event to be created is going to overlap another event
Expected output	Event not Created, message "Found Overlapping" , " event Recreated"
Obtained output	**Compliant**
Final result	The user is redirected to the homepage and the event is not modified

Exception	Event not owned
Caused by	The user who try to modify an event is not the owner
Expected output	Modify button disabled
Obtained output	**Compliant**
Final result	The user is unable to modify the event

4.4   Event Deletion

Goal	Event deleted if and only if the user is the owner of event
Environment	In user HomePage , logged in , Event Dialog , own event
Input	Delete Button Click
Expected output	Event deleted
Obtained output	**Compliant**
Final result	Event deleted

4.5   Accepted Event decline

Goal	Decline Event after accepting
Environment	In user HomePage , logged in , Event Dialog , not own event
Input	Decline Button Click
Expected output	All input disabled, Event declined , invitation in invitation dialog
Obtained output	**Compliant**
Final result	All input disabled, Event declined , invitation in invitation dialog

4.6   Set Public Calendar

Goal	Set the user own calendar to public or private
Environment	Page */calendar.xhtml, logged in, in the Settings dialog*
Input	User clicks on the Public/Private switch
Expected output	The "Public Calendar" flag value is changed
Obtained output	**Compliant**
Final result	If the new value is "Public" the user is listed in the users dialog, and if the new value is "Private" the user is unlisted from the users dialog.

4.7   View public calendar

Goal	View the public calendar of another user
Environment	Page */calendars.xhtml, logged in, Users Dialog,* the selected user's calendar is set as public
Input	User selects another user's email from the dialog
Expected output	The selected user's calendar appears with its public events
Obtained output	**Compliant**
Final result	A new dialog containing the selected user calendar appears

Expected exceptions

Exception	Non existent user
Caused by	The searched user does not exist
Expected output	Calendar not displayed, message "User not found"
Obtained output	**Not compliant**. An empty calendar is shown to the user instead of an error message.

4.8   Import

Goal	Import own calendar
Environment	In user HomePage, user is logged in. Settings dialog open. Xml document has not been modified by the user.
Input	Import click
Expected output	Old event deleted, new events imported
Obtained output	**Not testable**

Note

- We couldn't test this feature because the export functionality doesn't work on our test platform. See below for further informations.

- The developers of Calendarium have reported to us that this functionality works under other OSes (i.e. Windows and OSX)

4.9   Export

Goal	Export own calendar
Environment	In user HomePage, user is logged in. Settings dialog open.
Input	Click on export
Expected output	All the user events are exported
Obtained output	**Not compliant**

Unexpected exceptions

- The application always fails to export the calendar, but says "Export completed" and then "Export failed". This is rather confusing for the user.

- The developers of Calendarium have reported to us that this functionality works under other OSes (i.e. Windows and OSX), but this is nonetheless a bug, since Java code is supposed to be platform independent.

4.10   Warning Banner

Goal	If an event has a warning, the warning icon is shown near the event
Environment	In user HomePage, user is logged in. An event in the calendar has a warning.
Input	
Expected output	Warning icon in the event cell.
Obtained output	**Compliant**

4.11   Warning dialog populated

Goal	Warnings correctly displayed in the Warnings Dialog
Environment	In user HomePage, user is logged in. There are some warnings for some events.
Input	Click on warning button.
Expected output	The warnings are displayed in the carousel widget.
Obtained output	**Compliant**

4.12   Warning suggestion correct

Goal	Warning suggestion correct
Environment	In user HomePage, user is logged in. Warning dialog open, possible suggestion.
Input	Click on warning button.
Expected output	Suggestion possible or system says no suggestion is possible, modify button enabled.
Obtained output	**Compliant**

Part III
Final Considerations

- The MeteoCal Project Specification states that "*Whenever an event is saved, the system should enrich the event with weather forecast information (if available)*" however this feature has not been implemented.

- The RASD states that "*Users can see details of public events from other users' calendars that have been set public*" but the MeteoCal Project Specification requires that "If an event is public, all the registered users can see its details" regardless of the fact if the calendar is public or private.

- The system deauthenticates the user after a really short period of inactivity and shows an obscure stack trace to the user.

- The import/export functionality has not been developed in a platform independent way, for no good reason, which is in contrast with the Java "*write once, run anywhere*" motto.

Part IV
Hours Count

The Acceptance testing phase, in which we worked together, comprehensive of

- Reading of the Installation guide and the user manual

- Installation and configuration of the application

- Reading of the RASD and Testing documents

- Actual testing of the application

- Writing of this document

- Revision of this document

took us about **10 hours** to complete, divided in two working sessions.

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