Politecnico Di Milano
Facoltà di Ingegneria dell' Informazione
(Computer Science Engineering)

SOFTWARE ENGINEERING II PROJECT

Part III: **Test Cases**

Prof.ssa: **Di Nitto**

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Project Title: **BidWin**

Project Repository:
https://github.com/EmanueleLM/BidWin

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Test cases on the project GuessBid-SE2Project-Scura-Volpi

Link: https://github.com/John-Dark/GuessBid-SE2Project-Scura-Volpi

Here are provided the most meaningful test cases for the project.
We think that since GuessBid is a prototype-project to demonstrate our abilities in software engineering, a complete test suite can be developed meanwhile the project functionalities grows and the project becomes a fully functional webapp.

We adopt a notation which is similar to the one used in the Hoare's Logic:
{P} is the set of pre-conditions that must be fulfilled before the execution of the action(s).
{Q} is the state of the system after the action is done -set of post-conditions which leads to an appropriate system state-.

Notation: {P} actions; {Q}

The compliant test are **written in black,** while the **non-compliant in red.**

Test cases

Please note: for convenience, the " I am logged in" line will not be repeated in all the tests not involving login or registration.

Feature: Restrict access to registered user
Scenario: visiting a page before without logging in
* **{P}** I am not logged in

* When I visit any page

* **{Q}** I am shown the login page

Scenario: visiting a page after login
* **{P}** I am logged in

* When I visit any page

* **{Q}** I am not automatically redirected to login

Feature: Registration
Scenario: registering with a valid username
* **{P}** I am not logged in and the username U I'm choosing is not already in the system

* When I fill and submit the login form with my data

* **{Q}** the system should accept me and execute login

Scenario: registering with an already used username

- **{P}** I am not logged in and the username I'm choosing is already in the system

- When I fill and submit the login form with my data

- **{Q}** the system should show me an error and show me the registration page again **(ERROR: "Username already used")**

Scenario: registering with missing data

- **{P}** I am not logged in

- When I fill and submit the login form with incomplete data

- **{Q}** the system should show me an error and show me the registration page again (**ERROR: "Email not valid, field required etc.")**

Feature: Login
Scenario: logging in with correct data

- **{P}** I am not logged in and I am already registered in the system

- When I fill and submit the login form with my data

- **{Q}** the system should accept me, and redirect me to the main page

Scenario: logging in with wrong credentials

- **{P}** I am not logged in

- When I fill and submit the login form with wrong data

- **{Q}** The system should not accept me and show me the error page with a link to the login page

Feature: Logout
Scenario: logging out

- **{P}** I am logged in

- When I click the logout button

- **{Q}** the system should log me out and redirect me to the login page again

Feature: Recharge Pocket
Scenario: Recharge pocket

- **{P}** I am logged in and I'm in the recharge pocket page

- When I insert a number

- **{Q}** the system should add that amount to the total pocket counter.Please note that inserting a long integer, a letter or a non-integer number will fail the test ("javax.servlet.ServletException: java.lang.NumberFormatException: For input string").

Scenario: Creating a new auction

- **{P}** I am in the "My Objects" page

- When I click the link "Create Auction"

- **{Q}** the auction should be created and I should be set as the owner

  and I am shown the Welcome page. Please note that creating a new auction with the very same fields will succeed (feature?). And please note that the auction duration set to 120 hours by default, without the possibility to scale it.

Feature: Make a bid on an auction
Scenario: Make a bid on an auction

- **{P}** I am in an auction of <u>another user</u> (by the search engine or the home page which automatically displays some auction)
- When I find an auction and I put one bids on that
- **{Q}** The bid is registered on the auction's details.

Scenario: Make a bid on an auction that I own

- **{P}** I am in the search engine
- When I looks for my auctions
- **{Q}** Cannot bid on them

Scenario: Make a bid on an auction that is ended

- **{P}** I am in the search engine
- When I looks for an auction that is ended
- **{Q}** You can bid on them, the auction counter goes negative but you can still make a bid.

Feature: Winning an auction
Scenario: Winning an auction

- **{P}** I have the lowest and unique bid B among all the others (on the same auction A)
- When The time T (on the auction A) ends up
- **{Q}** You cannot win an auction, the auctions do not end up (negative counter)

Feature: Losing an auction
Scenario: Losing an auction

- **{P}** I do not have the lowest and unique bid on the auction A, still I have at least a bid B on that auction

- When The time T (on the auction A) ends up
- **{Q}** You cannot lose an auction, the auctions do not end up (negative counter)

Feature: Managing closed bids (history)
Scenario: Going to the "History" page by searching in the search engine
- **{P}** I am in my home page
- When I click look for the "History of my bids"
- **{Q}** I should be shown the "History of my bids" page where are displayed <u>just</u> the auctions where I made at least a bid.Doesn't work, probably due to the problem with the auctions (see previous tests)

Feature: Search Engine
Scenario: Looking for an object that exists
- **{P}** I am in the search engine form
- When I looks for a user/object type that exists (in the second case the auction on that object must be open)
- **{Q}** All the matching results are displayed

Scenario: Looking for an object that doesn't exist
- **{P}** I am in the search engine form
- When I looks for an object type that doesn't exist
- **{Q}** No result is displayed

Final considerations:

We talked with our colleagues and they said the system works properly in any condition: our result diverges al lot in several cases.
This result <u>do not mean necessarily</u> that the system is unusable: we need a cross validation by a third part that could say who is wrong and who is right.