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| Group 8 |
| Software Test Report |
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# Overview

# This test report is a test report for the Gamehub website project. The purpose of this test report is to summarize the tests during the test phase and analyze the test results, and describe whether the system meets the requirements. Expected reference personnel include users, the stakeholders and the developers of the system and the Supervisor of Software Development Workshop II’s Group Project.

# Test Environment

Related software version:

* Bootstrap 4.1
* Python 3.7
* Flask 1.0
* MySQL 10.1
* asn1crypto 0.24.0
* blinker 1.4
* cffi 1.12.3
* Click 7.0
* Cryptography 2.6.1
* Faker 1.0.5
* Flask 1.0.2
* Flask-Login 0.4.1
* Flask-Mail 0.9.1
* Flask-SQLAlchemy 2.4.0
* Itsdangerous 1.1.0
* Jinja2 2.10.1
* Lxml 4.3.3
* MarkupSafe 1.1.1
* Pycparser 2.19
* PyMySQL 0.9.3
* python-dateutil 2.8.0
* python-docx 0.8.10
* python-dotenv 0.10.1
* six 1.12.0
* SQLAlchemy 1.3.3
* text-unidecode 1.2
* Werkzeug 0.15.2

Testing on latest stable version of Google Chrome browser (66.0.3359.117 (64-bit) or later), no longer support IE 8 / IE 9.

Using HTML5 Standard.

Using UTF-8 encoding Standard.

# Test Procedure

* Functional Test
* Hyperlink Test
* User permission validation Test
* Exception Handling Test

# Test Detail

## Methods Test

|  |  |  |  |
| --- | --- | --- | --- |
| index | Method name | Results | Remark |
| 1 | send\_async\_email | PASS |  |
| 2 | Send\_email | PASS |  |
| 3 | validate\_email | PASS | RegistrationForm |
| 4 | validate\_email | PASS | ChangeEmailForm |
| 5 | before\_request | PASS |  |
| 6 | unconfirmed | PASS |  |
| 7 | login | PASS |  |
| 8 | logout | PASS |  |
| 9 | register | PASS |  |
| 10 | confirm | PASS |  |
| 11 | resend\_confirmation | PASS |  |
| 12 | password\_reset\_request | PASS |  |
| 13 | password\_reset | PASS |  |
| 14 | validate\_rating | PASS |  |
| 15 | personal\_center | PASS |  |
| 16 | allowed\_file | PASS |  |
| 17 | edit\_profile | PASS |  |
| 18 | change\_password | PASS |  |
| 19 | all\_orders\_user | PASS |  |
| 20 | refund | PASS |  |
| 21 | all\_refunds\_user | PASS |  |
| 22 | order\_detail | PASS |  |
| 23 | all\_games\_user | PASS |  |
| 24 | admin\_center | PASS |  |
| 25 | all\_orders\_admin | PASS |  |
| 26 | edit\_order | PASS |  |
| 27 | edit\_order\_by\_id | PASS |  |
| 28 | all\_refunds\_admin | PASS |  |
| 29 | refund\_process | PASS |  |
| 30 | process\_refund\_by\_id | PASS |  |
| 31 | all\_users\_admin | PASS |  |
| 32 | user\_management | PASS |  |
| 33 | edit\_user | PASS |  |
| 34 | edit\_user\_by\_id | PASS |  |
| 35 | all\_games\_admin | PASS |  |
| 36 | add\_new\_game | PASS |  |
| 37 | game\_management | PASS |  |
| 38 | edit\_game | PASS |  |
| 39 | edit\_game\_by\_id | PASS |  |
| 40 | enable\_game | PASS |  |
| 41 | disable\_game | PASS |  |
| 42 | recommend\_add | PASS |  |
| 43 | recommend\_remove | PASS |  |
| 44 | editor\_pick\_add | PASS |  |
| 45 | editor\_pick\_remove | PASS |  |
| 46 | recommendation\_carousel\_management | PASS |  |
| 47 | editor\_pick\_management | PASS |  |
| 48 | change\_game\_cover | PASS |  |
| 49 | add\_game\_image | PASS |  |
| 50 | remove\_game\_image | PASS |  |
| 51 | manage\_photos | PASS |  |
| 52 | page\_not\_found | PASS |  |
| 53 | forbidden | PASS |  |
| 54 | index | PASS |  |
| 55 | game\_list | PASS |  |
| 56 | game\_detail | PASS |  |
| 57 | rating | PASS |  |
| 58 | search | PASS |  |
| 59 | cart\_detail | PASS |  |
| 60 | cart\_add | PASS |  |
| 61 | cart\_remove | PASS |  |
| 62 | cart\_checkoutwishlist\_detail | PASS |  |
| 63 | wishlist\_add | PASS |  |
| 64 | wishlist\_remove | PASS |  |
| 65 | wishlist\_checkout | PASS |  |
| 66 | after\_cart\_checkout | PASS |  |
| 67 | page\_not\_found | PASS |  |
| 68 | forbidden | PASS |  |
| 69 | create\_app | PASS |  |
| 70 | admin\_required | PASS |  |
| 71 | verify\_password | PASS |  |
| 72 | generate\_confirmation\_token | PASS |  |
| 73 | confirm | PASS |  |
| 74 | generate\_reset\_token | PASS |  |
| 75 | password | PASS |  |
| 76 | reset\_password | PASS |  |
| 77 | generate\_email\_change\_token | PASS |  |
| 78 | change\_email | PASS |  |
| 79 | is\_administrator | PASS |  |
| 80 | load\_user | PASS |  |
| 81 | rating | PASS |  |
| 82 | get\_star\_num | PASS |  |
| 83 | make\_shell\_context | PASS |  |
| 84 | fake\_genres | PASS |  |
| 85 | insert\_100\_games | PASS |  |
| 86 | fake\_games | PASS |  |
| 87 | insert\_test\_users | PASS |  |
| 88 | fake\_users | PASS |  |
| 89 | fake\_comments | PASS |  |
| 90 | fake\_ratings | PASS |  |
| 91 | fake\_orders | PASS |  |
| 92 | fake\_refunds | PASS |  |
| 93 | fake\_test | PASS |  |
| 94 | fake\_all | PASS |  |
| 95 | init\_db | PASS |  |

## Functional Test

Log-in:

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Input the correct username and password | N/A | N/A |
| 2 | Click the login button | Log in successfully and enter the homepage | PASS |

Log-in with wrong input:

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Input the username and password without register or error | N/A | N/A |
| 2 | Click the login button | Show the error message | PASS |

Register

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Input the name, email, password and repeat password | N/A | N/A |
| 2 | Click the register button | Show the information about e-mail verification | PASS |

Register with wrong format

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Input the name, email, password and repeat password with wrong format | N/A | N/A |
| 2 | Click the register button | Show warn message and register fail | PASS |

Change password

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Input the e-mail address and new password | N/A | N/A |
| 2 | Click the Reset password button | Reset successfully | PASS |

User avatar:

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Click the user avatar | See the personal information button and exit login button | PASS |
| 2 | Click the profile button | Visit the personal information | PASS |
| 3 | Click the log out button | Log out the current account and visit dashboard page | PASS |

Personal center:

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Click the My game | See all the game the user has owned | PASS |
| 2 | Click the All orders | See all the orders information | PASS |
| 3 | Click the All refunds | See all the refunds information | PASS |

Admin page:

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Click the dashboard | See all the data of the website | PASS |
| 2 | Click the All orders | See all the orders information | PASS |
| 3 | Click the All refunds | See all the refunds information | PASS |
| 4 | Click the All users | See all the account information | PASS |
| 5 | Click the All Games | See all the games information | PASS |
| 6 | Click the Add New Game | See the page to add new game | PASS |
| 7 | Click the Management button | Edit the Game information and remove the record | PASS |

Cart

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Add the new game to the cart | Add the new game to the user’s cart | PASS |
| 2 | Add the remove button in the cart | Remove the game you have already add in the cart | PASS |
| 3 | Click the cheque out button | Purchase successfully and show the hint information | PASS |

Wish list

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Add the new game to the wish list | Add the new game to the user’s wish list | PASS |
| 2 | Add the remove button in the wish list | Remove the game you have already add in the wish list | PASS |

Search

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Input the relevant keyword about the game in the search | N/A | N/A |
| 2 | Click the search icon | Skip to the game page and show the games with the highest relevant | PASS |

Game page:

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Click the game image or game name | Skip to the specific game page | PASS |
| 2 | Click the type of game button like ACT, FPS | Show the different type of the games | PASS |

Specific game page:

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Behavior | Expected Outcome | Results |
| 1 | Park the mouse over the star | The star which behind your mouse fill with background color | PASS |
| 2 | Click the rating button | Refresh the interface and rate the game | PASS |
| 3 | Comment the game in comment window | N/A | N/A |
| 4 | Click the submit comment | Show the comment in the comment area | PASS |

## Hyperlink test

|  |  |  |  |
| --- | --- | --- | --- |
| **Login Page** | | | |
| # | Link/Button Name | Expected URL/Expected Function | Results |
| 1 | Login | /auth/login/ | PASS |
| 2 | Go to Gamehub without login | / | PASS |
| 3 | Create account | /auth/register | PASS |
| **Register Page** | | | |
| # | Link/Button Name | Expected URL/Expected Function | Results |
| 1 | Create account | /auth/register/ | PASS |
| 2 | Already have account?Login | /auth/login/ | PASS |
| **Homepage** | | | |
| # | Link/Button Name | Expected URL/Expected Function | Results |
| 1 | Gamehub logo | / | PASS |
| 2 | Personal center icon | /pensonal\_center | PASS |
| 3 | Wish list icon | /wishlist\_detail | PASS |
| 4 | Cart icon | /cart\_detail | PASS |
| 5 | Search bar | /search?keyword=/ | PASS |
| 6 | Next game | Slide to next game | PASS |
| 7 | Game name | /game\_detail | PASS |
| 8 | FPS | /game\_list?genre\_name=FPS | PASS |
| 9 | RPG | /game\_list?genre\_name=RPG | PASS |
| 10 | RTS | /game\_list?genre\_name=RTS | PASS |
| 11 | Home | / | PASS |
| 12 | Shop | /game\_list | PASS |
| 13 | Sign in | /login | PASS |
| 14 | View Cart | /cart\_detail | PASS |
| 15 | My Wishlist | /wishlist\_detail | PASS |
| 16 | Track My Order | /all\_orders\_user | PASS |
|  | Up arrow icon | Move to the top | PASS |
| **Game Page** | | | |
| # | Link/Button Name | Expected URL/Expected Function | Results |
| 1 | Give a rating | Dropdown panel | PASS |
| 2 | Rating! | /game\_detail/ | PASS |
| 3 | Wish list icon | /wishlist\_detail | PASS |
| 4 | Cart icon | /cart\_detail | PASS |
| 5 | BUY IT NOW! | /cart\_detail | PASS |
| 6 | Submit Comment | Add a comment | PASS |
| **List Page** | | | |
| # | Link/Button Name | Expected URL/Expected Function | Results |
| 1 | Types of games | /game\_list?genre\_name=/ | PASS |
| 2 | Game name | /game\_detail | PASS |
| 3 | Wish list icon | /wishlist\_detail | PASS |
| 4 | Cart icon | /cart\_detail | PASS |
| 5 | Next page icon | Next page of games | PASS |
| 6 | Page number | Corresponding page | PASS |
| **Wishlist Page** | | | |
| # | Link/Button Name | Expected URL/Expected Function | Results |
| 1 | Remove | Remove the game | PASS |
| 2 | Add them into cart | /cart\_detail | PASS |
| **Cart Page** | | | |
| # | Link/Button Name | Expected URL/Expected Function | Results |
| 1 | Remove | Remove the game | PASS |
| 2 | Cheque out | /after\_checkout | PASS |
| **Personal center Page** | | | |
| # | Link/Button Name | Expected URL/Expected Function | Results |
| 1 | My game | Dropdown panel | PASS |
| 2 | User records | Dropdown panel | PASS |
| 3 | Games | Dropdown panel | PASS |
| 4 | User head portrait | Dropdown panel | PASS |
| 5 | Profile | /edit\_profile | PASS |
| 6 | Change password | /change\_password | PASS |
| 7 | All Orders | /all\_orders\_user | PASS |
| 8 | All Refunds | /all\_refunds\_user | PASS |
| 9 | View All Games | /all\_games\_user | PASS |
| 10 | Change password | /change\_password | PASS |
| 11 | GameHub | / | PASS |
| 12 | Customer Center | /personal\_center | PASS |
| 13 | Logout | Pop-up window | PASS |
| **Admin center Page** | | | |
| # | Link/Button Name | Expected URL/Expected Function | Results |
| 1 | My game | Dropdown panel | PASS |
| 2 | User records | Dropdown panel | PASS |
| 3 | Games | Dropdown panel | PASS |
| 4 | User head portrait | Dropdown panel | PASS |
| 5 | Profile | /edit\_profile | PASS |
| 6 | Change password | /change\_password | PASS |
| 7 | Admin center | /admin\_center | PASS |
| 8 | System records | Dropdown panel | PASS |
| 9 | Users | Dropdown panel | PASS |
| 10 | Index Page Management | Dropdown panel | PASS |
| 11 | All user | /all\_users\_admin | PASS |
| 12 | All games | /all\_games\_admin | PASS |
| 13 | Add new game | /add\_new\_game | PASS |
| 14 | Recommendation carousel | /recommedndation\_carousel\_management | PASS |
| 15 | Editor’s\_pick | /editor\_pick\_management | PASS |
| 16 | GameHub | / | PASS |
| 17 | Customer Center | /personal\_center | PASS |
| 18 | Logout | Pop-up window | PASS |

## User Permission Validation test

|  |  |  |  |
| --- | --- | --- | --- |
| **AnonymousUser** | | | |
| Number | Function | Permission | Result |
| 1 | Login | Allow | PASS |
| 2 | Registration | Allow | PASS |
| 3 | PasswordResetRequest | Not Allow | PASS |
| 4 | PasswordReset | Not Allow | PASS |
| 5 | ChangeEmail | Not Allow | PASS |
| 6 | EditGame | Not Allow | PASS |
| 7 | AddNewGame | Not Allow | PASS |
| 8 | EditUser | Not Allow | PASS |
| 9 | EditProfile | Not Allow | PASS |
| 10 | ChangePassword | Not Allow | PASS |
| 11 | RefundProcess | Not Allow | PASS |
| 12 | UploadFile | Not Allow | PASS |
| 13 | EditOrder | Not Allow | PASS |
| 14 | ViewOrder | Not Allow | PASS |
| 15 | Comment | Not Allow | PASS |
| 16 | ViewShop | Allow | PASS |

|  |  |  |  |
| --- | --- | --- | --- |
| **Administrator** | | | |
| Number | Function | Permission | Result |
| 1 | Login | Allow | PASS |
| 2 | Registration | Allow | PASS |
| 3 | PasswordResetRequest | Allow | PASS |
| 4 | PasswordReset | Allow | PASS |
| 5 | ChangeEmail | Allow | PASS |
| 6 | EditGame | Allow | PASS |
| 7 | AddNewGame | Allow | PASS |
| 8 | EditUser | Allow | PASS |
| 9 | EditProfile | Allow | PASS |
| 10 | ChangePassword | Allow | PASS |
| 11 | RefundProcess | Allow | PASS |
| 12 | UploadFile | Allow | PASS |
| 13 | EditOrder | Allow | PASS |
| 14 | ViewOrder | Allow | PASS |
| 15 | Comment | Allow | PASS |
| 16 | ViewShop | Allow | PASS |

|  |  |  |  |
| --- | --- | --- | --- |
| **User** | | | |
| Number | Function | Permission | Result |
| 1 | Login | Allow | PASS |
| 2 | Registration | Allow | PASS |
| 3 | PasswordResetRequest | Allow | PASS |
| 4 | PasswordReset | Allow | PASS |
| 5 | ChangeEmail | Allow | PASS |
| 6 | EditGame | Not Allow | PASS |
| 7 | AddNewGame | Not Allow | PASS |
| 8 | EditUser | Not Allow | PASS |
| 9 | EditProfile | Allow | PASS |
| 10 | ChangePassword | Allow | PASS |
| 11 | RefundProcess | Allow | PASS |
| 12 | UploadFile | Allow | PASS |
| 13 | EditOrder | Not Allow | PASS |
| 14 | ViewOrder | Allow | PASS |
| 15 | Comment | Allow | PASS |
| 16 | ViewShop | Allow | PASS |

## Exception Handling Test

|  |  |  |  |
| --- | --- | --- | --- |
| **number** | Exception details | Expected behavior | Results |
| 1 | Login an account which has not signed up | Show an error message | PASS |
| 2 | Login an account with wrong password | Show an error message | PASS |
| 3 | Check in an account who doesn’t exist | Show an error message. | PASS |
| 4 | Search the ID of the user detail which will be edited does not exist | Show an error message | PASS |
| 5 | Search the ID of the game detail which will be edited does not exist | Show an error message | PASS |
| 6 | Search the ID of the order detail which will be edited does not exist | Show an error message | PASS |
| 7 | Search the ID of the Process Refund Request which does not exist | Show an error message | PASS |
| 8 | Sign up and repeat password is not the same as password | Show an error message | PASS |
| 9 | The input Email address format is not correct | Show an error message and deactivate the create button | PASS |
| 10 | Create account while the email address exists in the database | Showing that the email address already exists | PASS |

# Contributions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student ID | Name (in Pinyin/Chinese) | Contribution (in %) | Responsibilities/Work Done | Remarks |
| 1730026073 | Liu Rongkai | 25% | demand design, UI design, front-end design, database design, test | Null |
| 1730026090 | Shen Hongyue | 25% | demand design, UI design, front-end design, database design, test | Null |
| 1730026045 | Li Liangyu | 25% | demand design, database design, back-end, Source code, test | Null |
| 1730026006 | Chen Hongzhou | 25% | demand design, database design, back-end, Source code, test | Null |