# Top 5 Test Management Tools**:**

### **TestRail**

Designed to create test cases, create bugs, analyze testing, interact with bug trackers JIRA, GitHub, YouTrack and others, maintain reporting and customize the system for your own needs using the open TestRail API.

### **TestLink**

Designed to describe and create requirements for a product, create test cases based on these requirements, manage a test plan, group test cases into a test plan, cover requirements, select a tester, receive a test run report.

### **Jira + Zephyr**

They are aimed at controlling development, with project tasks, making bug reports, you can create a test plan, describe test cases, conduct testing and create test reports.

### **PractiTest**

Designed for a cloud service, you can create a test library, write test cases and scripts, maintain user stories, create defects, extensions, tasks, specify testing times, can work with other bug trackers and with Selenium and Jenkins through the API.

### **qTest**

Designed to help not only the tester, but also the development team, aimed at creating test plans, maintaining reports, import / export of requirements, writing test cases, recording bugs, executing tests and reporting

.

**Test Plan**

**Ukrzaliznytsya https://uz.gov.ua/**

**version: 1.0**

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 04.12.2020 | 1.0 | Test plan has created | Trishchuk Nazar |
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# **Introduction**

There is the website “uz.gov.ua”, which works for a huge number of clients. The application provides information for clients about trains, tickets, news of the company, and baggage transportation.

That web application has some goals:

1. To attract potential clients to choose train transport for travels and decide to be an employer of the company.
2. To attract clients and business to transport baggage by the company
3. To attract clients purchasing tickets online.

This document contains information about the approach and methodologies necessary for reaching mark goals.

1. **Scope of work**

**2.1 Components and functions to be tested:**

1. Search
2. Buy tickets

2.1 Language selection

2.2 Authorisation

1. Re-generate tickets
2. Return tickets
3. Trains schedule
4. Loyalty program
5. Discounts on tickets
6. Transport baggage
7. News
8. Information about delays of trains
9. Information about safety regulations
10. Feedback

11.1 Telephones

11.2 Emails

1. Color configurator
2. Section to persons with disabilities
3. Railroad job

14.1 Vacances

14.2 Send a resume

**2.2 Third-party components**

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Component name** | **Component role** | **Reference/Comment** |
| **1** | **Firefox** | **Browser** | **https://www.mozilla.org/ru/firefox/** |
| **2** | **I E 11** | **Browser** | **https://www.microsoft.com/uk-ua/** |
| **3** | **Safari (Mac OS)** | **Browser** | **https://safari.ru/mac** |
| **4** | **Chrome** | **Browser** | **https://www.google.ru/chrome/index.html** |
| **5** | **Jira** | **Software integrates development tools** | **-** |
| **6** | **MS Office** | **Create test cases, check lists** | **https://www.microsoft.com/uk-ua/** |
| **7** | **Google docs** | **Create test cases, check lists** | **-** |

**3. Test documentation**

1. Test plan
2. Check lists
3. Test cases
4. Bug reports
5. Test result, reports.

**4. Test strategy**

The WEB site “uz.gov.ua” will be tested using a “black box” approach without knowledge of the internal structure or program source code.

**4.1 Entry criteria**

The Testing Team may suspend partial or full-testing activities on a given build if any of the following occurs:

● There is a fault with a feature that prevents its testing.

● A severe problem has occurred that does not allow testing to continue.

**4.2 Test methods**

Testing is the process of attempting to find discrepancies between the program and its functional specification requirements. The goal is to make sure that main functions of the site “https://uz.gov.ua/’ work correctly.

● Manual functional testing – is considered as the main method of the application testing.

* Automation testing is considered as the main method of the performance testing

**4.3 Test types**

Functional testing is a type of testing which verifies that each function of the software application operates in conformance with the requirement specification.

Compatibility Testing - Compatibility Testing determines whether the product operates correctly in configurations with various operating systems, browsers.

Security testing - security testing verifies the payment system works safely.

Performance testing verifies that loading pages is quick with a huge number of visitors.

Usability Testing verifies clarity and simplicity of the product and convenience of colors and sizes of blocks of the WEB site.

**4.4 Test levels**

4.4.1 System Testing

4.4.2 Acceptance Testing

**4.5 Bug and documentation tracking**

Tools described in the section Test Tools will be used for bug reporting and documentation tracking. The bug metrics and statistics will be included in the test results reports.

**4.5.1 Bug severity definition**

**Blocker** - Blocks development and/or testing work, production could not run.

**Critical** - Crashes, loss of data, severe memory leak.

**Major** - Major loss of function.

**Minor** - Minor loss of function, or other problem where easy workaround is present.

**Trivial** - Cosmetic problem like misspelled words or misaligned tex

**5. Quality and acceptance criteria**

● All necessary artifacts сollected: check lists, test cases and bug reports

● The product should not have known bugs with severity Critical and Major, and bugs with Priority High at the time of finish testing

**6. Risk management**

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Probability** | **Impact** | **Actions** |
| **Problems in the test equipment. Breakdown of computer hardware or failures on the server side of the project. This can lead to a significant slowdown in project activities.** | **L** | **M** | **Availability of spare equipment, which will be provided if necessary.** |
| **The testing team consists of inexperienced workers, this can lead to the omission of different kinds of bugs.** | **VH** | **VH** | **Experienced people: RM or other tester will help testing team resolve any problems in urgent cases** |
| **Different types of leave (sickness or vacation) of any Member of the testing team, can lead to additional workload on other participants of the project.** | **H** | **M** | **RM can provide a project for an additional temporary. Person to work during the absence of a team member.** |
| **Force majeure circumstances that may lead to the de-energization of the workplace, which will lead to the suspension of work on the project** | **L** | **L** | **The presence of another room in the absence of electricity at the permanent workplace** |

**Legend: VH – Very High; H – High; M – Medium; L - Low**

**7. Resources**

**7.1 Test team**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Project Role** | **Name** | **Location** | **Responsibilities** |
| **1** | **Test** | **Trishchuk Nazar** | **Kyiv** | **Development of test-cases, executing and writing bug reports.** |
|  |  |  |  |  |

**7.2 Test hardware**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Role** | **Resource** | **Hardware configuration** | **Software configuration** |
| **1** | **Client** | **PC** | **RAM: 4 Gb Processor: AMD Athlon** | **Win 10 64 bit** |
| **2** | **Client** | **Smartphone Android** | **RAM: 3 GB Processor: Qualcomm Snapdragon 800** | **Android 7.1.2** |
|  |  |  |  |  |

**7.3 Test tools**

|  |  |  |
| --- | --- | --- |
| **#** | **Tool** | **Comment** |
| **1** | **Jira** | **Tracking of bugs and documentation.** |
| **2** | **MS Office Excel** | **Creating test-cases** |
|  |  |  |

**8.Quality and acceptance criteria**

● All necessary artifacts сollected: check lists, test cases and bug reports

● The product should not have known bugs with severity Critical and Major, and bugs with Priority High at the time of finish testing

**9. Critical success factors**

● Jira access.

● Access to uz.gov.ua website.

● Exact deadlines.

● Responsibility of all team members.

● Meet a schedule and complete development and testing of all functionality in term.

**10. Testing schedule**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Activity** | **Begin Date** | **End Date** | **Assignment** | **Location** | **Work content** |
| **1** | **Test plan creation** | **04.12.20** | **04.12.20** | **Test Plan Trishchuk v.1.docx** | **Report\_Trischuk** | **1 day** |
| **2** | **Сreation of check-lists** | **05.12.20** | **12.12.20** | **Test cases template.xlsx** | **Report\_Trischuk** | **7 days** |
| **3** | **Writing test cases** | **13.12.20** | **20.12.20** | **Test cases template.xlsx** | **Report\_Trischuk** | **7 days** |
| **4** | **Testing and writing bug reports** | **21.12.20** | **27.12.20** | **Jira** | **jira.it** | **7 days** |
| **5** | **Тhe creation of a Final TRR, preparation of presentations** | **28.12.20** | **03.01.21** | **Final TRR.docx** | **Report\_Trischuk** | **7 days** |