Strava application project

- Test Plan -

Revision History

Date	Description	Author	Comments
01.01.2024	Test Plan for Strava web application V333.10	Dubovic Alexandra	Version 1.0

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1. Introduction

Strava is the world's largest sport community, a platform that allows record over 30 types of activities with features to help explore, connect and measure sport progress. Strava is a social fitness platform with more than 76 million users in nearly every country worldwide.

1.1 Project Objective

The objective of this project is to increase the trust in quality of the application, to find possible defects in the live software application, to evaluate the product risks and to provide the stakeholders with information regarding the testing process. As well the objective of the project is to highlight the improvement of the application after the testing process.

1.2 Functionalities in scope

Strava application is available both for web and mobile users. The objective of this project is to focus on improving the quality of the web application. The version under testing is V333.10 released in November 13, 2023.

Strava provides users with a large range of functionalities (tracking, competitions, measuring etc.). For this project the functionalities in scope of testing process are:

- Training
 - Training calendar
 - My Activities
- Upload
 - Upload activity
 - Add manual entry
 - Create a route
 - Create a post
- Help
 - Strava support

As the application is live testing will be performed at a system testing level. During the testing process will be performed functional testing and some types of non-functional testing (usability testing), positive and negative testing and also if needed retesting and regression testing will be performed.

Based on requirement analysis some additional testing types and techniques may be applied.

1.3 Functionalities and tests out of scope

- Non-functional testing like stress, performance is beyond scope of this project.
- Automation testing is beyond scope.
- Only web application will be tested for this project.

- All the functionalities except the ones mentioned in chapter 1.2 are out of scope for this project and will be tested with next iterations.

2. Test process

2.1 Test planning

Roles and responsibilities

Gabriela Radulescu	Test Lead- will monitor the proper funcionality of the test process, the involvment of the teams and the reach of the defined deadlines
Alexandra Dubovic	Responsible for testing of all functionalities that are in scope of this project

Entry criteria:

- Testing environment is up and running (being an already live application, we will have the environment ready even before the implementation step)
- Business requirements are completed by the analysis team and are delivered to the appropriate testing team for evaluation
- Potential project risks are detected and mitigated
- Roles and responsibilities are allocated
- Test plan should be finalized before entering the next phase of testing
- Define the objectives of testing and the accepted level of quality

Exit criteria:

- 90% or more of the tests are passed
- No critical issues have status open
- All detected errors have been reported and closed
- The budget was reached
- The deadline was reached
- The objectives were fulfilled
- The product usage documentation has been finalized with the scenarios evaluated during the testing phase
- Test completion report has been created and sent to the stakeholders
- Product risks have been identified and mitigated

Project risks:

- The team does not have the proper knowledge or experience in order to guarantee the desired level of quality for the application
- Not enough time has been allocated in order to properly test and cover all the functionalities in scope
- All that the data that is going to be used will have to be created explicitly in the scope of testing, which will cut off from the time allocated for testing, generating a risk of not reaching the deadline

Product risks:

All the data that is going to be used will be test data, which will not give us an experience of the application close enough to the ones that the user will experience

2.2 Test analysis

In this phase we will analyze the business requirements that were provided and we will create test conditions based on the received requirements.

2.3 Test design

- In this phase we will create the test cases based on the previously defined test conditions to ensure that we will be covering all the functionalities that are in scope of this project.
- The test data that will be needed will be identified in this phase based on the identified data necessities from the created test cases

2.4 Test implementation

- we make sure that all the test data is available and reviewed (test data= email examples, password examples, different type of currency, different types of credit cards)
- we make sure that the setup environment is up and running
- we make sure that we have all the needed access and permissions to all themsystems involved in the validation process
- we prioritize the tests based on risks (if known) and business priority

2.5 Test execution

- the tests will be executed on the top 3 used browsers: Chrome, Mozilla Firefox,
 Microsoft Edge
- we create bug reports when the expected results that were defined in thetest cases are different from the actual results

- we will perform retesting and regression testing to make sure that all the bugs have been fixed and no previously working functionality was not affected by the changes
- we will generate the test status reports once a week and send them to the management team in order to provide them with means to monitor the testing process and take measures in case new risks are identified

2.6 Test closure

- We will evaluate the exit criteria and we will make sure that it was fulfilled in order to green light the launching of the new product version into the production environment
- We will generate the test completion report and send it to stakeholders in order to inform them about the testing process results and enhance them with the ability to make informed decisions with regards to the product launching
- All the product risks will be detected and mitigated (a solution was found in order to reduce the probability of them to arise) or a contingency plan hasbeen set in place
- All the performed test cases will be executed in the test management tool and all the remaining bugs that have been retested and fixed have been closed
- Regression testing will be performed and no other issues have been detected
- Learned lessons will be gathered and collected into a common improvement plan in order to enhance the improvement of the next testing, processes

2.7 Test monitoring and control

We will evaluate the test status reports and monitor them all throughout the testing process in order to ensure a smooth testing and team collaboration and in order to make sure that new risks are identified in time and managed accordingly

In case new risks will appear they will be mitigated or a contingency plan will be set in place to make sure that the negative effects will not stop us from fulfilling the testing objectives that were defined in the planning phase

3. Test deliverables

3.1 Test plan - link to test plan

3.2 Test conditions

The test conditions will be created based on the business requirements validated in the test analysis phase and will represent the features to be tested and transformed into test cases.

3.3 Test cases

Test cases written for this project can be accesed from https://itfclasses.atlassian.net/projects/PTAD?selectedItem=com.thed.zephyr.jee-test-cases

3.4 Daily test summary report

<u>https://itfclasses.atlassian.net/projects/PTAD?selectedItem=com.thed.zephyr.j</u>
<u>e test-metric-project-level</u>

3.5 Traceability matrix

https://itfclasses.atlassian.net/projects/PTAD?selectedItem=com.thed.zephyr.j e traceability-project-level

3.6 Test case results

<u>https://itfclasses.atlassian.net/projects/PTAD?selectedItem=com.thed.zephyr.j</u>
<u>e cycle-summary</u>

3.7 Bugs report

https://itfclasses.atlassian.net/jira/software/c/projects/PTAD/issues/?jql=project%20%3D%20%22PTAD%22%20and%20type%20%3D%20Bug%20ORDER%20BY%20created%20DESC

3.8 Test completion report

https://itfclasses.atlassian.net/jira/dashboards/10203