

FUTURE-ORIENTED BENCHMARKING THROUGH SOCIAL MEDIA ANALYSIS

Test Plan

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1. Introduction

1.1 Purpose

The purpose of this document is to provide an overview of the approach that will be used to test the *Future-Oriented Benchmarking Through Social Media Analysis* web-based system. The test cases will ensure that the system is performing the intended operations while providing the correct output. The test cases will be performed on the functions described in the Software Requirement documentations, Part 3.2 (Functional Requirements).

1.2 Project Overview

FOBM is a web-based system that will help businesses evaluate their performance based on their personal set goals as well as comparing their performance to that of their respective competitors. The data used for these analysis is obtained from different social platforms. The system will also allow businesses to use the trend analyzer tool which will help them predict future trends and identify possible issues so they could proactively work on them before they become an actual problem.

1.3 References

IEEE Computer Society, "IEEE Standard for Software Test Documentation"

2. Test Strategy

2.1 Unit Testing

This test is performed on the individual parts of the system before it is implemented in the main system. It helps to find any flaws in the individual system and detect any bugs in that particular part independently of the main system. Unit testing is carried out by team members.

2.2 Integration Testing

This test is performed after unit testing has been performed. The purpose of Integration testing is to test the system with the different parts merged together, to ensure that the system works as a whole after a new part of the system has been implemented to the main system. Integration testing is performed by team members.

2.3 System Testing

This test is performed on the system as a whole with all the features requested by the client. The purpose of this test is to make sure that the system is functioning well with all the necessary parts merged together. It helps to test the efficiency of the system and detect any unwanted failures or outcomes. System testing is performed by the team members.

2.4 User Acceptance Testing

This test is performed to make sure that the system satisfies all the requirements of the client. The system and all its features are tested to make sure that it is performing what it is expected to do by providing the accurate results. User acceptance testing is performed by the client.

3. Test Cases

The following test cases will be performed on the features described in the Software Requirements Specifications Documentation.

3.1 User Registration (FR1)

- The user is able to register a new account on the FOBM website
- The user will need to a valid email address, the organization's name, a phone number and select a valid password
- A confirmation email will be sent to the user if the registration is successful
- If the user is not able to register, a pop-up message will indicate the reason for the failure to register, such as "Invalid email address" or "Incorrect password Format" or "Invalid phone number"

3.2 User Log in (FR2)

- A registered user should be able to log in on the website
- After successfully logging in, the user will access a dashboard where he will be able to view previous generated analysis or have the ability to generate a new analysis.
- If the user is not able to log in, a pop-up message will indicate the reason for the failure to log in, such as "Incorrect Password" or "Incorrect Email address" or "No account found under this email address"

3.3 Forgot Password (FR3)

- A registered user should be able to reset the account password by using the "Forgot Password?" option on the website if the user forgot the log in credentials.
- An email with instructions and link to reset the password will be sent to the user.

- The user should be able to create a new password by using the link sent to the email
- If the user doesn't receive any email, the user should verify if the email didn't go to the Spam/Junk folder or verify if the correct email address was provided

3.4 Select Source (FR4)

- The user will have the option to select which social media platforms he would like the data(reviews) to be taken from
- After selecting the desired social media websites, the website will process the request and perform web scrapping from those websites
- The user should see data(reviews) from the desired websites presented in graphical illustrations
- If reviews from desired websites are missing, the user should verify that the social media pages from which data is being requested has the required data. If the social media page has the data, the user should launch another scrapping.

3.5 Select Services (FR5)

- Based on the graphical illustrations generated in FR4, the user should be able to select specific services where he would like to focus on
- Upon selecting a specific service, another graphical illustration should be generated displaying the requested data
- To ensure that the output is correct, the user will be able to see a graph focused on the specific service and a tag indicating when the graph was last updated

3.6 Drill Down (FR6)

- The website will provide a Drill-down option which will allow users to expand the graphical illustration generated in FR5.
- The Drill-down feature will provide source information about the data on the graph, such as original comments of the customers and data to show where for instance the root of negative comments.

3.7 Benchmark (FR7)

- The website will provide a benchmarking tool, which will allow users to generate a performance analysis
- The user will see a graphical illustration of the company's performance based on set goals as well as illustrations showing the company's performance in comparison to related competitors
- To ensure that the correct output is being displayed, the user should see an illustration containing the company's performance against respective competitors and a tag indicating when the graph and data was last updated

3.8 Trend Analyzer (FR8)

- The website will have a trend analyzing tool which will allow users to generate graphical illustrations of future trends.
- The user should see a graph showing present performance and a projected graph illustrating future trends.