TEST STRATEGY
FOR www.iuliustown.ro

Liliana Florentina Calancea

PROJECT NAME:

www.iuliustown.ro

DOCUMENT CONTROL

Version	**1.0**
Date	03-Jan-2023
Developed by	Florentina Calancea

DOCUMENT SIGN-OFF

Version	Status	Date	Approved by	Job Title
1.0	Final	03-Jan-2023	Ana Maria Ionescu	QA Lead

CONTENTS

1 INTRODUCTION

The objective of the **www.iuliustown.ro** project is to test the functional utility of the https://iuliustown.ro/ website. This document supports the following objectives:

- Identify existing project information and the website that should be tested.
- List the recommended test requirements (high level).
- Recommend and describe the testing strategies to be employed.
- Identify the required resources and provide an estimate of the test efforts.
- List the deliverable elements of the test activities.

The test methodology selected for the project is **Agile**.

Well executed Agile methodology helps teams significantly improve the quality of the software at each release.

2 PURPOSE

This Test Strategy will provide a high-level view of how testing will be completed for the **www.iuliustown.ro** project. There are many sections to this document, but the focus is on the overall approach to testing for the different test phases that are to be completed.

3 SYSTEM OVERVIEW

The System Under Test (SUT) consists of the following components.

The system's primary function is to provide information for the Iulius Town clients. The Web version of the **www.iuliustown.ro** was developed using the following web-based languages: JavaScript, and HTML.
The Homepage of the website contains four sections.

Header contains the following:

Address, Phone number, Language, Facebook logo (which will redirect the user to the company Facebook page), Twitter logo (which will redirect the user to the company Twitter page), Instagram logo (which will redirect the user to the company Instagram page), Youtube logo (which will redirect the user to the company Youtube page), and a Search bar.

Top Menu will consist of the following links:

Iulius Mall, Iulius Gardens, Iulius Congress Hall, United Business Center, Parking, Contact a background image and Iulius Town logo

The Top Menu will contain also links to: Iulius Town, Opening Hours, Maps, Stores, Dining, Entertainment, Event and Promotions.

The Main Content section will consist of new posts related to the categories: Winter, Iulius Town, Events, News, Promo and Services.

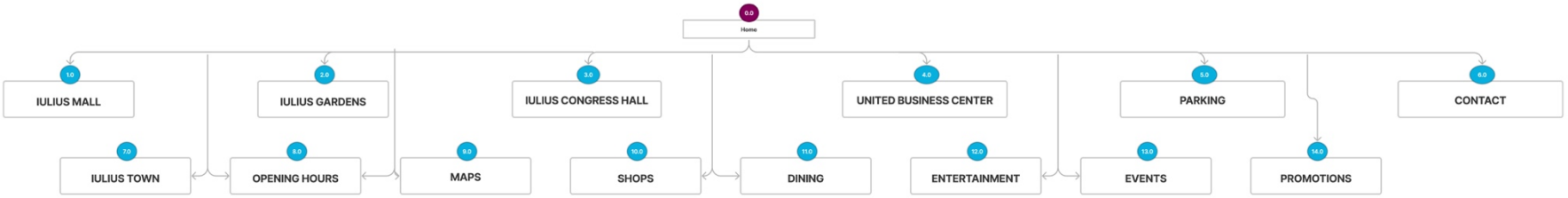
At the end of the Main Content section will be found the Fidelity section which will consist of two links: Fidelity by Iulius Mall and Partner Card.

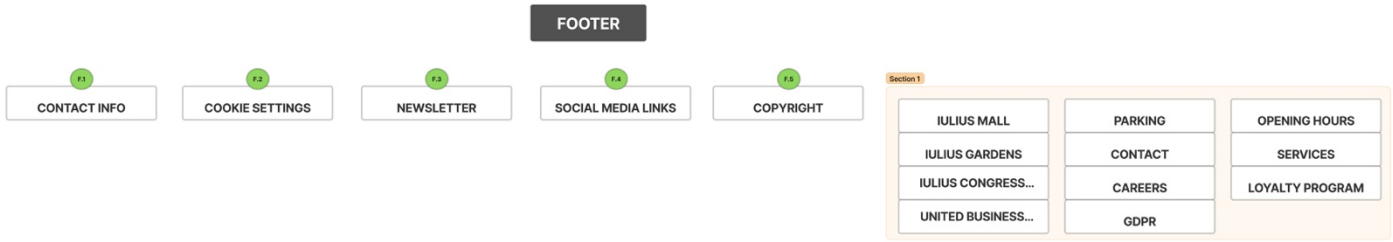
Footer section:

Iulius Town logo, Information about the company (Phone number, Email address, Location, Schedule, “SC Attrius Developments SRL, Str. Palas, nr. 7A, cladirea A1, etaj 2, birou A.b-28, RO37160477, J22/488/2017, Capital social 220 RON”).

The footer section will contain also links to: Iulius Mall, Iulius Gardens, Iulius Congress Hall, United Business Center, Parking, Contact, Careers, GDPR, Opening Hours, Services, Loyalty Program.

Also in the footer will appear links to Copyright, Links to social media accounts and a Email Newsletter Signup bar.


0.0
Home
1.0
IULIUS MALL
2.0
IULIUS GARDENS
3.0
IULIUS CONGRESS HALL
4.0
UNITED BUSINESS CENTER
5.0
PARKING
6.0
CONTACT
7.0
IULIUS TOWN
8.0
OPENING HOURS
9.0
MAPS
10.0
SHOPS
11.0
DINING
12.0
ENTERTAINMENT
13.0
EVENTS
14.0
PROMOTIONS


FOOTER
F.1
CONTACT INFO
F.2
COOKIE SETTINGS
F.3
NEWSLETTER
F.4
SOCIAL MEDIA LINKS
F.5
COPYRIGHT
Section 1
IULIUS MALL
IULIUS GARDENS
IULIUS CONGRESS...
UNITED BUSINESS...
PARKING
CONTACT
CAREERS
GDPR
OPENING HOURS
SERVICES
LOYALTY PROGRAM

4 SCOPE OF TESTING

As the diagram in section 3 shows the scope of the **www.iuliustown.ro** website testing is to test the functional utility of the website.

The purpose is to test feasibility and performance of the selected architecture. It is critical that all system and subsystem interfaces be tested as well as system performance at this early stage. Testing of system functionality and features will not be conducted on the prototype.

The software will be tested both functionally and non-functionally.

The team will begin with the home page functionality. We will search if this page, the home page is error free and it has no lags or errors when is navigated.

Also, the team will test if the homepage and other pages work well both in Romanian and English language.

Other pages that will be tested functionally: Iulius Town, Opening Hours, Maps, Stores, Dining, Entertainment, Events, Promotions.

The team will test if Facebook, Twitter, Instagram & YouTube buttons are working and lead the visitor to the specific pages.

GDPR page, Careers page, Contact page, Parking page and Newsletter box will also be tested.

The interfaces will be tested through the following devices:

- Local PCs;
- Mobile device.

A critical performance measure to test is response time to access the Homepage.

The website shall be MacOS compliant.

The website shall run in Chrome Version 108.0.5359.124 browser.

3.1 IN SCOPE

The types of testing that are in-scope are:

- Functional Testing
- User-interface Testing
- Performance Testing
- Configuration Testing
- Browser compatibility

3.2 OUT OF SCOPE

The types of testing that are out of scope are:

User Acceptance Testing (this will be performed in the development's environment but will be planned and executed by the client).

Static Testing

- Requirements
- Architecture
- Code Reviews

Non-functional Testing

- Security testing
- Mobile compatibility

Operational Acceptance Testing

- Deployment

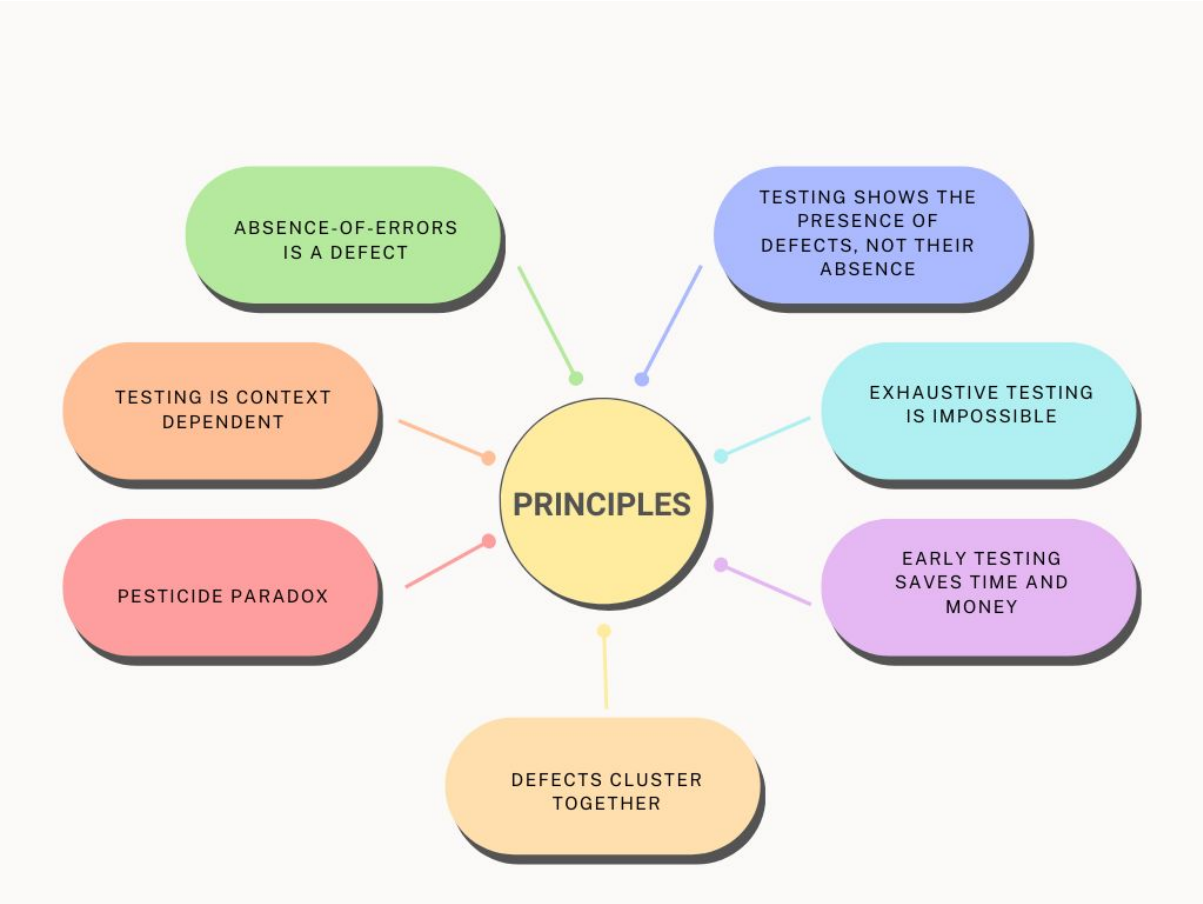
Regression testing

4 APPROACH TO TESTING

The following section describes the high-level approach to testing.

4.1 PRINCIPLES & APPLICATION

4.1.1.1 Principle



It is important to understand the risks to the business with regards to any system that is developed. Some parts of the system will be critical to the running of the business and some will not.

By understanding the risk profile, we can tune the amount & types of testing we complete. This can then give a realistic scale of testing for each project and therefore we can support the estimates we put forward.

1. Testing shows the presence of defects, not their absence

Usually we test software to discover issues, so that they can be fixed **before they are deployed to live environments** – this enables us to have confidence that our systems are working.

However, this testing process does not confirm that any software is completely correct and completely devoid of issues. As in our www.iuliustown.ro website case. Testing helps us greatly reduce the number of undiscovered defects hiding in software, but finding and resolving these issues is not itself proof that the software or system is 100% issue-free.

Additionally, ongoing monitoring and testing after systems have gone into production is **VITAL**. Thinking forward to potential issues that could arise is another good way to help mitigate against any future problems, for example considering performance testing if the www.iuliustown.ro website launching a new **sales** campaign, so we can be confident the software will withstand any anticipated larger volumes of traffic.

2. Exhaustive testing is impossible

As much as we would like to believe, it is impossible to test everything.

But in this project, www.iuliustown.ro website, we are covering vast areas, which are very important and we make sure we are testing the most important functions.

With our planned Test Cases, our test coverage remains excellent and we can be confident in our website, without testing every single line of code.

3. Early testing saves time and money

Testing early is fundamentally important in the software lifecycle. This could even mean testing requirements before coding has started, for example, is a lot easier and cheaper than doing so right at the end of the product's lifecycle, by which time whole areas of functionality might need to be re-written, leading to overruns and missed deadlines.

But this not means that after releasing, the website doesn't need to be tested. Even if our project www.iuliustown.ro is live, we can find defects and make the website easy navigable for the clients.

4. Defects cluster together

This is the idea that certain components or modules of software usually contain the most number of issues, or are responsible for most operational failures. Testing therefore, we are focused on these areas.

The Pareto principle of 80:20 can be applied – 80 percent of defects are due to 20 percent of code!

So we take into account the fact that if we find one defect in a particular area there is a strong chance of discovering many more there.

5. Pesticide paradox

If the same tests are run continuously then – while they might confirm the software is working – eventually they will fail to find new issues. It is important to keep reviewing our tests and modifying or adding to our scenarios to help prevent the pesticide paradox from occurring – maybe using varying methods of testing techniques, methods and approaches in parallel.

6. Testing is context dependent

Testing is about the context.

For example, our approach is different from an e-commerce website, which can require different types of testing and approaches to a database application.

Our approach may be similar with other presentations websites.

7. Absence-of-errors is a defect

Just because there might be a low number of issues, it does not mean the website is perfect and error-free. Meeting client expectations and requirements are just as important as ensuring quality.

4.2 TEAM – PLANNED ITERATIVE

Testing is a core discipline within Development Company's development framework (TEAM – The Development Company Adaptive Model), with engagement at each of the key stages of development as shown in the diagram below.

TEAM defines six dimensions, the core dimensions of: Process, Team and Tools and the supporting dimensions of: Communication, Culture and People. Each of these is addressed specifically in the testing discipline within the methodology.

There are two distinct software development approaches described by TEAM:

- Agile
- Planned Iterative

This project will be delivered using the Planned Iterative methodology.

Planned Iterative Principles impacting testing include:

- Testing is completed by an Independent Testing Group
- Test throughout the Project
- Focus on finding defects early in the SDLC.
- Formal Testing Scope within each iteration (Continuously verifying quality)
- Focus on testing the Architecture first.

- Test Cases derived from Use Cases.
- Tailor process and documentation for the size and complexity of the project

4.3 [TEST PHASE 1] - FIRST SPRINT

4.3.1 Objective

The objective of [Test Phase 1] is to test the website's Homepage functionality: The Homepage loads successfully, error-free on https://iuliustown.ro/, the page can be navigated without problems, the page contains all the sections and information presented. Also, in the Test Phase 1 we test the Newsletter plugin to see if the Newsletter box is displayed on the Homepage Footer.

In Test Phase 1 we also test the Mobile Interface of the website.

4.3.2 Scope

The scope of testing for [Test Phase 1] is to verify if the website Homepage is functional, the Mobile Interface contain the same information as the desktop version and the Newsletter box is displayed on the Homepage Footer.

Functional testing. The goals of these tests are to verify proper functionality, processing, and retrieval, and the appropriate implementation of the business rules.

Test objective: Ensure proper website navigation, both on local PCs and mobile devices.

User Interface Testing. The test objective is to verify that navigation through the website properly reflects business functions and requirements and the Newsletter box is conform to standards.

Configuration Testing. The goals of these tests are to validate and verify that the website function properly on different workstations, both on local PC and mobile device.

4.3.3 Test Preparation

In the process of preparing for the Testing Phase 1 has been set the objective and scope of the Testing Phase. The team has assured that all required functional documentation of the system is finished and available. Also, the team have verified that the User Stories are clear and univocal Acceptance Criteria is available.

4.3.3.1 Entry Criteria

Before the preparation phase can commence, there need to be met the following entry criteria:

- User Stories with clear and univocal Acceptance Criteria are available
- Development of all items to be tested is completed
- Production environment is configured and ready.
- All required information (test data requirements, test cases & scenarios, testers are familiar with system being tested) is available before test execution.

4.3.3.2 Exit Criteria

Before the preparation phase can commence, there need to be met the following exit criteria:

- Successful execution of the Test Script
- Meeting all Acceptance Criteria
- No open critical, major or average severity defects
- System Integration test has run successfully
- Functional website on execution

4.3.4 Test Execution

Number of Test cases planned: 3

For executing this Testing Phase, the following criteria need to be met:

- Development of all items to be tested is completed
- Production environment is configured and ready.
- All required information (test data requirements, test cases & scenarios, testers are familiar with system being tested) is available before test execution.

4.4 [TEST PHASE 2] - SECOND SPRINT

4.4.1 Objective

The objective of [Test Phase 2] is to test the website's Homepage functionality when switching to English language. We will verify if the user will see the same content in English language as in Romanian language and the Homepage contains all the sections and information presented in Romanian language.

Also, in the Test Phase 2 we test the website Contact page.

In Test Phase 2 we also test the Promotions page in English language, GDPR page in English language and the Social Media links.

4.4.2 Scope

The scope of testing for [Test Phase 2] is to verify if the website Homepage is containing the same information when switching to English language. We will test also the functionality of Contact, Promotions and GDPR pages and of the social media links.

Functional testing. The goals of these tests are to verify proper functionality, processing, and retrieval, and the appropriate implementation of the business rules.

User Interface Testing. The test objective is to verify that navigation through the website properly reflects business functions and requirements.

4.4.3 Test Preparation

In the process of preparing for the Testing Phase 2 has been set the objective and scope of the Testing Phase. The team has assured that all required functional documentation of the system is completed and available. Also, the team have verified that the User Stories are clear and univocal Acceptance Criteria is available.

4.4.3.1 Entry Criteria

Before the preparation phase can commence, there need to be met the following entry criteria:

- User Stories with clear and univocal Acceptance Criteria are available
- Development of all items to be tested is completed
- Production environment is configured and ready.
- All required information (test data requirements, test cases & scenarios, testers are familiar with system being tested) is available before test execution.

4.4.3.2 Exit Criteria

Before the preparation phase can commence, there need to be met the following exit criteria:

- Successful execution of the Test Script
- Meeting all Acceptance Criteria
- No open critical, major or average severity defects
- System Integration test has run successfully
- Functional website on execution

4.4.4 Test Execution

Number of Test cases planned: 7

For executing this Testing Phase, the following criteria need to be met:

- Development of all items to be tested is completed
- Production environment is configured and ready.
- All required information (test data requirements, test cases & scenarios, testers are familiar with system being tested) is available before test execution.
- Prior test phase has been completed meeting its exit criteria.
- No open critical/major or average severity defects unless the issue is determined to be low impact and low risk defects remaining from the prior test phase.

6. TEST ENVIRONMENTS REQUIREMENTS

6.1 PRODUCTION ENVIRONMENT

The Test Manager is responsible for setting up and maintain the production environment. Any tests executed in Production should have no impacted to the production data or functionality. This can be ensured either by executing only test cases not affecting data or by using a specific test data set or by removing removed/inactivating test data after test completion. The chosen strategy shall be documented in corresponding planning document.

The Production environment will be configured as shown below:

System and applications: https://iuliustown.ro/

Test data: Google account: flcalancea@gmail.com

Client operating system: MacOS Mojave Version 10.14.6 or above

Browser: Chrome Version 108.0.5359.124

Documentation required: Configuration guides, Installation guides, User manuals

7. TEST DATA REQUIREMENTS

The test data used for testing purposes is the Google account: flcalancea@gmail.com.

8. TESTING TOOLS & TECHNIQUES

The tools inside the testing discipline are in a permanent process of evaluation and customization so that they can offer the best solution in the right context; however, the tools described in the following sections are proposed for use in this project.

Document management system (DMS) SharePoint ECDC	SharePoint
Source Control Versioning and Work item Management (SCV/WIM)	Team Foundation Server
Service Desk, Infrastructure Change Management and Configuration Management database (CMDB)	Ivanti Service Desk
Test execution	TestCaseLab
Defect Tracking	JIRA
Test management	TestCaseLab
Record and playback	Currently MTM Microsoft Test Manager
Evaluating web site security	Acunetix

9. TESTING ROLES & RESPONSIBILITIES

The following table shows the testing roles for the project, together with the individuals involved in the testing effort.

Activity	Responsibility/Ownership	Name
Test Plan Creation	[Test Manager]	Liliana Florentina Calancea
Test Phase Plan Creation	[Test Lead]	Liliana Florentina Calancea
Test Management	[Development Company Test Manager & System Test Lead]	Corina Maxim
[Test Analysis and Design]	[Development Company Test Engineers]	Ana-Maria Ionescu
[Test Preparation, Execution & Results]	[Test Manager]	Liliana Florentina Calancea
[Test Defect Submission]	[Development Company Test Engineers]	Georgiana Redenstein
[Test Summary Reporting]	[Development Company Test Manager & Test Lead]	Liliana Florentina Calancea Corina Maxim
[Test Completion Reporting]	[Development Company Test Manager & Test Lead]	Liliana Florentina Calancea Corina Maxim
[Test Environment Deployment]	[Development Company Test Engineers]	Georgiana Redenstein

10. TEST MANAGEMENT

Overall responsibility for the Testing Project will be with the Development Company Test Manager [Liliana Florentina Calancea]. Day-to-day Test Management will be the responsibility of the Development Company Test Lead [Corina Maxim].

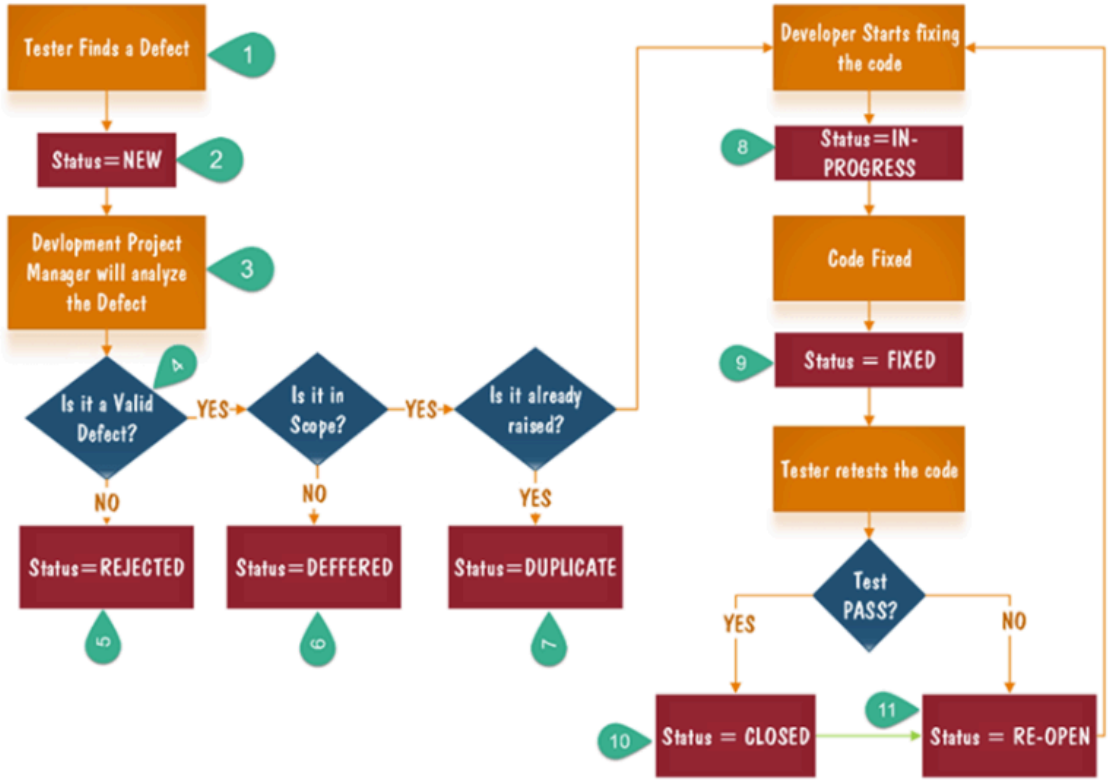
One of the key roles for the Test Management Team is to work closely with the Project Manager, Technical Lead & Lead Business Analyst to ensure that testing is integrated and executed efficiently. On that basis the Test Management Team will attend the weekly Project Managers meeting with the Technical Team Lead and the Lead Business Analyst where all actions, issues and risks are reviewed and progressed.

In addition, daily testing update meetings will be undertaken each morning, whereby each tester will be required to state their progress (what they did yesterday, what they intend to do today and any issues they have preventing them from progressing).

At the end of every Testing Phase, a Testing Review Board Meeting will be arranged. The Testing Review Board (TRB) is a review board working within a project environment assembled from the key stakeholders and decision makers for the Project. It is designed as a mechanism to review readiness for testing, testing status, and make formal strategic project decisions on testing and portfolio management.

The Project Team (Test Management, Project Management, Business Analysis and Development) will also attend a daily Defect Review Board Meeting. This is to be held at the end of each day, whilst Test Execution is in progress. The Defect Review Board (DRB) will assess errors and issues that arise during testing. The key purpose of the DRB is to prevent the testing becoming distracted by low priority issues that take them off the critical path. The DRB will carefully assess functional, technical and data implications, as well as business impact.

11. DEFECT MANAGEMENT



11.1 DEFECT MANAGEMENT PROCESS

- Subject must be concise, having a max amount of information with a minimum number of words.
- Defect comments must contain repro, expected and actual results.
- A good practice for a Tester is always to try to reduce the repro steps to the minimal number of steps; this is extremely helpful for the programmer who must find the defect.
- Remember that the only person who can close a defect is the person who opened it. Anyone can resolve it, but only the person who detected the defect can really be sure that what he found is fixed.
- No Repro means that nobody could ever reproduce the defect. Programmers often use this when the defect report is missing the repro steps.
- Every build of the software that is given to testing should have a build ID number with revision number. A fixed defect report for the build should be made available to testers through a change log provided by PM, where environment, build number and list of changes is presented. In this case, the tester is informed which non-conformities are fixed in this build and does not have to retest the defect on a version of the software where it was not even supposed to be fixed.

- If you find bug reproduction very difficult to explain, having more steps, interaction with many systems provide more visual evidence by uploading pictures and videos.
- It is not a good practice to keep track of the non-conformities both in Bugzilla and in spreadsheets or word documents. Still if you must, then make sure to include the IDs of the non-conformities from Bugzilla and always use Bugzilla as a data source when creating a word document or a spreadsheet.
- Any Change request will have the “Enhancement”.

12. TEST SCHEDULE

The following table shows the high-level testing milestones for this project.

Ref No	Stage	Project Milestone	Due date
1	Test Preparation Stage	Phase Test Plan document completed.	01/03/2023
2	Test Preparation Stage	Test analysis completed on the detailed requirements and technical documentation.	01/05/2023
3	Test Preparation Stage	Test Conditions/Cases/Scripts completed and signed off.	01/15/2023
4	Test Execution Stage	Execution of Test scripts completed.	02/25/2023

13. REFERENCED DOCUMENTS

The following table identifies the documentation used for developing this Test Strategy:

#	Document	Author	Description
1	Test Plan	[Liliana Florentina Calancea]	This document provides information regarding what specific testing will be completed on the Project.
2	Project Documentations	[Elvira Lung]	This provides information with regards to the Project as a whole.