TO-DO LIST SYSTEM WITH CALENDAR INTEGRATION

FOR

ICARUS SHIRTS (BONANZA ENTERPRISE)

A Thesis Project Presented to the
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TESTING DOCUMENTATION

INTRODUCTION

Purpose

The purpose of this Testing Documentation is to provide a comprehensive account of the testing activities performed on the To-Do List System with Calendar Integration. The primary objective of testing is to ensure that the system functions according to the requirements established during the planning and design phases, while also meeting quality standards in terms of usability, performance, and reliability. By documenting the testing process, this report serves as evidence that the system has undergone thorough evaluation before deployment.

The scope of this document covers both functional testing and non-functional testing. Functional testing verifies that each feature performs according to specifications, while non-functional testing evaluates the system's behavior under different conditions, such as speed, resource usage, and error handling. User acceptance testing was also conducted to validate that the system meets the expectations of the intended users, specifically in the context of task management for Icarus Shirts.

This document is organized into several sections. The Testing Environment section describes the hardware, software, and data setup used during the tests. The Testing Methodology section explains the approaches applied, including manual testing and the criteria used for determining success or failure. The Test Case Results section outlines the test scenarios, steps, and actual outcomes, while the Bug Tracking and Issue Log provides details on identified problems and their resolutions. Finally, the User Acceptance Testing and Conclusion sections summarize the overall results of the testing process and provide recommendations for future improvements. By presenting this Testing Documentation, the development team demonstrates a commitment to delivering a system that is not only functional but also robust, maintainable, and aligned with the needs of its users.

TESTING ENVIRONMENT

The testing environment defines the hardware, software, and data setup used to conduct the evaluation of the To-Do List System. Establishing a controlled environment ensures that the tests are reliable, repeatable, and accurately reflect the conditions under which the system is expected to operate.

Hardware Environment

The following hardware was used during testing:

- **Processor (CPU):** Intel Core i5, 3.40 GHz
- **Memory (RAM):** 16 GB DDR3
- **Storage:** 512 GB SSD
- **Display:** 24 inch monitor, 1920x1080 resolution

Software Environment

The following software tools and dependencies were installed to support system testing:

- **Operating System:** Windows 10 (64-bit)
- **Development Environment:** Microsoft Visual Studio 2010
- **Framework:** .NET Framework 4.5
- **Database Server:** Microsoft SQL Server Express 2019
- **Database Management Tool:** QL Server Management Studio (SSMS) 2022
- **Additional Libraries:** Guna UI Framework for .NET

TESTING METHODOLOGY

The testing of the To-Do List System was carried out using the Black-Box Testing methodology. This approach focuses on testing the system's functionalities from the user's perspective without examining the internal source code. By providing inputs and observing the outputs, Black-Box Testing ensures that each feature performs as intended according to the requirements specification.

Test cases and criteria

TEST CASES

Test Case ID	Requirement / Module	Test Scenario	Input	Expected Output	Actual Output	Status
TC01	Authentication	Valid login	Correct password entered	System grants access and opens Dashboard	System grants access and opens Dashboard	Pass
TC02	Authentication	Invalid login	Wrong password entered	Error message, access denied	Error message, access denied	Pass
TC03	Task Management	Add task	Enter title, description, deadline, priority, status, image	Task saved and displayed in My Task and Dashboard	Task saved and displayed in My Task and Dashboard	Pass
TC04	Task Management	Edit task	Select task, update details	Task information updated and displayed	Task information updated and displayed	Pass
TC05	Task Management	Delete task	Select task, Delete	Task removed from My Task and appears in Recycle Bin	Task removed from My Task and appears in Recycle Bin	Pass
TC06	My Vital	Extreme priority task	Add task with “Extreme” priority	Task appears in My Vital tab	Task appears in My Vital tab	Pass
TC07	Task Completion	Mark task completed	Select task, Mark Completed	Task moves to Completed tab; Dashboard updates progress	Task moves to Completed tab; Dashboard updates progress	Pass

TC08	Calendar	Display task deadline	Add task with deadline	Task appears on correct date in Calendar	Task appears on correct date in Calendar	Pass
TC09	Calendar	Multiple tasks same date	Add multiple tasks with same deadline	All tasks appear on that date in Calendar	All tasks appear on that date in Calendar	Pass
TC10	Recycle Bin	Restore deleted task	Select deleted task, Restore	Task restored to My Task with original details	Task restored to My Task with original details	Pass
TC11	Completed Tasks	Edit completed task	Select completed task, Edit details	Task updated successfully in Completed tab	Task updated successfully in Completed tab	Pass
TC12	Settings	Change password	Enter current and new password	Password updated; system requires new password at next login	Password updated; system requires new password at next login	Pass
TC13	Settings	Backup database	Run backup, select folder	.bak file generated in selected location	.bak file generated in selected location	Pass
TC14	Settings	Restore database	Select .bak file, Restore	Database restored successfully with previous data	Database restored successfully with previous data	Pass

BUG TRACKING & ISSUE LOG

Bug ID	Description	Severity	Reported By	Status	Resolution
B001	Visual Glitch from Guna Labels	Moderate	Jason, Eugene	Resolved	The bug is most probably a computer problem.

USER ACCEPTANCE TESTING

User Acceptance Testing (UAT) was conducted to verify that the To-Do List System meets the needs and expectations of its intended users at Icarus Shirts. Unlike functional testing, which focuses on technical correctness, UAT evaluates whether the system supports real-world workflows and provides a user-friendly experience.

UAT Test Scenarios and Results

Scenario ID	Test Scenario	Expected Outcome	Actual Outcome	Status
UAT01	User logs in with a valid password to access the Dashboard	Dashboard loads successfully showing recent tasks, completion percentages, and navigation panel	Dashboard displayed as expected	Pass
UAT02	User adds a new task with deadline and priority level	Task appears in My Task list, Dashboard recent tasks, and Calendar	Task displayed correctly in all sections	Pass
UAT03	User checks Calendar for upcoming tasks	Calendar displays tasks on their correct deadlines	Tasks appear in correct dates and views	Pass
UAT04	User marks a task as Completed	Task moves from My Task to Completed tab; Dashboard progress percentages update	Task moved and Dashboard updated as expected	Pass
UAT05	User deletes a task and restores it from Recycle Bin	Task appears in Recycle Bin, then is restored to My Task with original details	Task restored correctly	Pass

UAT06	User edits a completed task	Task details update successfully in Completed tab	Edits applied correctly	Pass

Feedback

These are the user feedback that the To-Do List System receives from other users while testing:

- Users have a positive feedback regarding the overall appearance of the system.
- Users have suggested to choose a different background color for the task list to make it more readable
- The navigation panel and Dashboard were reported as easy to use.
- Users confirmed that the system supports daily workflows such as task creation, monitoring deadlines, and marking tasks as complete.

Improvements

- Adjust the colors for texts.
- Added a separate database for permanent delete.
- Added a Forget Password and Create Account.
- Added Navigational buttons for the calendar

CONCLUSION AND RECOMMENDATIONS

The testing process for the To-Do List System successfully demonstrated that the system is stable, functional, and aligned with the requirements defined during the analysis and design phases. Through Black-Box Testing, each module of the system—including Authentication, Task Management, Calendar Integration, Recycle Bin, Completed Tasks, and Settings—was evaluated against its intended functionality. All defined test cases passed, confirming that the system responds correctly to both valid and invalid inputs.

The Bug Tracking and Issue Log indicated only minor interface issues, which were resolved during the testing phase. Furthermore, User Acceptance Testing (UAT) confirmed

that the system meets the expectations of its intended users at Icarus Shirts. Users found the interface intuitive, the workflows practical for daily operations, and the backup and recovery features reliable for data protection.

Overall, the testing phase validated that the To-Do List System is ready for deployment, providing users with a reliable and efficient platform for managing tasks, monitoring deadlines, and ensuring productivity.

Recommendations

Although the system performed well during testing, several areas for enhancement were identified through user feedback and observation:

1. **Calendar Navigation** – Add quick navigation buttons (e.g., jump to today, next week, or month) for faster access to deadlines.
2. **Scalability Considerations** – For future versions, optimize the database and system architecture to support a larger number of tasks and users simultaneously.
3. **Continuous Maintenance** – Regularly update the system to fix bugs, apply security patches, and improve functionality based on user feedback.

By addressing these recommendations, the system can be further refined to meet evolving user needs, improve usability, and ensure long-term sustainability in real-world operations.