Test Plan

Introduction:
The purpose of this test plan is to outline the testing approach and strategies for evaluating the functionality and non-functional aspects of the vacation management system. This system allows employees to manage their absences and enables managers to approve or decline vacation requests.

Objective:
The objective of this test plan is to ensure that the vacation management system functions correctly, meets specified requirements, and adheres to performance, usability, and security standards.

Test Items:
The test items include all features and components of the vacation management system, including but not limited to:

Employee login functionality
Absence form creation
Absence form submission
Absence viewing by employees and managers
Vacation request approval and decline by managers
Performance under varying load conditions
Usability of the absence form
Security measures implemented in the system
Test Approach:
The testing approach involves a combination of manual testing techniques to evaluate both the functionality and non-functional aspects of the system. Test cases will be executed to cover positive, negative, and edge scenarios to ensure comprehensive test coverage.

Test Criteria:
The test criteria include:

Correct functionality of all features according to specified requirements
Proper error handling and validation for invalid inputs
System response within acceptable time frames under different load conditions
Intuitive and user-friendly interface design for ease of use
Implementation of adequate security measures to protect sensitive information
Test Deliverables:
The test deliverables will include:

Test plan document outlining the testing approach and strategies
Test cases document detailing positive, negative, and edge scenarios for functionality and non-functional testing

Test Environment:
The testing will be conducted in the following environment:

Browser: Chrome, Firefox
Devices: Desktop
Operating Systems: Windows
Schedule:
The testing activities will be conducted over a period of four days, as follows:

Day 1: Positive scenario testing for functionality
Day 2: Negative and edge scenario testing for functionality
Day 3: Performance, usability, and security testing

Day 4: Test case review, documentation, and finalization of test reports
Test Cases Coverage:

Test Cases by Functionality and Scenario Type:
Functionality Testing:
Positive Scenarios:

TC_001: Check if the employee can log in with valid credentials.
TC_003: Check if the employee can access the vacation system page after logging in.
TC_004: Verify that the employee can create a new absence form.
TC_006: Verify that the employee can specify start and end dates for absence within the allowed limits.
TC_012: Verify that the employee can submit the absence form successfully with all required fields filled correctly.
TC_013: Verify that the employee can view their team's absences when valid start and end dates are provided.
TC_020: Verify that the manager can approve a vacation request successfully.
TC_081: Verify that the manager can decline a vacation request successfully.
TC_086: Verify that the employee can check the state of their vacation request, whether it's approved or declined.
Negative Scenarios:

TC_002: Verify the system's response to login with invalid credentials.
TC_007: Verify error handling for selecting a past date as the start date for the absence form.
TC_014: Verify that the system displays a message indicating no team absences when valid start and end dates are provided, but no team members are absent during that period.
TC_075: Verify that the vacation requests page displays a message indicating no requests if there are none.
Edge Scenarios:

TC_008: Verify error handling for selecting a future date beyond allowed limits as the start date for the absence form.
TC_009: Verify error handling for selecting a future date beyond allowed limits as the end date for the absence form.
TC_010: Verify error handling for selecting a future date beyond allowed limits as the Requesting Date.
TC_024: Verify that the system handles gracefully when an invalid date range is provided for showing team absences.
TC_062: Verify that the form is submitted successfully when the start and end dates are the same day.
TC_086: Verify that the employee is informed appropriately when they have no vacation requests.
TC_090: Verify that the system handles displaying an appropriate message when the employee checks the state of a non-existent or invalid request.
Non-Functional Testing:
Performance Testing:
TC_093: Verify the performance of the application under varying load conditions.
Usability Testing:
TC_094: Evaluate the usability of the Create Absence Form for users.
Security Testing:
TC_095: Validate the security measures implemented in the application.