Test Plan

Objective:

The objective of this test plan is to ensure the functionality, reliability, and usability of the employee management system, focusing on key features outlined in the provided use cases.

Scope:

This test plan will cover testing scenarios related to adding, searching, updating, and deleting employee data, as well as scheduling functionalities, leave requests, and employee profile viewing.

Resources:

* Testing team members
* Test environment (hardware, software)
* Test data (sample employee data, schedules)
* Communication tools for issue reporting

Methodologies:

* Black-box testing
* White-box testing
* Functional testing
* Regression testing

Test Cases:

UC-01: Adding Employee

1. Verify that the HR Manager can successfully add a new employee when logged in.
   1. Verify successful addition of employee data in the database.
   2. Verify that the system sends a randomly generated password to the newly added employee via email.
2. Verify handling of missing data during employee addition.
3. Verify handling of duplicate employee data.

UC-02: Searching Employee for their Department

1. Verify that the Department Manager and HR Manager can search for employees by department when logged in.
   1. Verify that the system displays a list of employees in the database.
   2. Verify narrowing down of employee list based on search criteria.
2. Verify system behavior when searching for a non-existing employee.

UC-03: Updating Employee Data

1. Verify that the HR Manager can update employee data when logged in.
   1. Verify successful retrieval and display of employee data.
   2. Verify successful modification of employee data.
   3. Verify confirmation prompt for changes.
2. Verify handling of scenarios where the employee does not exist, data is not selected, or data is unchanged.

UC-04: Deleting Employee Data

1. Verify that the HR Manager can delete employee data when logged in.
   1. Verify successful deletion of employee data.
2. Verify handling of scenarios where the employee does not exist or is not selected.

UC-05: Employee Views Scheduled Days

1. Verify that employees can view their scheduled days when logged in.
   1. Verify successful navigation to schedule page.
2. Verify display of schedule information for the selected week.

UC-06: Administrator Manually Creates Schedule

1. Verify that the Administrator can manually create schedules for employees when logged in.
   1. Verify navigation to schedule creation page.
   2. Verify selection of employee and assignment of days.
2. Verify handling of scenarios where no schedule is generated.

UC-07: Administrator Generates Schedule

1. Verify that the Administrator can automatically generate schedules for employees when logged in.
   1. Verify navigation to schedule creation page.
   2. Verify selection of generating schedules.
   3. Verify successful generation of schedules.
2. Verify handling of scenarios where no schedule is generated.

UC-08: Employee Requests for Leave

1. Verify that employees can request leave when logged in.
   1. Verify successful submission of leave request.
2. Verify handling of scenarios where the requested period exceeds 3 days or falls within the current week.

UC-09: Employee Views Personal Details

1. Verify that employees can view their personal details when logged in.
   1. Verify successful navigation to personal data page.
   2. Verify display of personal information.

UC-10: Employee First Time Login

1. Verify that employees can log in for the first time using auto-generated password sent through email.
   1. Verify successful redirection to password creation page.
   2. Verify successful creation and confirmation of new password.
2. Verify handling of scenarios where the input information is incorrect or the new password is not valid.

Conclusion:

This test plan outlines the approach, objectives, scope, resources, methodologies, and specific test cases for testing the employee management system. By executing these test cases, we aim to ensure that the system meets quality standards and provides a reliable and user-friendly experience for HR Managers, Department Managers, and Employees.