

# Verification Test Plan

Unit Testing:

Test Set 1:

Employee newEmployee(): Employee

Employee e

e.UserID = 1234

e.password = Password1234

If (e.passwordCorrect() == true)

    e.logIn()

    Return PASS

Else

    Return FAIL

Test Set 2:

PayrollAdmin newPayrollAdmin(): PayrollAdmin

PayrollAdmin p

p.UserID = 0987

p.password = Password0987

p.viewEmployeeHours()

If (p.enterToPayroll() != "access denied")

    Return PASS

Else

    Return FAIL

Integration Testing:

Test Set 1: Login and Clock-In Connection

After an employee logs in, the system should let them clock-in. If login fails, they shouldn't be able to access the clock-in page.

1. Employee enters correct username and password, go to clock-in screen
2. Employee enters wrong password, receive error and return to sign-in

Expected result: Only valid users can clock-in.

Test Set 2: Clock-In and Database

Check that when an employee clocks in or out, the information is properly saved in the database.

1. Employee clocks in at 8:00 AM, system saves the record in the database
2. Same employee clocks out at 5:00 PM, database updates that record with the new time
3. If the database is offline, system shows an error message

Expected result: Clock-in/out data is saved correctly in the database. If saving fails, an error message appears.

System Testing:

#### Test Set 1: Start to End Workflow

- Purpose: Verify the full process from employee clock-in to payroll submission.
- Test Steps:
  - An employee clocks in at 9am and out at 5pm for five consecutive workdays
  - A manager reviews and approves the employee's recorded time working.
  - The system transfers the approved total time working to the payroll system
- Expected result: The payroll system accurately records 40 total approved hours for the employee.
- This test ensures that the time recording system, approval, and payroll system all work correctly and seamlessly

#### Test Set 2: Role Based Access

- Purpose: Confirms that permission and access are correctly given to the right user, based on roles.
- Test Steps:
  - An employee tries to access administrative settings (should be denied)
  - A manager views employees clock-in clock-out records and approves time working (should be approved)
  - An administrator edits user accounts and generates company wide reports (should be approved)
- Expected Results: Each user is restricted to actions allowed by their roles.
- This Test verifies the effectiveness of a role based system and prevents unauthorized access.