

## Testing Phase

Date	25 JUNE 2025
Team ID	LTVIP2025TMID29797
Project Name	workforce administration solution (dev)
Maximum Marks	

**Objective:** Ensure the functionality, security, and performance of the workforce administration solution during its development phase.

### ✓ Key Testing Areas

#### 1. Functional Testing

- Employee onboarding/offboarding workflows
- Leave & attendance tracking
- Payroll integration (if applicable)
- Role-based access control

#### 2. UI/UX Testing

- Navigation flows
- Mobile/responsive design behavior
- Accessibility compliance (WCAG standards)

#### 3. Integration Testing

- ERP/HRIS systems (SAP, Workday, etc.)
- Third-party services (background checks, payroll, benefits)

#### 4. Performance Testing

- Load handling (concurrent logins, bulk updates)

- System response times during peak hours

## **5. Security Testing**

- User authentication & authorization
- Data encryption (at rest and in transit)
- GDPR/HIPAA compliance checks (if relevant)

## **6. Regression Testing**

- Ensure new features don't break existing ones
- Automated test scripts for repeated runs

## **7. User Acceptance Testing (UAT)**

- Conducted by HR managers or stakeholders
- Validate if business needs are being met

## **Tools You Might Use**

- **JIRA** – Test case management and bug tracking
- **Selenium/Cypress** – Automation testing
- **Postman** – API testing
- **JMeter/Locust** – Load and performance testing
- **OWASP ZAP/Burp Suite** – Security testing

## Example Testing Timeline

Phase	Duration	Owner(s)
Test Planning	1 week	QA Lead, PM
Test Case Development	2 weeks	QA Engineers
Test Execution	3 weeks	QA + Dev Team
Bug Fixes & Retesting	2 weeks	Developers + QA
UAT & Sign-off	1 week	Stakeholders/HR

## Data Migration & Validation Testing

### Why It Matters:

When moving from a legacy HR system or spreadsheet-based tracking to a new workforce solution, **data integrity** is critical.

### Key Focus Areas:

- Validate import of employee records, payroll data, attendance history, etc.
- Check field mappings between old and new systems
- Test for data loss, duplicates, or formatting issues
- Reconcile totals (e.g., leave balances, salary figures)

### Tools:

- SQL queries for validation
- ETL tools (if large-scale migration involved)
- Manual spot checks for sensitive data

## **Analytics & Reporting Verification**

### **Why It Matters:**

Workforce administrators rely on reports for compliance, planning, and management decisions.

### **Key Focus Areas:**

- Test built-in reports (e.g., headcount, attrition, attendance summaries)
- Verify custom reporting features
- Validate accuracy of dashboard visualizations and KPIs
- Check role-based access to sensitive reports (e.g., salary reports)

### **Considerations:**

- Test export functionality (PDF, Excel, CSV)
- Confirm scheduled reports trigger correctly (e.g., monthly payroll reports)