

# Learnix Badge & Certificate System - Progress Tracker

## Project Overview

**Project Name:** Learnix Badge & Certificate System

**Start Date:** March 15, 2025

**Target Completion:** June 7, 2025

**Current Status:** Phase 2 - Core Component Development

**Overall Progress:** 55% Complete

## Phase Status Summary

Phase	Description	Status	Progress	Due Date
1	Foundation & Setup	✅ COMPLETED	100%	April 1, 2025
2	Core Functionality	🔄 IN PROGRESS	70%	May 1, 2025
3	User Interfaces	⌚ PENDING	0%	May 22, 2025
4	Testing & Refinement	⌚ PENDING	0%	June 5, 2025
5	Deployment & Support	⌚ PENDING	0%	June 7, 2025

## Executive Summary

The Badge and Certificate System implementation is progressing exceptionally well, with the certificate system components now fully completed. Phase 1 has been successfully completed, and Phase 2 is now 70% complete, significantly ahead of our planned schedule.

### Key Achievements:

- Database schema confirmed and implemented
- Badge design system finalized
- All certificate system components completed**
- HTML certificate templates completed for all types
- Print-specific CSS and controls implemented
- Verification system fully implemented

### Current Focus:

- Badge SVG template development

- Badge awarding logic
- Progress tracking integration
- Security measures for the overall system

### **Key Challenges:**

- Integrating badge system with existing progress tracking
- Testing badge awarding triggers under various scenarios





## **Detailed Progress Tracking**

### **Phase 1: Foundation & Setup (100% Complete)**





#### **1.1 Database Implementation (100% Complete)**

-  Badge definition tables
-  User badge tables
-  Certificate record tables
-  Verification tables
-  Relationship/constraint setup
-  Index configuration





#### **1.2 Asset Preparation (100% Complete)**

-  Badge tier concept designs
-  Achievement icon concept designs
-  Certificate template concepts
-  Certificate asset gathering

#### **1.3 Core Service Structure (100% Complete)**






-  Badge manager service design
-  Certificate generator service design
-  Verification service architecture
-  Notification integration planning

#### **1.4 Development Environment (100% Complete)**








-  Version control configuration
-  Development environment setup
-  Testing framework selection
-  Deployment pipeline design

## Phase 2: Core Functionality Development (45% Complete)






### 2.1 Badge System Core (60% Complete)

-  Badge definition management
-  Badge criteria evaluation engine
-  SVG template system (In Progress - 70%)
-  Badge awarding service (Pending)
-  Badge display components (In Progress - 40%)





### 2.2 Certificate System Core (100% Complete)

-  HTML certificate templates
-  Variable replacement system
-  QR code generation
-  Certificate record management
-  Browser print functionality
-  Print-specific CSS
-  Print control interface

### 2.3 Integration Services (40% Complete)

-  Progress tracking hooks (In Progress - 50%)
-  Course completion triggers (Pending)
-  Notification dispatchers (Pending)
-  Verification endpoints
-  Social sharing functionality (Pending)

### 2.4 Security Implementation (60% Complete)

-  Certificate verification system
-  Anti-forgery measures (Pending)
-  Access controls (Pending)
-  Audit logging (Pending)

## Phase 3: User Interface Development (0% Complete)

### 3.1 Admin Interfaces (0% Complete)

-  Badge management dashboard (Pending)

- 🕒 Certificate template editor (Pending)
- 🕒 Criteria configuration interface (Pending)
- 🕒 Reporting and analytics views (Pending)

### 3.2 Student/User Interfaces (0% Complete)

- 🕒 Badge collection/showcase view (Pending)
- 🕒 Certificate listing interface (Pending)
- 🕒 Certificate viewing with print controls (Pending)
- 🕒 Progress and achievement tracking views (Pending)
- 🕒 Social sharing interface (Pending)

### 3.3 Public Interfaces (0% Complete)

- 🕒 Certificate verification page (Pending)
- 🕒 Embeddable badge widgets (Pending)
- 🕒 Public achievement showcase (Pending)

## Phase 4: Testing & Refinement (0% Complete)

### 4.1 Testing Execution (0% Complete)

- 🕒 Unit testing (Pending)
- 🕒 Integration testing (Pending)
- 🕒 Browser compatibility testing (Pending)
- 🕒 Print testing (Pending)
- 🕒 User acceptance testing (Pending)
- 🕒 Performance testing (Pending)

### 4.2 Performance Optimization (0% Complete)

- 🕒 Database query optimization (Pending)
- 🕒 Asset loading improvements (Pending)
- 🕒 Caching implementation (Pending)
- 🕒 Client-side performance tuning (Pending)

### 4.3 Refinement (0% Complete)

- 🕒 UI/UX improvements (Pending)
- 🕒 Accessibility enhancements (Pending)
- 🕒 Mobile experience optimization (Pending)

- 🕒 Print layout refinement (Pending)

## Phase 5: Deployment & Support (0% Complete)

### 5.1 Deployment Planning (0% Complete)

- 🕒 Deployment schedule (Pending)
- 🕒 Rollback procedures (Pending)
- 🕒 Monitoring setup (Pending)
- 🕒 Documentation preparation (Pending)

### 5.2 Training (0% Complete)









- 🕒 Administrator training (Pending)
- 🕒 Support staff training (Pending)
- 🕒 User documentation (Pending)

## Milestone Progress




Milestone	Description	Target Date	Status
M1	Database schema complete	Mar 22, 2025	✅ COMPLETED
M2	Badge design system finalized	Mar 29, 2025	✅ COMPLETED
M3	Certificate HTML approach validated	Apr 5, 2025	✅ COMPLETED
M4	First functional badge generation	Apr 15, 2025	🔄 IN PROGRESS
M5	First printable certificate	Apr 22, 2025	✅ COMPLETED
M6	Complete badge & certificate backend	May 1, 2025	🕒 PENDING
M7	Admin interfaces functional	May 10, 2025	🕒 PENDING
M8	Student interfaces functional	May 17, 2025	🕒 PENDING
M9	Public verification system live	May 22, 2025	🕒 PENDING
M10	Testing complete	Jun 5, 2025	🕒 PENDING
M11	System fully deployed	Jun 7, 2025	🕒 PENDING

## File Implementation Status

### Badge System Files







File	Status	Progress	Assigned To
assets/img/badges/tiers/bronze.svg	 IN PROGRESS	90%	Alex
assets/img/badges/tiers/silver.svg	 IN PROGRESS	80%	Alex
assets/img/badges/tiers/gold.svg	 IN PROGRESS	70%	Alex
assets/img/badges/tiers/platinum.svg	 IN PROGRESS	60%	Alex
assets/img/badges/achievements/*.svg	 IN PROGRESS	40%	Alex
assets/js/badges/badge-generator.js	 IN PROGRESS	30%	Taylor
assets/js/badges/badge-display.js	 PENDING	0%	Taylor
assets/js/badges/badge-sharing.js	 PENDING	0%	Taylor

## Certificate System Files

File	Status	Progress	Assigned To
templates/certificates/certificate.html	 COMPLETED	100%	Jordan
assets/js/certificates/print-handler.js	 COMPLETED	100%	Taylor
assets/js/certificates/verification.js	 COMPLETED	100%	Taylor

*Note: Certificate CSS is embedded directly in the HTML file, following the simplified single-template approach*

## Backend Components

File	Status	Progress	Assigned To
backend/badges/BadgeManager.php	 PENDING	0%	Morgan
backend/badges/BadgeAwarder.php	 PENDING	0%	Morgan
backend/badges/BadgeRepository.php	 IN PROGRESS	40%	Morgan
backend/certificates/CertificateGenerator.php	 COMPLETED	100%	Morgan
backend/certificates/VerificationService.php	 COMPLETED	100%	Morgan
backend/progress/ProgressTracker.php	 IN PROGRESS	25%	Morgan

## Last Week's Accomplishments

- 1. Completed all certificate system components
- 2. Finalized print-specific CSS for perfect paper/PDF output
- 3. Implemented complete print control interface
- 4. Finished certificate verification system
- 5. Integrated QR code verification

## Current Week Focus

- 1. Complete remaining badge tier SVG templates

- 2. Accelerate badge generation engine development
- 3. Begin development of badge awarding service
- 4. Continue progress on badge repository
- 5. Plan user interface requirements for badge showcase

Blockers & Issues

ID	Description	Impact	Mitigation Plan	Status
B1	Print formatting inconsistencies in Safari	Medium	Develop specific CSS overrides for Safari	In Progress
B2	SVG rendering performance in Internet Explorer	Low	Implement fallback PNG generation for IE	Not Started

Next Sprint Planning

Sprint 5 (April 22-29)

- 1. Complete all badge SVG templates and achievement icons
- 2. Finalize all certificate HTML templates
- 3. Implement complete print functionality
- 4. Develop badge awarding service
- 5. Create basic certificate listing interface

Resource Allocation

Resource	Allocation	Current Focus
Alex (Designer)	100%	Badge SVG templates and icons
Taylor (Frontend Dev)	100%	JS components for badges and certificates
Jordan (Frontend Dev)	100%	Certificate HTML/CSS templates
Morgan (Backend Dev)	100%	PHP backend services
QA Team	25%	Testing framework setup

Budget Tracking

Category	Allocated	Spent	Remaining	% Used
Development	\$48,000	\$16,800	\$31,200	35%
Design	\$12,000	\$5,400	\$6,600	45%
QA	\$9,000	\$2,250	\$6,750	25%
Infrastructure	\$6,000	\$3,000	\$3,000	50%
Total	\$75,000	\$27,450	\$47,550	36.6%

# Risk Register

Risk ID	Description	Probability	Impact	Mitigation
R1	Browser compatibility issues	Medium	High	Comprehensive testing across browsers
R2	Print format inconsistencies	High	Medium	Print-specific CSS with device testing
R3	Integration with progress system	Medium	Medium	Early interface definition
R4	Performance under load	Low	High	Load testing and optimization

## Status Meeting Notes

**Date:** April 15, 2025

**Attendees:** Project Team, Product Owner, Technical Lead

**Key Discussion Points:**

- HTML certificate approach has been validated with stakeholders
- Print functionality testing plan expanded to include more devices
- Decision to prioritize certificate templates before badge display components
- Additional resources requested for browser compatibility testing

**Action Items:**

1. Schedule print testing session with QA team (Morgan)
2. Create fallback rendering options for older browsers (Taylor)
3. Prepare demo of certificate HTML templates for next stakeholder meeting (Jordan)
4. Document print instructions for various browsers (Documentation Team)

## Appendix: Updates to Implementation Plan

Based on progress to date, the following updates have been made to the implementation plan:

1. Certificate template approach confirmed with HTML-only strategy
2. Print testing expanded to include mobile browsers
3. SVG template system requires additional performance optimization
4. Added Safari-specific CSS requirements for print functionality