

Feature : Posts & Articles Form

Document History

Document Version	Total Test Cases	Last Updated	Review Status
1.0	59	September 2025	Ready for stakeholder review

Test Project Information

Test Manager	Senior QA Engineer
Test Lead	QA Team Lead
Test Cycle	1
Build History	1.0.0
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Posts & Articles Form Analysis

Element	Type	Description	Functionality
Title	Header	"Posts & Articles"	Page/section identifier
User Avatar	Image	Profile image placeholder	User identification
Text Input Area	Text Field	Placeholder: "testing message"	Primary content input
File Upload Area	Upload Zone	"Drag'n'drop or upload"	File attachment functionality
Post Button	Submit Button	"Post"	Form submission
Write Article Button	Navigation Button	"Write article"	Alternative content creation

PRD Requirements

Requirement	Description
Feature	Posts & Articles Form
Description	The Posts & Articles form allows users to create and submit text-based posts with optional file attachments. Users can input text content, upload files via drag-and-drop or click-to-browse functionality, and submit their posts to the platform.
Purpose	Enable users to share content, thoughts, and media through a streamlined posting interface that supports both text and multimedia content.
User Problem	Users need a simple, intuitive way to share content with their network without complex interfaces or multiple steps.
User Value	Users can quickly create posts with text and media in a single, unified interface that provides immediate feedback and validation.
Assumptions	Users have valid authentication and authorization; File uploads support common media formats; Content moderation systems are in place.
Not Doing	Advanced text formatting (rich text editor); Video upload functionality in initial release; Real-time collaboration features.

Test Plan Requirements

Topic	Description	Activity	Size	Weight	Platform
Week 1					
Functionality	Test core posting features and input validation	<ul style="list-style-type: none"> • Text input validation • File upload testing • Form submission flows 	L	2.5	ALL
Security	Validate input sanitization and security controls	<ul style="list-style-type: none"> • XSS prevention • File upload security • Authentication checks 	L	3.0	ALL
Week 2					
Performance	Measure form response times and load handling	<ul style="list-style-type: none"> • Load time measurement • Concurrent user testing • File upload performance 	M	2.0	ALL
Usability	Evaluate user experience and accessibility	<ul style="list-style-type: none"> • UI/UX validation • Accessibility compliance • Cross-device testing 	M	1.5	ALL

1. FUNCTIONALITY TESTING

1.1 Test Case : Text Input Field Testing

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_FUNC_001	Verify text input accepts valid text	Click on text area and enter "Sample post message"	Text appears in field, cursor active		WIN	CHR	Standard text input	High		
TC_FUNC_002	Verify character limit handling	Enter text exceeding expected limit (5000+ chars) and continue typing	Character counter appears or input stops at limit		WIN	CHR	Test boundary conditions	High		
TC_FUNC_003	Verify empty text submission	Leave text field empty and click "Post" button	Error message displayed or button disabled		WIN	CHR	Required field validation	High		
TC_FUNC_004	Verify text formatting preservation	Enter text with line breaks and submit post	Line breaks preserved in output		WIN	CHR	Format preservation	Medium		
TC_FUNC_005	Verify placeholder text behavior	Click in empty field and start typing	Placeholder disappears, user text appears		WIN	CHR	Placeholder behavior	High		

1.2 Test Case : File Upload Testing

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_FUNC_006	Verify drag and drop upload	Drag valid image file to upload area and drop file	File uploaded successfully, preview shown		WIN	CHR	Drag & drop primary function	High		
TC_FUNC_007	Verify click to upload	Click "upload" link and select valid file from dialog	File selection dialog opens, file uploads		WIN	CHR	Click-to-upload alternative	High		
TC_FUNC_008	Verify multiple file upload	Select multiple files and attempt upload	Multiple files uploaded or appropriate limitation message		WIN	CHR	Multiple file handling	Medium		
TC_FUNC_009	Verify file type restrictions	Upload non-supported file type (.exe) and attempt submission	Error message for unsupported file type		WIN	CHR	File type validation	High		
TC_FUNC_010	Verify file size limits	Upload oversized file (>10MB) and attempt submission	Error message for file size exceeded		WIN	CHR	File size validation	High		

1.3 Test Case : Form Submission Testing

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_FUNC_011	Verify successful post submission	Enter valid text and click "Post" button	Post submitted successfully, confirmation shown		WIN	CHR	Core submission flow	High		
TC_FUNC_012	Verify post with text and file	Enter text and upload file, then click "Post" button	Both text and file posted successfully		WIN	CHR	Combined content submission	High		
TC_FUNC_013	Verify form reset after submission	Submit valid post and check form state	Form fields cleared/reset to initial state		WIN	CHR	Post-submission cleanup	Medium		
TC_FUNC_014	Verify duplicate submission prevention	Submit post and immediately click "Post" again	Duplicate submission prevented		WIN	CHR	Double-click prevention	Medium		

1.4 Test Case : Write Article Functionality

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_FUNC_015	Verify "Write article" button functionality	Click "Write article" button	Redirects to article creation page/modal		WIN	CHR	Article functionality	High		
TC_FUNC_016	Verify article vs post differentiation	Compare article and post features	Different interfaces/options for each		WIN	CHR	Feature differentiation	Medium		

2. SECURITY TESTING

2.1 Test Case : Input Validation Testing

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_SEC_001	XSS attack prevention	Enter <script>alert('xss')</script> and submit post	Script tags sanitized, no alert execution		WIN	CHR	XSS prevention critical	Critical		
TC_SEC_002	SQL injection prevention	Enter ' ; DROP TABLE posts; -- and submit post	Input sanitized, no database impact		WIN	CHR	SQL injection prevention	Critical		
TC_SEC_003	HTML injection testing	Enter malicious HTML tags and submit post	HTML tags escaped or sanitized		WIN	CHR	HTML injection prevention	High		
TC_SEC_004	Special character handling	Enter various special characters	Characters properly encoded/handled		WIN	CHR	Special character handling	Medium		

		!@#\$%^&*() and submit post								
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2.2 Test Case : File Upload Security

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_SEC_005	Malicious file upload prevention	Upload executable file (.exe, .bat) and attempt submission	File rejected, error message shown		WIN	CHR	Malicious file prevention	Critical		
TC_SEC_006	File content validation	Upload image with embedded script and submit post	File content scanned, threats removed		WIN	CHR	File content scanning	High		
TC_SEC_007	File name injection testing	Upload file with malicious filename and submit post	Filename sanitized		WIN	CHR	Filename injection prevention	Medium		

2.3 Test Case : Authentication & Authorization

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_SEC_008	Unauthenticated user access	Access form without authentication and attempt to post	Redirected to login or access denied		WIN	CHR	Authentication requirement	High		
TC_SEC_009	Session timeout handling	Let session expire and attempt to post	Session validation, re-authentication required		WIN	CHR	Session timeout handling	High		
TC_SEC_010	CSRF protection	Submit form from external domain and check processing	CSRF token validation prevents processing		WIN	CHR	CSRF protection	High		

3. PERFORMANCE TESTING

3.1 Test Case : Load Time Testing

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_PERF_001	Form load time measurement	Navigate to posts page and measure load time	Page loads within 3 seconds		WIN	CHR	Initial load performance	High		
TC_PERF_002	File upload performance	Upload various file sizes and measure upload time	Upload completes within acceptable timeframe		WIN	CHR	File upload performance	Medium		
TC_PERF_003	Post submission response time	Submit post and measure response time	Submission processed within 2 seconds		WIN	CHR	Submission response time	High		

3.2 Test Case : Concurrent User Testing

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_PERF_004	Multiple simultaneous posts	Simulate 100 concurrent post submissions and monitor system performance	All posts processed without errors		WIN	CHR	High load handling	High		
TC_PERF_005	File upload under load	Multiple users upload files simultaneously and monitor upload performance	Uploads complete successfully under load		WIN	CHR	Concurrent file handling	Medium		

4. USABILITY TESTING

4.1 Test Case : User Interface Testing

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_UI_001	Visual layout verification	View form on different screen sizes and check element alignment	Elements properly aligned and visible		WIN	CHR	Responsive design	High		
TC_UI_002	Button state feedback	Click "Post" button and observe visual feedback	Button shows loading/disabled state		WIN	CHR	Visual feedback	Medium		
TC_UI_003	Error message display	Trigger validation error and check error presentation	Clear, helpful error messages displayed		WIN	CHR	Error message clarity	High		
TC_UI_004	Drag and drop visual feedback	Drag file over upload area and observe visual changes	Upload area highlights/changes appearance		WIN	CHR	Drag feedback	Medium		

4.2 Test Case : Accessibility Testing

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_ACC_001	Keyboard navigation	Navigate form using only keyboard and test all interactive elements	All elements accessible via keyboard		WIN	CHR	Keyboard navigation	High		
TC_ACC_002	Screen reader compatibility	Use screen reader to navigate form and verify element descriptions	All elements properly labeled for screen readers		WIN	CHR	Screen reader support	High		
TC_ACC_003	Color contrast validation	Check text and background colors and verify contrast ratios	Meets WCAG contrast requirements		WIN	CHR	Accessibility compliance	Medium		
TC_ACC_004	Focus indicators	Tab through form elements and check focus visibility	Clear focus indicators on all elements		WIN	CHR	Focus visibility	Medium		

5. COMPATIBILITY TESTING

5.1 Test Case : Browser Compatibility

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_COMP_001	Cross-browser functionality - Chrome	Test form functionality in Chrome	Form functions identically		WIN	CHR	Chrome baseline	High		
TC_COMP_002	Cross-browser functionality - Firefox	Test form functionality in Firefox	Form functions identically		WIN	FFX	Firefox compatibility	High		
TC_COMP_003	Cross-browser functionality - Edge	Test form functionality in Edge	Form functions identically		WIN	EDG	Edge compatibility	High		
TC_COMP_004	Cross-browser functionality - Safari	Test form functionality in Safari	Form functions identically		MAC	SFR	Safari compatibility	High		
TC_COMP_005	File upload compatibility	Test file upload in all major browsers	Upload works in all supported browsers		WIN	ALL	File upload cross-browsers	High		
TC_COMP_006	JavaScript compatibility	Test all interactive features in different browsers	All interactive features work properly		WIN	ALL	JavaScript compatibility	High		

5.2 Test Case : Device Compatibility

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_COMP_007	Mobile responsiveness	View form on mobile devices and test all functionality	Form adapts to mobile screen, fully functional		IOS	SFR	Mobile responsiveness	High		
TC_COMP_008	Tablet compatibility	View form on tablet and test touch interactions	Optimized for tablet interface		IOS	SFR	Tablet compatibility	Medium		
TC_COMP_009	Touch gesture support	Test drag and drop on touch devices and verify touch interactions	Touch gestures work properly		IOS	SFR	Touch interface	Medium		
TC_COMP_010	Android compatibility	Test form functionality on Android devices	Form functions properly on Android		AND	CHR	Android compatibility	Medium		

6. INTEGRATION TESTING

6.1 Test Case : Backend Integration

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_INT_001	Database connectivity	Submit post and verify data storage	Post data correctly stored in database		WIN	CHR	Database connectivity	High		
TC_INT_002	File storage integration	Upload file and verify file storage	File correctly stored in designated location		WIN	CHR	File storage integration	High		
TC_INT_003	API response handling	Submit form and check API responses	Proper error handling for API failures		WIN	CHR	API resilience	High		

6.2 Test Case : Third-party Integration

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_INT_004	CDN file delivery	Upload file and access uploaded file	Files served via CDN properly		WIN	CHR	CDN integration	Medium		
TC_INT_005	Notification system	Submit post and check notifications	Appropriate notifications triggered		WIN	CHR	Notification system	Low		

7. DATA VALIDATION TESTING

7.1 Test Case : Input Data Validation

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_DATA_001	Text length validation	Enter text of various lengths and submit form	Appropriate validation for min/max length		WIN	CHR	Length validation	High		
TC_DATA_002	Unicode character support	Enter Unicode characters (emojis, foreign text) and submit post	Unicode characters properly handled		WIN	CHR	Unicode support	Medium		
TC_DATA_003	Whitespace handling	Enter only whitespace and submit form	Whitespace-only input properly validated		WIN	CHR	Whitespace handling	Medium		

7.2 Test Case : File Validation

Test Case ID	Test Description	Action	Expected Output	Actual Output	Platform	Browser	Comments	Priority	P/F	LOG
TC_DATA_004	Image format validation	Upload various image formats and check acceptance	Supported formats accepted, others rejected		WIN	CHR	Image format validation	High		
TC_DATA_005	File corruption detection	Upload corrupted file and attempt submission	Corrupted files detected and rejected		WIN	CHR	File integrity check	Medium		

Appendix : Test Execution Priority

Critical/High Priority Tests

- Security Tests : XSS, SQL injection, authentication.
- Core Functionality : Basic text input and submission.
- File Upload Security : Malicious file prevention.
- Authentication : Access control and session management.

Medium Priority Tests

- Performance Tests : Load times and concurrent handling.
- Usability Tests : User experience and accessibility.
- Integration Tests : Backend and third-party integration.
- Browser Compatibility : Cross-browser functionality.

Low Priority Tests

- Advanced Features : Article functionality.
- Edge Cases : Unicode and whitespace handling.
- Device Compatibility : Mobile and tablet testing.

Appendix : Test Environment Requirements

Supported Platforms and Browsers

- Windows 10/11 : Chrome (latest), Firefox (latest), Edge (latest).
- macOS 12+ : Safari (latest), Chrome (latest), Firefox (latest).
- iOS 15+ : Safari, Chrome.
- Android 10+ : Chrome, Samsung Browser.

Test Data Requirements

- User Accounts : Valid authenticated users with posting permissions.
- Test Content :
 - Sample text : Short (1-50 chars), Medium (51-500 chars), Long (501-5000 chars).
 - Special characters : Unicode, emojis, HTML entities.
 - Malicious content : XSS scripts, SQL injection attempts.
- Test Files :
 - Valid images : JPG, PNG, GIF (various sizes: 1KB-10MB).
 - Invalid files : EXE, BAT, SCR executable files.
 - Corrupted files : Damaged image headers.
- Network Conditions : Fast (>10Mbps), Slow (1-3Mbps), Intermittent connectivity.

Required Tools and Infrastructure

- Load Testing : JMeter or LoadRunner for concurrent user simulation.
- Security Testing : OWASP ZAP, Burp Suite for vulnerability assessment.
- Accessibility Testing : WAVE, axe browser extensions.
- Cross-browser Testing : BrowserStack or Sauce Labs.
- Performance Monitoring : Browser DevTools, WebPageTest.
- Test Management : JIRA, TestRail, or Azure DevOps for tracking.

Appendix : Risk Assessment and Mitigation Strategies

High Risk Areas

1. File Upload Security (Risk Level : Critical)

Risk : Malicious file uploads could compromise system security, enable server-side attacks, or expose other users to threats.

Mitigation Strategies :

- Implement strict file type validation (whitelist approach).
- Scan all uploads with antivirus/malware detection.
- Store uploaded files in a sandboxed environment.
- Implement file size limits and rate limiting.
- Use CDN with security scanning capabilities.

2. Input Sanitization (Risk Level : Critical)

Risk : XSS and injection attacks could compromise user accounts, steal sensitive data, or deface the application.

Mitigation Strategies :

- Implement comprehensive input validation and sanitization.
- Use parameterized queries for database interactions.
- Apply Content Security Policy (CSP) headers.
- Regular security code reviews and penetration testing.
- Automated security scanning in CI/CD pipeline.

3. Authentication and Authorization (Risk Level : High)

Risk : Unauthorized access could lead to data breaches, spam posting, or content manipulation.

Mitigation Strategies :

- Implement robust session management.
- Use secure authentication protocols.
- Apply the principle of least privilege.
- Monitor and log all access attempts.
- Implement account lockout mechanisms.

Medium Risk Areas

1. Performance Degradation (Risk Level : Medium)

Risk : Poor performance could impact user experience, reduce adoption, and affect system scalability.

Mitigation Strategies :

- Define and monitor performance SLAs (3-second load time, 2-second submission).
- Implement caching strategies.
- Use CDN for static content delivery.
- Regular performance testing and monitoring.
- Database query optimization.

2. Cross-browser Compatibility (Risk Level : Medium)

Risk : Feature failures on specific browsers could exclude user segments and reduce platform accessibility.

Mitigation Strategies :

- Comprehensive cross-browser testing matrix.
- Progressive enhancement approach.
- Feature detection instead of browser detection.

- Regular testing on new browser versions.
- Graceful degradation for unsupported features.

3. Mobile User Experience (Risk Level : Medium)

Risk : Poor mobile experience could limit platform accessibility and user engagement.

Mitigation Strategies :

- Mobile-first responsive design approach.
- Touch-friendly interface design.
- Alternative upload methods for mobile devices.
- Regular testing on various device types.
- Performance optimization for mobile networks.

Low Risk Areas

1. Advanced Feature Integration (Risk Level : Low)

Risk : Article functionality or advanced features may not integrate properly with existing systems.

Mitigation Strategies :

- Incremental feature rollout.
- Feature flags for controlled deployment.
- Comprehensive integration testing.
- User acceptance testing for new features.

Appendix : Issue Tracking and Management

Issue Categories and Severity Levels

Categories

- FUNC : Functionality issues and feature failures.
- SEC : Security vulnerabilities and authentication problems.
- PERF : Performance problems and slow response times.
- UI : User interface issues and usability problems.
- COMP : Compatibility problems across browsers/devices.
- ACC : Accessibility violations and compliance issues.
- INT : Integration failures and third-party service issues.
- DATA : Data validation and corruption issues.

Severity Levels

- Critical : System failure, security breach, data loss, complete feature failure.
- Major : Significant feature failure, major usability impact, performance degradation.
- Minor : Cosmetic issues, minor inconveniences, edge case failures.
- Trivial : Documentation issues, spelling errors, minor UI inconsistencies.

Sample Issue Documentation Format

Issue ID: ISS-001

Category: [FUNC]

Severity: Major

Title: File upload fails for PNG files > 5MB

Description: When users attempt to upload PNG files larger than 5MB, the upload process fails without clear error message

Steps to Reproduce:

1. Navigate to Posts & Articles form
2. Attempt to upload PNG file > 5MB
3. Click Post button

Expected Result: File uploads successfully or clear error message displayed

Actual Result: Upload fails silently, no error message shown

Test Case Reference: TC_FUNC_010

Platform: Windows 10, Chrome 118

Assigned To: Development Team

Status: Open

Priority: High

Issue Resolution Workflow

1. Discovery : Issue identified during test execution.
2. Documentation : Complete issue report created with all details.
3. Triage : Development team reviews and assigns priority.
4. Resolution : Developer implements fix.
5. Verification : QA team verifies fix in test environment.
6. Closure : Issue closed after successful verification.

Appendix : Test Completion Criteria

Entry Criteria

- All test environments configured and accessible.
- Test data prepared and validated.
- Required user accounts created with appropriate permissions.
- Testing tools installed and configured.
- The development team confirms the build is ready for testing.

Exit Criteria

- All high and critical priority test cases executed.
- 90% of medium priority test cases executed.
- All critical and major defects resolved.
- Security testing completed with no critical vulnerabilities.
- Performance benchmarks met (3-second load time, 2-second submission).
- Cross-browser compatibility verified on all supported platforms.
- Accessibility compliance validated.
- Test summary report completed and reviewed.

Success Metrics

- Defect Detection Rate : > 95% of defects found before production.
- Test Case Coverage : 100% of critical functionality tested.
- Performance Compliance : All response time SLAs met.
- Security Compliance : Zero critical security vulnerabilities.
- Browser Compatibility : 100% functionality across supported browsers.
- Accessibility Compliance : WCAG 2.1 AA standards met.

Appendix : Platform and Browser Abbreviations

Platform Codes

- WIN : Windows (10/11).
- MAC : macOS (12+).
- IOS : iOS (15+).
- AND : Android (10+).

Browser Codes

- CHR : Google Chrome.
- FFX : Mozilla Firefox.
- EDG : Microsoft Edge.
- SFR : Safari.
- ALL : All supported browsers.

Device Categories

- Desktop : Windows/Mac computers.
- Mobile : Smartphones (iOS/Android).
- Tablet : iPad, Android tablets.