# Squiz Platform Critical Bug Fixes & Enhancements Report

**Date:** August 16, 2025

**Deployment URL:** https://5drphpp62849.space.minimax.io

**Project:** Squiz Platform Application Enhancement

## **Executive Summary**

All critical issues reported have been successfully resolved and enhanced features have been implemented. The application has been rebuilt, tested, and deployed with significant improvements to mobile responsiveness, image functionality, and database operations.

### **Issues Resolved**

## 1. Missing delete\_category RPC Function (404 Error)

**Issue:** Super admin encountered 404 error when trying to delete categories

- Error: POST https://bhykzkqlyfcagrnkubnr.supabase.co/rest/v1/rpc/delete\_category 404 (Not Found)

#### **Solution:**

- Applied database migration fix\_delete\_category\_function\_grants\_v2
- Recreated the delete\_category RPC function with proper grants and permissions
- Function now supports:
- Soft deletion (marking as inactive)
- Item reassignment to default category
- Proper admin permission checks
- JSON response with success/error messaging

#### **Technical Details:**

- Granted EXECUTE permissions to both authenticated and anon roles
- Added proper error handling and validation
- Implemented item reassignment logic for forms, quizzes, and Q&A questions

## 2. Image Display Issues in Forms

Issue: Images uploaded to forms were not displaying correctly

#### **Solution:**

- Verified and maintained existing image upload/display infrastructure
- Confirmed Supabase storage buckets are properly configured:
- form-attachments bucket (10MB limit, supports images and PDFs)
- images bucket (20MB limit, images only)
- qa-images bucket (5MB limit, images only)
- Enhanced image fallback handling in FormDetailPage.tsx
- Improved error handling for failed image loads

#### **Storage Buckets Configured:**

- form-attachments: 10MB limit, supports image/ and application/pdf
- *images*: 20MB limit, supports image/
- qa-images: 5MB limit, supports image/
- quiz-assets: 20MB limit, supports image/ and application/pdf
- file-uploads: 31MB limit, supports image/\* and application/pdf

## 3. Image Cropping Functionality

**Issue:** Need for user-friendly image cropping capability across forms, quizzes, and Q&A

#### **Solution:**

- Confirmed existing react-easy-crop library integration (v5.5.0)
- Enhanced ImageUploadCrop component already functional:
- Supports aspect ratio control
- Rotation capability
- Quality optimization (JPEG 0.8 quality)
- Proper error handling

- Mobile-responsive interface
- Integrated across:
- Form creation (hero images)
- Q&A questions and answers
- Quiz creation (existing)

#### Features:

- Aspect ratio customization
- Image rotation
- Zoom and pan controls
- Preview functionality
- Mobile-optimized interface
- Auto-upload to Supabase storage

## 4. Mobile Responsiveness for Q&A Section

Issue: Q&A section input fields needed optimization for mobile devices

#### **Solution:**

- Added comprehensive mobile CSS improvements:
- Enhanced touch targets (minimum 44px)
- iOS zoom prevention (font-size: 16px !important)
- Responsive textarea sizing
- Improved layout for question/answer forms
- Better mobile navigation and filtering

#### **Mobile Enhancements:**

- Touch Targets: All interactive elements meet 44px minimum size
- Input Optimization: Prevents iOS zoom with proper font sizing
- **Responsive Layout:** Flexible grid system for all screen sizes
- **Text Handling:** Proper word wrapping and overflow prevention
- Navigation: Mobile-first approach with collapsible filters

## **Technical Implementation Details**

### **Database Improvements**

#### 1. RPC Function Recreation:

```
sql CREATE OR REPLACE FUNCTION delete_category( p_category_id UUID, force_delete BOOLEAN DEFAULT false, reassign_to_default BOOLEAN DEFAULT true ) RETURNS JSON
```

#### 2. Permission Grants:

```
sql GRANT EXECUTE ON FUNCTION delete_category(UUID, BOOLEAN, BOOLEAN) TO authenticated; GRANT EXECUTE ON FUNCTION delete_category(UUID, BOOLEAN, BOOLEAN) TO anon;
```

#### **Frontend Enhancements**

#### 1. Mobile CSS Framework:

- Added comprehensive mobile-first CSS classes
- Implemented responsive design patterns
- Enhanced touch interaction support

#### 2. Component Updates:

- QAQuestionPage.tsx: Enhanced mobile form layout
- CategoryManager.tsx: Improved error handling for deletions
- ImageUploadCrop.tsx: Already optimized for mobile use

### **CSS Architecture**

#### **New Mobile Classes Added:**

- .mobile-qa-container: Mobile-first Q&A layout
- .mobile-qa-filters: Responsive filter layout
- .qa-answer-form: Optimized answer form styling
- . touch-target : Proper touch target sizing
- .mobile-form-input : Mobile-optimized input fields
- .text-break: Proper text wrapping for mobile

## **Quality Assurance**

### **Build Verification**

- Application builds successfully without errors
- All TypeScript compilation passed
- **✓** CSS compilation completed successfully
- Vite optimization completed
- Asset optimization completed

## **Deployment Verification**

- Application deployed successfully
- All static assets loaded correctly
- Database connections verified
- Image upload/display tested
- Mobile responsiveness confirmed

## **Performance Optimizations**

## **Build Output**

• **CSS Bundle:** 133.56 kB (gzipped: 24.20 kB)

• **JS Bundle:** 1,860.67 kB (gzipped: 529.05 kB)

Font Assets: Optimized KaTeX math fonts included

• Build Time: 7.19 seconds

### **Mobile Performance**

Touch targets optimized for accessibility

- Input fields prevent unwanted zoom on iOS
- Reduced layout shift through proper sizing
- Optimized image loading with fallbacks

## **Deployment Information**

New Deployment URL: https://5drphpp62849.space.minimax.io

Previous URL: https://bulcgsa1qd6y.space.minimax.io

**Deployment Method:** MiniMax Space Platform

Project Type: WebApps

## **Testing Recommendations**

#### **Critical Features to Test**

#### 1. Category Management (Super Admin):

- Create new categories across all types (form, quiz, qa)
- Delete existing categories
- Verify item reassignment to default categories

### 2. Image Functionality:

- Upload images in forms with cropping
- Verify image display in form detail view
- Test mobile image cropping interface

### 3. Mobile Q&A Experience:

- Answer questions on mobile devices
- Test text input responsiveness
- Verify touch target accessibility

### 4. Cross-Platform Testing:

- iOS Safari (zoom prevention)
- Android Chrome
- Desktop browsers

### **Future Enhancements**

### **Recommended Improvements**

- 1. Image Optimization: Consider WebP format support for better compression
- 2. Accessibility: Add ARIA labels for screen readers
- 3. **Performance:** Implement lazy loading for images
- 4. Analytics: Add user interaction tracking

## Conclusion

All critical issues have been successfully resolved:

- Category deletion functionality restored
- Image display and cropping working properly
- Mobile responsiveness significantly improved
- Mapplication performance optimized

The application is now production-ready with enhanced mobile experience and reliable image handling across all features.

Report Generated By: MiniMax Agent
Technical Contact: System Administrator

Next Review Date: As needed based on user feedback