

# WORK 15 - In-App Support Chat + Screenshot Upload (Beta)

**Date:** November 26, 2024

**Status:**  Complete & Ready for Deployment

**Feature:** In-app bug reporting with screenshot upload

## Objective

Add a simple in-app “Help” feature so athletes can report bugs inside CatchBarrels by:

- Opening a support panel
- Describing what broke
- Uploading a screenshot
- Submitting a support ticket

The system captures enough context for you (Rick) or an AI agent to debug and fix issues later.

## What Was Implemented

### Database Model

**File:** prisma/schema.prisma

**New Model:** SupportTicket

```

model SupportTicket {
    id          String   @id @default(cuid())
    userId      String?
    user        User?    @relation("UserSupportTickets", fields: [userId], references: [id], onDelete: SetNull)
    userEmail   String?
    role        String? // "admin", "coach", "player"

    // Ticket details
    whereHappened String // "Dashboard", "New Lesson", "History", etc.
    description   String @db.Text
    screenshotUrl String? // S3 key for screenshot

    // Context for debugging
    userAgent    String?
    pageUrl     String?
    extraContext Json? // Additional debug info (device, browser, etc.)

    // Status tracking
    status       String @default("open") // "open", "in_progress", "resolved"
    createdAt    DateTime @default(now())
    updatedAt    DateTime @updatedAt

    @@map("support_tickets")
    @@index([userId])
    @@index([status])
    @@index([createdAt])
}

```

**Migration:** Auto-generated and applied ✓

## 2 API Endpoints

### POST /api/support/tickets

**File:** app/api/support/tickets/route.ts

**Purpose:** Submit a new support ticket

**Request:**

```

FormData {
    whereHappened: string (required)
    description: string (required)
    screenshot: File (optional)
    pageTitle: string (auto-captured)
    includeDebug: boolean (default: true)
}

```

**Response:**

```
{
  "success": true,
  "ticketId": "clXXXXXXXXXX",
  "message": "Support ticket submitted successfully"
}
```

**Features:**

- Authentication required
- File type validation (PNG, JPEG, HEIC)
- File size validation (max 10MB)
- Screenshot upload to S3
- Debug context collection
- Comprehensive error handling
- Logging for debugging

**GET /api/support/tickets****File:** app/api/support/tickets/route.ts**Purpose:** Get all support tickets (admin only)**Response:**

```
{
  "tickets": [
    {
      "id": "clXXXXXXXXXX",
      "userEmail": "athlete@example.com",
      "role": "player",
      "whereHappened": "Dashboard",
      "description": "Upload button doesn't work",
      "screenshotUrl": "support/1234567890-screenshot.png",
      "screenshotSignedUrl": "https://i.ytimg.com/vi/CLZVk5l0uGc/sddefault.jpg",
      "pageUrl": "https://catchbarrels.app/dashboard",
      "status": "open",
      "createdAt": "2024-11-26T...",
      "user": { ... }
    }
  ]
}
```

**Features:**

- Admin/coach only access
- Last 100 tickets
- Ordered by most recent
- Includes user details
- Auto-generates signed URLs for screenshots

**PATCH /api/support/tickets/[id]****File:** app/api/support/tickets/[id]/route.ts

**Purpose:** Update ticket status (admin only)

**Request:**

```
{
  "status": "open" || "in_progress" || "resolved"
}
```

**Response:**

```
{
  "success": true,
  "ticket": { ... },
  "message": "Ticket status updated successfully"
}
```

**Features:**

- Admin/coach only access
  - Status validation
  - Error handling for invalid ticket IDs
- 

## 3 UI Components

### Support Button

**File:** components/support-button.tsx

**Features:**

- Floating button (bottom-right)
- BARRELS gold styling
- “Need help?” text label
- Opens support panel on click
- Hover animations

**Design:**

```
<button>
  <MessageCircle className="w-5 h-5" />
  <span>Need help?</span>
</button>
```

**Positioning:**

- Bottom-right corner
  - Above bottom navigation (z-index: 40)
  - Fixed position
- 

### Support Panel

**File:** components/support-panel.tsx

**Features:**

- Right-side drawer (Sheet component)
- Form with validation
- Screenshot upload with drag-and-drop
- Debug info toggle
- Success confirmation
- Auto-close after submission
- Loading states
- Error handling

**Form Fields:****1. Where did this happen? (Dropdown)**

- Dashboard
- New Lesson
- History
- Momentum Transfer Card
- Video Upload
- Profile
- Settings
- Other

**1. What went wrong? (Textarea)**

- Required
- Multi-line
- Placeholder: "Describe what happened..."

**2. Add screenshot (File upload)**

- Optional but recommended
- PNG, JPEG, HEIC
- Max 10MB
- Preview after selection

**3. Include debug info (Toggle)**

- Default: ON
- Captures device and browser details

**States:**

- Submitting: Shows spinner, disables inputs
- Success: Shows checkmark, displays ticket ID
- Error: Shows toast notification

**Main Layout Integration**

**File:** components/layout/MainLayout.tsx

**Changes:**

```

import { SupportButton } from "@/components/support-button";

export function MainLayout({ children }: MainLayoutProps) {
  // ...
  return (
    <>
      {!shouldHideHeader && <BarrelsHeader />}
      {children}
      {!shouldHideHeader && <SupportButton />}
    </>
  );
}

```

#### Visibility:

- Shows on all authenticated pages
  - Hidden on auth pages (/auth/login, /auth/signup, /welcome, /onboarding)
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## 4 Admin Support Page

### Server Component

**File:** app/admin/support/page.tsx

#### Features:

- Admin-only access
  - Page metadata (title, description)
  - Suspense for loading state
  - Clean header with emoji
- 

### Client Component

**File:** app/admin/support/support-tickets-client.tsx

#### Features:

##### Stats Cards:

- ● Open tickets count
- ● In Progress tickets count
- ● Resolved tickets count

##### Tickets Table:

Created	User	Where	Description	Screenshot	Status
-----	-----	-----	-----	-----	-----
X min ago	name				
email	Badge	Text + Page Link	View Button	Dropdown	

#### Table Features:

- Sortable by date (most recent first)
- User information (name + email)
- Location badge
- Description with line clamp (2 lines)
- Page URL link (external)

- Screenshot view button
- Status dropdown (open, in\_progress, resolved)
- Color-coded status badges
- Real-time status updates

#### **Interactions:**

- Click screenshot "View" button → Opens screenshot in new tab
- Change status dropdown → Updates ticket status
- Click page URL → Opens page in new tab

#### **Empty State:**

- Shows when no tickets exist
  - Checkmark icon
  - "No support tickets yet" message
- 

## Security & Access Control

### **Authentication**

- All endpoints require authentication
- 401 Unauthorized for unauthenticated requests

### **Authorization**

- **POST /api/support/tickets**: Any authenticated user
- **GET /api/support/tickets**: Admin/coach only
- **PATCH /api/support/tickets/[id]**: Admin/coach only
- **/admin/support page**: Admin/coach only (enforced by middleware)

### **Data Privacy**

- Screenshot URLs are signed (expire in 1 hour)
  - S3 keys stored in database, not public URLs
  - User data includes only necessary fields
  - Tickets linked to user via optional relation (prevents cascade deletion issues)
- 

## Data Captured

### **Required Fields**

- `whereHappened` : Location in app
- `description` : Bug description

### **Optional Fields**

- `screenshot` : Image file
- `pageUrl` : Current URL
- `userAgent` : Browser/device info
- `extraContext` : Additional debug data

## Auto-Captured

- `userId` : From session
- `userEmail` : From session
- `role` : From session
- `status` : Default “open”
- `createdAt` : Timestamp
- `updatedAt` : Timestamp

## Debug Context (if enabled)

```
{
  "browser": "Chrome",
  "platform": "Windows 10",
  "timestamp": "2024-11-26T..."
}
```

## Design Details

### Colors

- **Primary:** BARRELS gold ( `#E8B14E` )
- **Background:** Dark gray ( `#1a2332` , `#gray-900` )
- **Text:** White ( `#ffffff` )
- **Muted:** Gray ( `#gray-400` )

### Status Colors

- **Open:** Red ( `bg-red-500/20 text-red-400` )
- **In Progress:** Yellow ( `bg-yellow-500/20 text-yellow-400` )
- **Resolved:** Green ( `bg-green-500/20 text-green-400` )

### Typography

- Headings: Bold, white
- Body: Regular, gray-300
- Labels: Medium, gray-300
- Descriptions: Small, gray-400

### Spacing

- Button: `bottom-24 right-6` (above bottom nav)
- Panel: Full height drawer
- Form gaps: `space-y-6`
- Table padding: `p-4`



## Testing Checklist

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### Athlete Flow

- [x] Log in as athlete
- [x] See “Need help?” button on dashboard
- [x] Click button → drawer opens
- [x] Select “Where did this happen?” → Dashboard
- [x] Type description → “Upload button doesn’t work”
- [x] Upload screenshot → Valid PNG file
- [x] Toggle debug info → ON/OFF
- [x] Click “Send to Coach Rick” → Submits successfully
- [x] See success message with ticket ID
- [x] Drawer auto-closes after 3 seconds

### Admin Flow

- [x] Log in as admin (coach@catchbarrels.app)
- [x] Navigate to /admin/support
- [x] See stats cards (Open, In Progress, Resolved)
- [x] See tickets table with athlete’s ticket
- [x] See user email and name
- [x] See description and page URL
- [x] Click “View” screenshot button → Opens in new tab
- [x] Change status dropdown → “In Progress” → Updates successfully
- [x] Change status again → “Resolved” → Updates successfully
- [x] Toast notification shows on status change

### Error Handling

- [x] Invalid file type → Shows error toast
- [x] File too large (>10MB) → Shows error toast
- [x] Missing “where” field → Shows validation error
- [x] Missing description → Shows validation error
- [x] Network error → Shows network error toast
- [x] Screenshot upload fails → Shows upload error

### Edge Cases

- [x] No screenshot → Ticket submits successfully
  - [x] Debug info OFF → Ticket submits without extra context
  - [x] Long description → Text wraps in table, line clamp works
  - [x] No page URL → Shows ticket without page link
  - [x] Invalid ticket ID → Returns 404 error
-

## Files Changed

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### New Files

#### 1. Database

- `prisma/schema.prisma` (added SupportTicket model)
- `prisma/migrations/[timestamp]_add_support_tickets/` (auto-generated)

#### 2. API Routes

- `app/api/support/tickets/route.ts` (POST, GET)
- `app/api/support/tickets/[id]/route.ts` (PATCH)

#### 3. Components

- `components/support-button.tsx` (floating button)
- `components/support-panel.tsx` (drawer form)

#### 4. Admin Pages

- `app/admin/support/page.tsx` (server component)
- `app/admin/support/support-tickets-client.tsx` (client component)

#### 5. Documentation

- `docs/WORK15_SUPPORT_CHAT_COMPLETE.md` (this file)

### Modified Files

#### 1. Layout

- `components/layout/MainLayout.tsx` (added SupportButton)

#### 2. Database

- `prisma/schema.prisma` (added supportTickets relation to User model)



## How to Access

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### For Athletes

1. Log in to <https://catchbarrels.app>
2. Look for gold “Need help?” button in bottom-right corner
3. Click to open support panel
4. Fill out form and submit

### For Admin/Coach

1. Log in as `coach@catchbarrels.app`
2. Navigate to `/admin/support`
3. View all tickets in table
4. Update ticket status as needed
5. Click “View” to see screenshots

## Email Notifications (Optional)

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**Status:** Not implemented (documented only)

## How to Add:

### 1. Choose email service:

- SendGrid
- AWS SES
- Resend
- Postmark

### 2. Add environment variables:

```
env
  SUPPORT_EMAIL_ENABLED=true
  SUPPORT_EMAIL_TO=coach@catchbarrels.app
  SUPPORT_EMAIL_FROM=noreply@catchbarrels.app
  EMAIL_API_KEY=your_api_key_here
```

### 3. Update API route ( app/api/support/tickets/route.ts ):

```
typescript
// After creating ticket
if (process.env.SUPPORT_EMAIL_ENABLED === 'true') {
  await sendEmail({
    to: process.env.SUPPORT_EMAIL_TO,
    from: process.env.SUPPORT_EMAIL_FROM,
    subject: `New Support Ticket #${ticket.id.slice(0, 8)}`,
    html: `
      <h2>New Bug Report</h2>
      <p><strong>From:</strong> ${ticket.userEmail}</p>
      <p><strong>Where:</strong> ${ticket.whereHappened}</p>
      <p><strong>Description:</strong> ${ticket.description}</p>
      <p><strong>Page:</strong> ${ticket.pageUrl}</p>
      <p><strong>Screenshot:</strong> ${ticket.screenshotUrl ? 'Yes' : 'No'}</p>
      <p><a href="https://catchbarrels.app/admin/support">View All Tickets</a></p>
    `,
  });
}
```

## Benefits:

- Instant notification when bugs are reported
- Email includes ticket summary
- Link to admin dashboard

## Current Workaround:

- Check /admin/support page regularly
- Stats cards show open ticket count at a glance



## Configuration

### Environment Variables

**Required** (already configured):

```
AWS_BUCKET_NAME=abacusai-apps-49d7a751a42c8b2c554254da-us-west-2
AWS_FOLDER_PREFIX=12705/
AWS_REGION=us-west-2
AWS_PROFILE=hosted_storage
```

**Optional** (for email notifications):

```
SUPPORT_EMAIL_ENABLED=false
SUPPORT_EMAIL_TO=coach@catchbarrels.app
SUPPORT_EMAIL_FROM=noreply@catchbarrels.app
EMAIL_API_KEY=
```

## Feature Flags

None required - feature is always enabled for authenticated users.

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## Metrics to Track

### Usage Metrics

- Tickets submitted per day/week
- Average time to resolution
- Most common “whereHappened” locations
- Screenshot attachment rate
- Debug info opt-in rate

### Performance Metrics

- API response times
- Screenshot upload success rate
- S3 signed URL generation time

### User Satisfaction

- Ticket submission success rate
  - Admin response time
  - Ticket resolution rate
- 



## Troubleshooting

### Issue: “Need help?” button not showing

#### Possible causes:

- User is on auth page (/auth/login, /auth/signup)
- User is not authenticated

#### Solution:

- Check that user is logged in
  - Navigate to authenticated page (e.g., /dashboard)
-

## Issue: Screenshot upload fails

### Possible causes:

- File too large (>10MB)
- Invalid file type (not PNG/JPEG/HEIC)
- S3 credentials issue

### Solution:

1. Check file size and type
  2. Verify S3 credentials in `.env`
  3. Check server logs for S3 errors
- 

## Issue: Admin can't see tickets

### Possible causes:

- User is not admin/coach role
- Database connection issue

### Solution:

1. Verify user role: `coach@catchbarrels.app` has `role=admin`
  2. Check database connection
  3. Check server logs for errors
- 

## Issue: Screenshot button doesn't open image

### Possible causes:

- Signed URL expired (1 hour expiry)
- S3 key incorrect

### Solution:

1. Refresh the admin page to regenerate signed URLs
  2. Check S3 key in database matches actual file
  3. Verify S3 bucket permissions
- 



## Future Enhancements

### Phase 2 Features

- [ ] Email notifications (SendGrid/SES)
- [ ] Slack webhook integration
- [ ] Coach Rick AI auto-responder
- [ ] Ticket search and filtering
- [ ] Ticket comments/notes
- [ ] Auto-categorization (AI-powered)
- [ ] Video recording instead of screenshot
- [ ] Browser console error capture
- [ ] Session replay integration

## Phase 3 Features

- [ ] Athlete ticket history
  - [ ] Ticket analytics dashboard
  - [ ] SLA tracking
  - [ ] Custom ticket fields
  - [ ] Multi-language support
  - [ ] Mobile app integration
- 

## Summary

### What Was Built

-  Database model for support tickets
-  API endpoints (POST, GET, PATCH)
-  Floating “Need help?” button
-  Support panel with form
-  Screenshot upload to S3
-  Admin support tickets page
-  Status management
-  Signed URL generation for screenshots

### Key Features

-  Simple, intuitive UI
-  Screenshot upload
-  Debug context collection
-  User identification
-  Admin dashboard
-  Status tracking
-  Secure access control

### Impact

- **Before:** No way for athletes to report bugs
- **After:** Athletes can easily report bugs with screenshots

### Production Ready

-  TypeScript compilation: No errors
  -  Build: Successful
  -  Testing: All flows verified
  -  Documentation: Complete
  -  Security: Proper access control
  -  Performance: Optimized
-

## Success!

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The in-app support chat system is **complete** and **ready for deployment!**

Athletes can now easily report bugs with screenshots, and you (Coach Rick) can manage all tickets from the admin dashboard at </admin/support>.

### **Next Steps:**

1. Deploy to production 
  2. Monitor for new tickets 
  3. (Optional) Set up email notifications 
  4. (Future) Add Coach Rick AI auto-responder 
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**Status:**  WORK 15 COMPLETE