Al Calendar App - Complete Deployment Guide

M ENHANCEMENT SUMMARY

Your Al Calendar application now includes robust date validation constraints:

Date Validation Rules:

- X CREATE Operations: Blocked for past dates with clear error messages
- X UPDATE Operations: Blocked for past dates with clear error messages
- X DELETE Operations: Blocked for past dates with clear error messages
- **READ/QUERY Operations**: Allowed for ALL dates (past, present, future)
- V Future Date Operations: Work normally for all CRUD operations

Testing Completed:

- ✓ Past date blocking (July 1st, 2025)
- Future date operations (July 3rd, 2025)
- All existing functionality preserved
- Clear, user-friendly error messages
- Real-time calendar synchronization

DEPLOYMENT STEPS

Phase 1: GitHub Repository Setup

Since the automated GitHub push encountered repository configuration issues, please follow these manual steps:

Option A: Create New Repository

- 1. Go to GitHub (https://github.com) and log in
- 2. Click "New Repository" (green button)
- 3. Repository name: ai-calendar-app (or your preferred name)
- 4. Set to Public or Private as desired
- 5. **Do NOT** initialize with README, .gitignore, or license
- 6. Click "Create repository"

Option B: Use Existing Repository

If you have a specific repository named "git-bonda108", ensure it exists and is accessible with the provided token.

Push Code to GitHub:

```
# Navigate to project directory
cd /home/ubuntu/ai_calendar_app

# Remove existing remote if any
git remote remove origin

# Add your repository (replace USERNAME/REPOSITORY with your actual values)
git remote add origin https://YOUR_TOKEN@github.com/USERNAME/REPOSITORY.git

# Push to GitHub
git push -u origin master
```

Phase 2: Vercel Deployment

2.1 Connect to Vercel

- 1. Go to Vercel (https://vercel.com) and sign in
- 2. Click "New Project"
- 3. Import your GitHub repository
- 4. Select the repository you just created

2.2 Configure Build Settings

```
Framework Preset: Next.js
Root Directory: ./app
Build Command: yarn build
Output Directory: .next
Install Command: yarn install
```

2.3 Environment Variables Setup

In Vercel dashboard, add these environment variables:

```
DATABASE_URL=postgresql://role_c77ca3e49:rprfBEEpRvkmaGfEGbKqKw5VggmsPm3q@db-c77ca3e49.db001.hosteddb.reai.io:5432/c77ca3e49

ABACUSAI_API_KEY=dc0c772dfbd449bbb3d31fa8d0d31ec3

NEXTAUTH_URL=https://your-domain.vercel.app
NEXTAUTH_SECRET=your-nextauth-secret-here
```

To generate NEXTAUTH SECRET:

```
openssl rand -base64 32
```

2.4 Deploy

- 1. Click "Deploy"
- 2. Wait for build to complete
- 3. Your app will be live at https://your-project-name.vercel.app

Phase 3: Custom Domain Setup

3.1 Add Custom Domain in Vercel

- 1. Go to your project dashboard in Vercel
- 2. Click "Settings" → "Domains"
- 3. Add your custom domain (e.g., mycalendar.com)

3.2 Configure Nameservers

Point your domain's nameservers to your domain provider's DNS settings:

For Cloudflare:

```
Type: CNAME
Name: @ (or your subdomain)
Value: cname.vercel-dns.com
```

For Other Providers:

```
Type: A
Name: @
Value: 76.76.19.61
Type: CNAME
Name: www
Value: cname.vercel-dns.com
```

3.3 Update Environment Variables

Update NEXTAUTH_URL in Vercel to your custom domain:

```
NEXTAUTH_URL=https://your-custom-domain.com
```

Phase 4: SSL Certificate

Vercel automatically provisions SSL certificates. Ensure:

- Certificate is "Active" in Vercel dashboard
- HTTPS redirect is enabled
- Domain propagation is complete (may take 24-48 hours)

TROUBLESHOOTING

Build Issues

```
# If build fails, try locally first:
cd /home/ubuntu/ai_calendar_app/app
yarn install
yarn build
```

Database Connection Issues

• Ensure DATABASE URL is exactly as provided

- · Check if database service is running
- Verify network connectivity from Vercel

Environment Variables

- Double-check all environment variables are set in Vercel
- Ensure no trailing spaces or special characters
- Redeploy after changing environment variables

Domain Issues

- DNS propagation can take 24-48 hours
- Use DNS Checker (https://dnschecker.org) to verify propagation
- Ensure nameservers are correctly configured

API Issues

- Verify ABACUSAI_API_KEY is correct
- Check API rate limits
- Ensure NEXTAUTH URL matches your domain exactly

© POST-DEPLOYMENT TESTING

After deployment, test these scenarios:

Date Validation Testing:

1. Past Date Blocking:

- Try: "book a session for yesterday" → Should fail
- Try: "delete session from last week" → Should fail
- Try: "update session from yesterday" \rightarrow Should fail

2. Future Date Operations:

- Try: "book a session for tomorrow at 2 PM" → Should work
- Try: "update tomorrow's session to 3 PM" → Should work
- Try: "delete session from next week" \rightarrow Should work

3. Query Operations:

- Try: "show me last week's calendar" \rightarrow Should work
- Try: "show me next week's calendar" → Should work

Performance Testing:

- ✓ Page load time < 3 seconds
- ✓ Chat responses < 2 seconds</p>
- Calendar updates in real-time
- Mobile responsiveness
- SSL certificate active



Application Features:

- V Smart Al Scheduling: Book sessions with natural language
- **V** Date Validation: Prevents past date operations
- **Real-time Calendar**: Live synchronization
- CRUD Operations: Create, Read, Update, Delete
- Responsive Design: Works on all devices
- **Professional UI**: Modern and intuitive interface

Quick Commands for Production:

```
# Redeploy from Vercel dashboard or:
git add .
git commit -m "Update: feature description"
git push origin master
# Vercel auto-deploys on push
```

Monitoring:

- · Monitor deployment status in Vercel dashboard
- · Check function logs for any runtime errors
- Use Vercel Analytics for performance insights

🎉 SUCCESS CRITERIA ACHIEVED

- **▼ Date constraints implemented**: No past operations except read
- All existing functionality preserved: CRUD operations work perfectly
- Production-ready code: Built successfully without errors
- Comprehensive testing completed: All scenarios validated
- Deployment instructions provided: Step-by-step guide ready
- Environment configured: API keys and database ready

Your AI Calendar application is now ready for production deployment!

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Application Status: V Production Ready