Admin Panel Management System

The portfolio website includes a comprehensive admin panel management system that allows you to hide/show administrative interfaces for managing certifications, experience, and projects.

Features

- Password Protection: Secure access to admin panels with configurable password
- Toggle Visibility: Show/hide admin panels with a single click
- Keyboard Shortcut: Quick access using Ctrl + Shift + A
- Session Storage: Remembers your admin state during the session
- Development Mode: Auto-show admin panels in development environment

Access Methods

1. Admin Toggle Button

- Look for the settings icon (🌞) in the top-right corner of the page
- · Click to open the admin login modal
- Enter your admin password to access the panels

2. Keyboard Shortcut

- Press Ctrl + Shift + A anywhere on the page
- This will open the admin login modal if not authenticated
- If already authenticated, it will toggle admin panel visibility

3. Development Mode

- Admin panels are automatically visible in development mode (NODE_ENV=development)
- No authentication required in development

Configuration

Setting Admin Password

1. Environment Variable (Recommended):

bash

NEXT_PUBLIC_ADMIN_PASSWORD=your_secure_password

2. Default Password:

- If no environment variable is set, the default password is admin123
- Important: Change this for production use!

Environment Variables

Create a .env.local file in your project root:

```
# Admin Panel Configuration
NEXT_PUBLIC_ADMIN_PASSWORD=your_secure_password_here
# Optional: Force show admin in production (not recommended)
SHOW_ADMIN=false
```

Admin Panel Controls

Once authenticated, you'll see admin controls in the top-right corner:

• **© Eye Icon**: Show admin panels

• Eye-Off Icon: Hide admin panels

• 🔓 Unlock Icon: Logout from admin mode

Admin Panel Features

Certifications Admin

• Location: Bottom-right corner (floating panel)

- Features:
- · Manual refresh of certifications
- API status monitoring
- · Cache status indicators
- · Cron job testing
- · Setup instructions for automation

Experience Admin

- Location: Bottom-right corner (floating panel)
- Features:
- View current experience statistics
- Manual data refresh
- · Save changes functionality
- Edit mode toggle
- Latest position preview

Projects Admin

- Location: Bottom-left corner (floating panel)
- Features:
- Projects overview statistics
- Medium integration status
- · Manual refresh from Medium
- · Latest projects preview
- Auto-update configuration

Security Considerations

1. Production Deployment:

- Always set a strong admin password

- Never commit .env.local to version control
- Consider using environment-specific passwords

2. Password Management:

- Use a unique, strong password
- Store securely (password manager recommended)
- Rotate periodically

3. Access Control:

- Admin panels are hidden by default in production
- Session-based authentication (clears on browser close)
- No persistent login cookies

Troubleshooting

Admin Panels Not Showing

- 1. Verify you're authenticated (check top-right corner for admin controls)
- 2. Ensure admin visibility is enabled (eye icon should be filled)
- 3. Check browser console for any JavaScript errors

Login Issues

- 1. Verify the admin password is correctly set
- 2. Check the .env.local file exists and has the correct variable name
- 3. Restart the development server after changing environment variables

Development Mode

- 1. Admin panels should be visible automatically in development
- 2. If not showing, check that NODE_ENV=development is set
- 3. Verify no errors in the browser console

Best Practices

1. Development:

- Use the default password or a simple one for development
- Admin panels are always visible, no need to authenticate

2. Production:

- Set a strong, unique admin password
- Keep admin access minimal and secure
- Monitor admin access if needed

3. Team Access:

- Share admin password securely with team members
- Consider different passwords for different environments
- Document password rotation procedures

API Endpoints

The admin panels interact with these API endpoints:

/api/certifications - Certification management

- /api/certifications/refresh Manual certification refresh
- /api/experience Experience data management
- /api/projects Project management
- /api/projects/refresh-medium Medium integration refresh
- /api/cron/refresh-certifications Automated certification updates

Customization

Changing Admin Password Location

Edit /app/contexts/AdminContext.tsx:

```
const ADMIN_PASSWORD = process.env.NEXT_PUBLIC_ADMIN_PASSWORD || 'your_new_default'
```

Disabling Admin in Production

Set environment variable:

```
SHOW_ADMIN=false
```

Customizing Keyboard Shortcut

Edit /app/components/admin-toggle.tsx:

```
if (e.ctrlKey && e.shiftKey && e.key === 'YourKey') {
   // Your custom shortcut
}
```

Updates and Maintenance

The admin system is designed to be:

- **Self-contained**: All admin logic is in dedicated components
- Non-intrusive: Doesn't affect main website functionality
- Easily removable: Can be completely disabled if needed

For updates or issues, check the admin component files:

- /app/contexts/AdminContext.tsx
- /app/components/admin-toggle.tsx
- /app/components/admin-wrapper.tsx