

Deployment Guide for Weight Certificate PDF to JSON Converter

Streamlit Community Cloud (Recommended)

Step 1: Prepare Your Repository

1. Create a GitHub repository:

```
git init
git add .
git commit -m "Initial commit: Weight Certificate PDF to JSON Converter"
git branch -M main
git remote add origin https://github.com/yourusername/calJson.git
git push -u origin main
```

2. Ensure these files are included:

- ☒ `app.py` (main Streamlit app)
- ☒ `weight_certificate_processor.py` (OCR processing)
- ☒ `requirements.txt` (Python dependencies)
- ☒ `packages.txt` (system dependencies for cloud)
- ☒ `weight_certificate_import_schema.json` (validation schema)
- ☒ `README.md` (documentation)

Step 2: Deploy to Streamlit Community Cloud

1. Go to Streamlit Community Cloud:

- Visit: <https://share.streamlit.io/>
- Sign in with your GitHub account

2. Create new app:

- Click "New app"
- Repository: `yourusername/calJson`
- Branch: `main`
- Main file path: `app.py`
- App URL (optional): `your-app-name`

3. Deploy:

- Click "Deploy!"
- Wait for deployment (usually 2-5 minutes)

Step 3: Your App is Live!

Your app will be available at: <https://your-app-name.streamlit.app/>

Alternative Deployment Options

Option 2: Heroku

1. **Install Heroku CLI**
2. **Create Procfile:**

```
web: sh setup.sh && streamlit run app.py --server.port=$PORT --
server.address=0.0.0.0
```

3. **Create setup.sh:**

```
mkdir -p ~/.streamlit/
echo "[server]
port = $PORT
enableCORS = false
headless = true
[theme]
primaryColor = '#1f77b4'
backgroundColor = '#ffffff'
secondaryBackgroundColor = '#f0f2f6'
textColor = '#262730'
" > ~/.streamlit/config.toml
```

Option 3: Docker

Create **Dockerfile**:

```
FROM python:3.11-slim

# Install system dependencies
RUN apt-get update && apt-get install -y \
    tesseract-ocr \
    poppler-utils \
    && rm -rf /var/lib/apt/lists/*

WORKDIR /app
COPY requirements.txt .
RUN pip install -r requirements.txt

COPY . .

EXPOSE 8501

CMD ["streamlit", "run", "app.py", "--server.port=8501", "--
server.address=0.0.0.0"]
```

Option 4: Railway

1. Connect your GitHub repository
2. Railway will auto-detect Streamlit
3. Add environment variables if needed

Deployment Checklist

Before deploying, ensure:

- ☐ All files are committed to Git
- ☐ `requirements.txt` includes all dependencies
- ☐ `packages.txt` includes system dependencies
- ☐ App works locally with `streamlit run app.py`
- ☐ No hardcoded local paths (we've made this cloud-compatible)
- ☐ Sensitive data is handled via environment variables

Post-Deployment

Custom Domain (Optional)

- Most platforms allow custom domain setup
- Configure DNS CNAME to point to your app URL

Monitoring

- Streamlit Community Cloud provides basic analytics
- Monitor app performance and usage

Updates

- Push changes to your GitHub repository
- Streamlit Community Cloud auto-deploys on git push

Security Considerations

- Don't commit sensitive files
- Use environment variables for API keys
- Consider authentication if handling sensitive documents
- Ensure uploaded files are handled securely

Tips

1. **Streamlit Community Cloud is free** and perfect for demos
2. **Test locally first** with `streamlit run app.py`
3. **Use meaningful commit messages** for easier debugging
4. **Monitor logs** in the deployment platform for issues
5. **Consider file size limits** for PDF uploads