

DOCUMENT SIGNING PLATFORM (MERN STACK) - RESOURCE GUIDE

TECHNOLOGY STACK:

Frontend:

- React.js with Tailwind CSS
- PDF.js (for PDF viewing)
- Axios (for API calls)

Backend:

- Node.js + Express.js
- MongoDB with Mongoose
- Multer (for file upload)
- pdf-lib or node-signpdf (PDF manipulation/signing)
- jsonwebtoken (JWT Authentication)
- bcrypt (Password hashing)
- nodemailer (Sending emails with PDF attachment)

FEATURES TO IMPLEMENT:

1. Authentication (Login/Register with JWT)
2. Upload PDF
3. View PDF in browser (PDF.js)
4. Add signature (typed/drawn) using pdf-lib or canvas

5. Save signed PDF
6. Download signed PDF
7. Send signed PDF via Email

PROJECT STRUCTURE:

client/

src/

components/

pages/

Login.jsx

Dashboard.jsx

SignPdf.jsx

utils/

server/

controllers/

models/

routes/

middleware/

utils/

KEY LIBRARIES:

Frontend:

- react-router-dom
- react-pdf (or PDF.js wrapper)
- react-signature-canvas
- axios

Backend:

- express
- mongoose
- multer
- jsonwebtoken
- bcryptjs
- pdf-lib / node-signpdf
- nodemailer

EMAIL SENDING (Node.js):

Use nodemailer and attach signed PDF:

```
const transporter = nodemailer.createTransport({ ... });  
await transporter.sendMail({  
  from: "SignRight" <noreply@signright.com>,  
  to: userEmail,  
  subject: "Signed Document",  
  text: "Please find your signed document attached.",  
  attachments: [  
    {
```

```
    filename: "signed.pdf",  
    content: signedPdfBuffer  
  }  
]  
});
```

PDF VIEWER (React):

Use react-pdf or @react-pdf-viewer for embedded viewer.

SIGNATURE IMPLEMENTATION:

1. Let user draw/choose signature using react-signature-canvas
2. On backend, use pdf-lib to embed image/text as signature
3. Save or send PDF

DOWNLOAD PDF:

Use Blob & FileSaver.js in frontend:

```
const blob = new Blob([pdfData], { type: 'application/pdf' });  
saveAs(blob, "signed-document.pdf");
```

AUTHENTICATION FLOW:

1. Register/Login: Get JWT token
 2. Store JWT in localStorage
 3. Protect routes with Auth middleware
 4. Verify token on each secure API call
-

ENDPOINTS (Example):

POST /api/auth/login

POST /api/auth/register

POST /api/upload/pdf

POST /api/sign/pdf

GET /api/pdf/:id

POST /api/pdf/send

yashsoni