

Technical Specification Document (TSD)

Project Name: Matty - Online Graphic Design Tool

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Tech Stack

Layer	Technology
Frontend	React.js, Redux, TailwindCSS, react-konva
Backend	Node.js, Express.js
Database	MongoDB Atlas
Auth	JWT (OAuth planned: Google/Facebook)
Storage	Cloudinary (image hosting)
Hosting	Vercel (frontend), Render (backend)

Frontend Component Tree

```
<App />  
  <AuthProvider />  
  <Router>  
    /login    -> <Login />  
    /register  -> <Register />  
    /editor   -> <EditorCanvas />  
    /dashboard -> <MyDesigns />
```

API Documentation

Method	Route	Function
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POST /api/auth/register Register new user
POST /api/auth/login Login & return JWT
GET /api/designs Fetch all user designs
POST /api/designs Save new design
PUT /api/designs/:id Update design
DELETE /api/designs/:id Delete design

Notes

- JWT is used for secure authentication.
- jsonData of design is stored in MongoDB with userId and optional thumbnailUrl.
- Images are stored on Cloudinary.
- Canvas is built using react-konva or fabric.js.