

Quick Start Checklist

Step 1: Environment Variables

Backend **.env**

```
cd BackEnd
```

Create/Edit **.env** file:

```
CLERK_PUBLISHABLE_KEY=pk_test_XXXXX
CLERK_SECRET_KEY=sk_test_XXXXX
MONGODB_URI=mongodb://localhost:27017/codepro
JWT_SECRET=your-secret-key
FRONTEND_URL=http://localhost:4000
GEMINI_API_KEY=your-gemini-key
GITHUB_CLIENT_ID=your-github-id
GITHUB_CLIENT_SECRET=your-github-secret
```

Frontend **.env**

```
cd FrontEnd
```

Create/Edit **.env** file:

```
VITE_CLERK_PUBLISHABLE_KEY=pk_test_XXXXX
VITE_API_URL=http://localhost:5000/api
VITE_WS_URL=http://localhost:5000
VITE_GITHUB_CLIENT_ID=your-github-id
```

Step 2: Get Clerk Keys

1. Go to <https://dashboard.clerk.com/>
2. Create/Select your application
3. Go to **API Keys** section
4. Copy:
 - Publishable key (starts with **pk_test_**)
 - Secret key (starts with **sk_test_**)

Step 3: Configure Clerk Dashboard

1. **Allowed Origins** (Settings → URLs → Allowed origins):

- Add: `http://localhost:4000`
- Add: `http://localhost:5000`

2. **Sign-in Methods** (User & Authentication → Email, Phone, Username):

- ☒ Enable Email
- ☒ Enable Password

3. **OAuth Providers** (optional):

- ☒ Enable Google
 - ☒ Enable GitHub
-

Step 4: Start Services

Terminal 1 - MongoDB (if local)

```
mongod
# or
brew services start mongodb-community
```

Terminal 2 - Backend

```
cd BackEnd
npm install
npm run dev
```

Expected output:

```
MongoDB Connected: localhost
Server running on port 5000
WebSocket server is ready
```

Terminal 3 - Frontend

```
cd FrontEnd
npm install
npm run dev
```

Expected output:

```
VITE ready in XXX ms  
Local: http://localhost:4000/
```

Step 5: Test Sign Up

1. Open browser: <http://localhost:4000>
2. Open DevTools: Press **F12**
3. Click **"Start Free Trial"**
4. Fill in sign-up form
5. Check console for ☒ success messages

☒ Success Indicators

Browser Console Should Show:

- ☒ Clerk Publishable Key found: pk_test_...
- ☒ WebSocket connected! Socket ID: ...

Backend Terminal Should Show:

- ☒ Client connected: socket_id
- ☒ New user created: user@example.com

You Should See:

- ☒ Sign-up form appears
- ☒ No red errors in console
- ☒ After sign-up → redirected to </dashboard>
- ☒ Your name appears in navbar

✗ Common Issues

Issue	Solution
"Missing Clerk Publishable Key"	Add <code>VITE_CLERK_PUBLISHABLE_KEY</code> to <code>FrontEnd/.env</code>
CSP errors	Clear cache: <code>Ctrl+Shift+Delete</code>
401 from Cloudflare	Hard refresh: <code>Ctrl+Shift+R</code>

Issue	Solution
Clerk modal doesn't appear	Check Clerk Dashboard → Allowed Origins
MongoDB connection error	Start MongoDB service
Port already in use	Kill process: <code>lsof -ti:5000 \ xargs kill -9</code>

Quick Debug Commands

```
# Check if ports are in use
lsof -i :5000 # Backend
lsof -i :4000 # Frontend

# Check MongoDB status
mongosh # Connect to MongoDB
# or
brew services list | grep mongodb

# View environment variables (Frontend)
cd FrontEnd
npm run dev
# Then in browser console:
console.log(import.meta.env)

# Test backend health
curl http://localhost:5000/health
```

Next Steps After Success

1. ☒ Connect GitHub repository
2. ☒ Open a pull request
3. ☒ Watch AI review your code
4. ☒ Check WebSocket real-time updates

Quick Test Checklist

- ☐ MongoDB running
- ☐ Backend running on port 5000
- ☐ Frontend running on port 4000
- ☐ Both `.env` files created
- ☐ Clerk keys added
- ☐ No errors in browser console
- ☐ Can access `http://localhost:4000`
- ☐ Sign-up modal appears
- ☐ Can create account

- ☐ Redirected to dashboard
 - ☐ User in MongoDB
-

Time to Complete: ~10 minutes

Difficulty: Easy 🎯

Good luck! 🚀