





Quick Start Guide

Get the Homework Assignment System up and running in 5 minutes.

Prerequisites Check

Before starting, ensure you have:

-  Node.js 18+ installed (`node --version`)
-  Yarn package manager (`yarn --version`)
-  PostgreSQL database running
-  Git for version control

Installation Steps

1. Navigate to Project

```
cd homework_assignment_system/app
```

2. Install Dependencies

```
yarn install
```

3. Environment Setup

Create and configure your environment variables:

```
# .env file already configured with database
# Verify DATABASE_URL is correct for your setup
cat .env
```

4. Database Setup

```
# Push schema to database
npx prisma db push

# Seed with demo data
npx prisma db seed
```

5. Start Development Server

```
yarn dev
```

6. Access Application

Open your browser and visit:

- **Main Site:** <http://localhost:3000>

- **Teacher Login:** <http://localhost:3000/teacher/login>
- **Student Access:** <http://localhost:3000/student>

Test the System

Try Teacher Features

1. **Login with demo account:**

- Username: `demo_teacher`
- Password: `demo_password`

2. **Create a new assignment:**

- Visit dashboard → “Create Assignment”
- Use rich text editor with formatting toolbar (Bold, Italic, Headings, Bullets)
- Preview your formatted assignment in real-time
- Note the generated 6-character code

3. **Monitor submissions:**

- Dashboard shows real-time student progress
- Download submissions when ready

Try Student Features

1. **Access demo assignment:**

- Go to <http://localhost:3000/student>
- Name: `Your Name`
- Code: `DEM001`

2. **Test the editor:**

- Write some text in the protected editor
- Try to copy the question (should be blocked)
- Save draft and exit

3. **Return to continue:**

- Enter same name and code
- Your draft should be restored

Key Features to Test

Copy Protection

- Right-click on assignment questions (blocked)
- Try Ctrl+C on question text (blocked)
- Press F12 for developer tools (blocked)
- Text selection on questions (blocked)

Save & Continue

- Write content and manually save
- Exit and re-enter with same name
- Auto-save works every 30 seconds
- Submit final answer (one-time only)



Capacity Management

- Create 3+ assignments (limit warning)
- Add 30+ students to one assignment
- Real-time counters on dashboard



Common Commands

Development

```
# Start development server
yarn dev

# Type checking
yarn tsc --noEmit

# Database operations
npx prisma studio           # Visual database browser
npx prisma db push          # Update database schema
npx prisma generate         # Regenerate Prisma client
npx prisma db seed          # Add demo data
```

Production

```
# Build for production
yarn build

# Start production server
yarn start

# Database migration
npx prisma migrate deploy
```



Troubleshooting

Database Issues

```
# If database connection fails
npx prisma db push --force-reset

# If Prisma client issues
npx prisma generate
```

Port Issues

```
# If port 3000 is busy
PORT=3001 yarn dev
```

Reset Demo Data

```
# Reset to fresh demo data
npx prisma db seed
```

Next Steps

Once you have the system running:

1. Read the Documentation:

- `README.md` - Complete overview
- `ARCHITECTURE.md` - System design
- `TECH_SPEC.md` - Technical details
- `API_REFERENCE.md` - API documentation

2. Customize the System:

- Modify capacity limits in schema
- Adjust auto-save intervals
- Update styling and branding
- Add additional validation rules

3. Deploy to Production:

- Set up production database
- Configure environment variables
- Deploy to your hosting platform
- Enable HTTPS for security

Need Help?

- **Documentation:** Check `README.md` for detailed instructions
 - **API Issues:** Consult `API_REFERENCE.md` for endpoint details
 - **Technical Problems:** Review `TECH_SPEC.md` for troubleshooting
 - **Architecture Questions:** See `ARCHITECTURE.md` for system design
-

You're ready to use the Homework Assignment System!

The system is designed for academic integrity with comprehensive copy protection, easy assignment management, and seamless student experience.