

Quick Start Guide

Get the Digital Forensics Training Simulator running in under 5 minutes.

First Time Setup

1. Install dependencies:

```
cd backend && npm install && cd ..  
cd frontend && npm install && cd ..
```

2. Configure environment:

```
cp backend/.env.example backend/.env  
cp frontend/.env.example frontend/.env  
# Edit both .env files with your settings
```

3. Setup database:

```
cd backend  
npm run db:generate  
npm run db:migrate  
npm run db:seed  
cd ..
```

Start the Application

Terminal 1 - Backend:

```
cd backend  
npm start
```

Terminal 2 - Frontend:

```
cd frontend  
npm run dev
```

Access the Application

- **Frontend:** <http://localhost:5173>
- **Backend API:** <http://localhost:5000/api>
- **API Health:** <http://localhost:5000/health>

Default Credentials

After seeding the database, you can login with:

Student Account: - Email: `student@example.com` - Password: `password123`

Admin Account: - Email: `admin@example.com` - Password: `admin123`

Demo Mode

The application runs in **Demo Mode** by default - forensic tools show documentation instead of launching containers. No Docker installation required for basic testing.

Troubleshooting

Backend won't start

- Check PostgreSQL is running
- Verify DATABASE_URL in `backend/.env`
- Run `npm run db:generate` to regenerate Prisma client

Frontend can't connect to API

- Verify backend is running on port 5000
- Check VITE_API_URL in `frontend/.env`
- Check browser console for CORS errors

Database errors

```
cd backend
npm run db:reset # WARNING: This deletes all data
npm run db:seed
```

Port already in use

```
# Find process using port 5000 (backend)
lsof -i :5000
kill -9 <PID>

# Find process using port 5173 (frontend)
lsof -i :5173
kill -9 <PID>
```

Key Features

- **5 Progressive Levels** - From basic file analysis to advanced forensics
- **Interactive Tasks** - Step-by-step guidance with hints
- **Progress Tracking** - Complete tasks and earn points
- **Leaderboard** - Compete with other students
- **Admin Dashboard** - Manage users and content
- **Demo Mode** - Try tools without Docker installation

Next Steps

- Review the Main README for project overview

- Check Backend README for API details
- Check Frontend README for UI details
- Complete Level 1 to learn the basics

Production Deployment

For production deployment instructions, see the backend and frontend README files for specific deployment configurations.

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