

Training Day 26 Report

Date: 25 July 2025

Project: MERN Notes App

Topic Covered: Deployment Preparation (Env Setup & Production Build)

On the twenty-sixth day, we prepared the MERN Notes App for deployment. This included configuring environment variables, cleaning up code, and generating a production build for the frontend.

Concepts Learned

- Using `dotenv` to manage environment variables securely.
- Building the React frontend for production with `npm run build`.
- Serving static files in Express for deployment.
- Preparing MongoDB connection for a cloud provider (Atlas).

Environment Variables

In `.env` file:

Listing 1: `.env` setup

```
1 PORT=5000
2 MONGO_URI=mongodb+srv://<username>:<password>@cluster0.mongodb.net/
  notes
3 JWT_SECRET=mysecretkey
4 NODE_ENV=production
```

In `server.js`:

Listing 2: Loading env variables

```
1 const dotenv = require('dotenv');
2 dotenv.config();
3
4 const PORT = process.env.PORT || 5000;
5 app.listen(PORT, () => console.log('Server running on ${PORT}'));
```

React Production Build

In frontend folder:

Listing 3: Build React app

```
1 cd frontend
2 npm run build
```

Serve build folder in Express:

Listing 4: Serving React build in Express

```
1 const path = require('path');
2
3 if (process.env.NODE_ENV === 'production') {
4   app.use(express.static(path.join(__dirname, '/frontend/build')));
5
6   app.get('*', (req, res) =>
7     res.sendFile(path.resolve(__dirname, 'frontend', 'build', 'index.
8       html'))
9   );
10 }
```

Testing the Setup

- Verified that running `npm run build` generated the `build/` folder.
- Tested Express serving static files → app loaded correctly from backend server.
- Checked that environment variables were loaded from `.env`.

Outcome of the Day

- Prepared project for production deployment.
- Secured configuration using environment variables.
- Successfully built and served the frontend with Express backend.