

Quick Setup Guide - Commands and File Changes

Commands to Run

Step 1: Install Dependencies

```
cd frontend/vehicle-service-management-ui  
npm install
```

Step 2: Build (to verify)

```
npm run build
```

Step 3: Start Development Server

```
npm start
```

Files That Need to Be Changed

File 1: angular.json

Location: frontend/vehicle-service-management-ui/angular.json

What Changed: Updated budget limits to prevent build errors

Complete File Content: (or you can copy from [this link](#))

```
{  
  "$schema": "./node_modules/@angular/cli/lib/config/schema.json",  
  "version": 1,  
  "cli": {  
    "packageManager": "npm"  
  },  
  "newProjectRoot": "projects",  
  "projects": {  
    "vehicle-service-management-ui": {  
      "projectType": "application",  
      "schematics": {  
        "@schematics/angular:component": {  
          "style": "scss"  
        }  
      },  
      "root": "",
```

```
"sourceRoot": "src",
"prefix": "app",
"architect": {
  "build": {
    "builder": "@angular/build:application",
    "options": {
      "browser": "src/main.ts",
      "tsConfig": "tsconfig.app.json",
      "inlineStyleLanguage": "scss",
      "assets": [
        {
          "glob": "**/*",
          "input": "public"
        }
      ],
      "styles": [
        "src/styles.scss"
      ]
    },
    "configurations": {
      "production": {
        "budgets": [
          {
            "type": "initial",
            "maximumWarning": "1MB",
            "maximumError": "2MB"
          },
          {
            "type": "anyComponentStyle",
            "maximumWarning": "10kB",
            "maximumError": "20kB"
          }
        ],
        "outputHashing": "all"
      },
      "development": {
        "optimization": false,
        "extractLicenses": false,
        "sourceMap": true
      }
    },
    "defaultConfiguration": "production"
  },
  "serve": {
    "builder": "@angular/build:dev-server",
    "configurations": {
      "production": {
        "buildTarget": "vehicle-service-management-ui:build:production"
      },
      "development": {
        "buildTarget": "vehicle-service-management-ui:build:development"
      }
    },
    "defaultConfiguration": "development"
  }
}
```

```
    },  
    "test": {  
      "builder": "@angular/build:unit-test"  
    }  
  }  
}  
}  
}
```

Key Changes Made

Production Budgets (lines 38-49):

- **Initial bundle warning:** Increased to **1MB** (from previous lower limits)
- **Initial bundle error:** Set to **2MB**
- **Component style warning:** Set to **10kB**
- **Component style error:** Set to **20kB**

Development Configuration (lines 51-55):

- **Optimization:** Disabled (**false**)
- **Extract Licenses:** Disabled (**false**)
- **Source Maps:** Enabled (**true**)
- **Note:** Development configuration does not include budgets to avoid warnings during development

Summary of Changes

In **angular.json**:

1. Production Budgets:

- Initial bundle warning: **1MB**
- Initial bundle error: **2MB**
- Component style warning: **10kB**
- Component style error: **20kB**

2. Development Configuration:

- No budgets section (to prevent warnings during development)
- Optimization disabled for faster builds
- Source maps enabled for debugging

Why These Changes Were Needed

The budget limits were increased to accommodate:

- **Initial bundle size:** Larger applications may exceed default limits
- **Component styles:** Complex components with extensive styling may exceed default style budgets

- **Development workflow:** Removing budgets from development configuration prevents unnecessary warnings during active development

Verification

After making these changes, run:

```
npm run build
```

Expected result: Build completes successfully with no errors.

Then start the server:

```
npm start
```

Expected result: Development server starts on <http://localhost:4200> (or the next available port).

Troubleshooting

If you encounter build errors:

1. Clear node_modules and reinstall:

```
rm -rf node_modules package-lock.json  
npm install
```

2. Clear Angular cache:

```
npm run ng cache clean
```

3. Verify Node.js version:

- Ensure you're using Node.js 18.x or higher
- Check with: `node --version`

4. Check Angular CLI version:

```
ng version
```

Additional Notes

- The `angular.json` file uses the new Angular build system (`@angular/build:application`)

- Budgets are only applied to production builds to maintain strict size limits
- Development builds are optimized for speed and debugging experience
- All assets are served from the `public` directory as specified in the assets configuration