**Documentation for Dynamic Work Engine**

**Integration of JSON at build time**

1. **Combining JSON files from templates folder to a single JSON file**
2. There is a folder templates which contains JSON files for templates.
3. In combine-templates.js file **inputDir** is set to the directory where the JSON files to be combined are located.
4. The script reads JSON files from a specified directory, combines their content into a single JSON object.

If you want to display data by combining json files into a single file, perform these changes in package.json file.

* Add the script **"combine-json-files": "node combine-templates.js".**

At build time, in **package.json node combine-templates.js** invokes combine-template.js file which therefore combines all the JSON files and push them into Templates.json file.

* Replace the build script with **”build”: "npm run combine-json-files && ng build”**

This script runs command and firstly executes custom script named "combine-json-files" , && operator executes the commands on both sides of it sequentially.

In this case, it ensures that the second command (**ng build**) is only executed if the first one (**npm run combine-json-files**) is successful.

1. **Fetching data from Database**
2. Install
3. "msnodesqlv8": "^4.1.2",
4. "mssql": "^10.0.1" using npm install.
5. 'sp\_getAllTemplate' is the stored procedure which fetches template data from the database

Get Template.json data using database or combining JSON files at build time

In package.json: “combine-json-files": "node combine-templates.js

”build”: "npm run combine-json-files && ng build”

In package.json: "DBConnect": "node dbConnect.js "build”: " npm run DBConnect && ng build"

**outputFile (Specify the output file)**, worksheetTemplates.json Open a new pool connection and connect to DB

**inputDir**=\_\_dirname+'/src/templates’, **outputFile (Specify the output file)**, **combinedData** = {"Templates":[]}

Check if each file ends with ".json."

Execute Store Procedure: 'sp\_getAllTemplate'

If there is no error

Continue checking other files

Console the error

Combine JSON data.

Parse the JSON file, then append the data to **combinedData.Templates**.

Parse the data. Write the data to the output file.

Write the combined data to the output file.

In both cases, the Templates.json file is updated with the templates data.

If you want to display data by fetching data from database and pushing into a json file, perform these changes in package.json file.

* Add the script  **"DBConnect": "node dbConnect.js".**

At build time, in package.json **node dbConnect.js** invokes dbConnect.js file which therefore fetches data from database and push it into Templates.json file.

* Replace the build script with **"build": " npm run DBConnect && ng build",**

This script runs command and executes custom script named "combine-json-files" firstly, && operator executes the commands on both sides of it sequentially.

In this case, it ensures that the second command (**ng build**) is only executed if the first one (**npm run DBConnect**) is successful.

CHANGES MADE IN tsconfig.ts file :

Add

* **"resolveJsonModule": true,**
* **"esModuleInterop": true** in compilerOptions