# File Handling Application Documentation

## Overview

A Real-time File Handling Application is a Node.js-based solution designed to efficiently manage large volumes of files by automatically splitting them into smaller, more manageable chunks. This approach facilitates easier storage and transfer of files.

**Requirements**

- Develop a Node.js application that monitors an input folder for new files every 5 minutes.
- Every file found in the input folder should be converted/split into multiple chunks based on size (chunks of 10MB) and stored in an output folder using Linux commands within the Node Application.
- If a file is already processed, it should not be processed again.
- As soon as the conversion is done, the application should compare the original file and the chunks to check if any data is lost during the conversion and print the output.

### Architecture Components

1. Checksum Calculation (`checksum.js`)
2. File Processing (`fileService.js` and `fileController.js`)
3. MD5 Checksum Verification
4. Using Git Bash for Linux Commands on Windows

**Technical Details**:

- Uses Node's `child_process` module to execute the `md5sum` command via Git Bash.
- Replaces backslashes with forward slashes in file paths to ensure compatibility with Git Bash.
- Executes the command and parses the output to extract the MD5 checksum.

**Running the Application Locally**

**Prerequisites**

1. **Node.js**: Ensure Node.js is installed on your machine.
2. **Git Bash**: Install Git Bash to provide a Linux-like environment on Windows.
   (**Purpose**: To utilize Linux commands (`split`, `cat`, `md5sum`) on a Windows environment.)
3. By open gitbash use **cd** command to go to the path of the project location
4. Type **node cronJobs.js** on gitbash for run the code