**Classroom Activity: Implementing File Uploads with Express.**

**Step 1: Set Up Your Project**

mkdir file-upload-app

cd file-upload-app

npm init -y

npm install express multer

**Step 2: Create the Application Files**

create app.js

mkdir public

create public/index.html

**Step 3: Set Up the Express Server**

Open app.js and add the following code:

const express = require('express');

const multer = require('multer');

const path = require('path');

const fs = require('fs');

const app = express();

// Serve static files from the 'public' directory

app.use(express.static('public'));

// Configure storage

const storage = multer.diskStorage({

    destination: function (req, file, cb) {

        cb(null, 'uploads/');

    },

    filename: function (req, file, cb) {

        cb(null, Date.now() + path.extname(file.originalname)); // Appends the file extension

    }

});

// Initialize upload

const upload = multer({ storage: storage });

// Create uploads directory if it doesn't exist

if (!fs.existsSync('uploads')) {

    fs.mkdirSync('uploads');

}

// Define a POST route for file upload

app.post('/upload', upload.single('file'), (req, res) => {

    try {

        res.send('File uploaded successfully!');

    } catch (err) {

        res.sendStatus(400);

    }

});

// Define a route for the root URL

app.get('/', (req, res) => {

    res.sendFile(path.join(\_\_dirname, 'public', 'index.html'));

});

// Start the server

app.listen(3000, () => {

    console.log('Server started on http://localhost:3000');

});

**Step 4: Create the HTML Form for File Upload**

Open public/index.html and add the following code:

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <title>File Upload</title>

</head>

<body>

    <form action="/upload" method="post" enctype="multipart/form-data">

        <input type="file" name="file">

        <button type="submit">Upload</button>

    </form>

</body>

</html>

**Step 5: Run the Application**

node app.js

**Output:**

