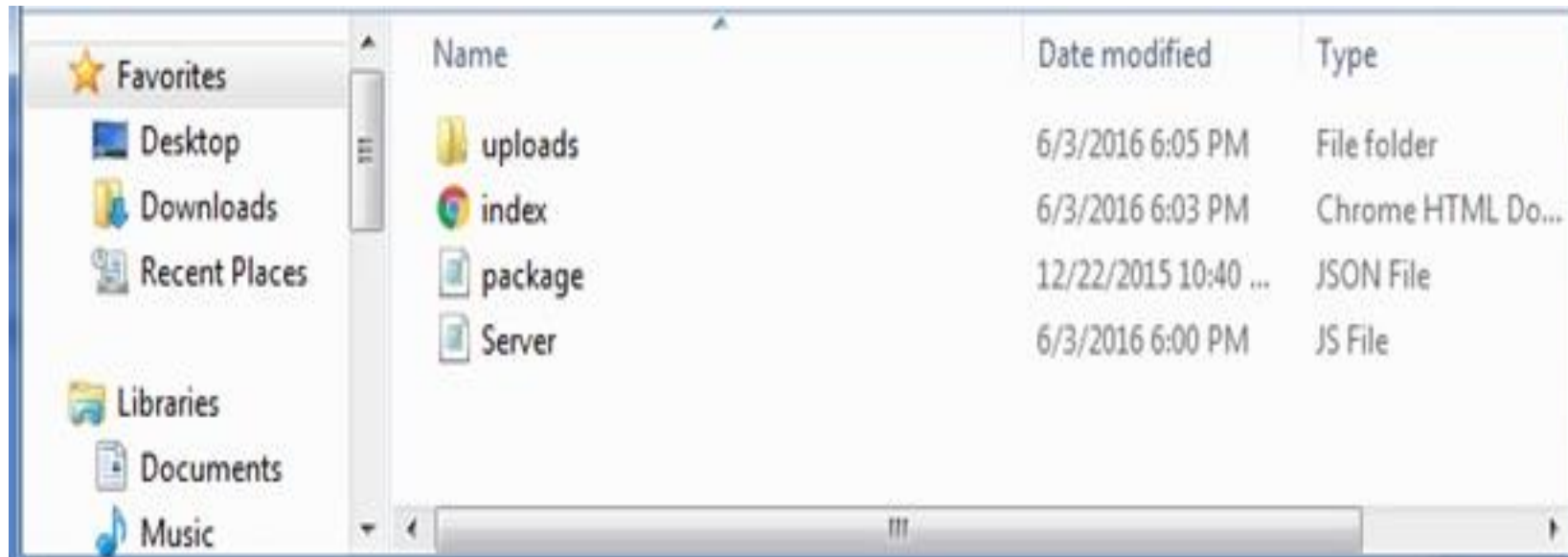# Express : Upload File

In Express.js, file upload is slightly difficult because of its asynchronous nature and networking approach.

It can be done by using middleware to handle multipart/form data. There are many middleware that can be used like multer, connect, body-parser etc.

Multer is a node. js middleware for **handling multipart/form-data , which is primarily used for uploading files**.

Express : Upload File

uploads: It is an empty folder i.e. created to store the uploaded images.
Requirements :
npm install express
npm install multer

package: It is JSON file, having the following data:
File: package.json
```
{
  "name": "file_upload",
  "version": "0.0.1",
  "dependencies": {
    "express": "4.13.3",
    "multer": "1.1.0"
  },
  "devDependencies": {
    "should": "~7.1.0",
    "mocha": "~2.3.3",
    "supertest": "~1.1.0"
```

Express : Upload File

File: index.html
```html
<html>
 <head>
  <title>File upload in Express</title>
 <script src="http://ajax.googleapis.com/ajax/libs/jquery/1.7.1/jquery.min.js"></script>
 <script src="http://cdnjs.cloudflare.com/ajax/libs/jquery.form/3.51/jquery.form.min.js"></script>
 <script>
 $(document).ready(function() {
   $('#uploadForm').submit(function() {
      $("#status").empty().text("File is uploading...");

    $(this).ajaxSubmit({

      error: function(xhr) {
          status('Error: ' + xhr.status);
      },

      success: function(response) {
          console.log(response)
          $("#status").empty().text(response);
      }
   });

   return false;
   });
});
 </script>
 </head>
```

Express : Upload File

File: index.html

```html
<body>
    <h1>Express.js File Upload</h1>
    <form id="uploadForm" enctype="multipart/form-data" action="/uploadFile" method="post">
      <input type="file" name="myfile" /><br/><br/>
      <input type="submit" value="Upload Image" name="submit"><br/><br/>
      <span id="status"></span>
    </form>
  </body>
</html>
```

Express : Upload File

File: server.js

```javascript
var express =   require("express");

var multer  =   require('multer');

var app =   express();

var storage =   multer.diskStorage({
  destination: function (req, file, callback) {
    callback(null, './uploads');
  },
  filename: function (req, file, callback) {
    callback(null, file.originalname);
  }
});
```

Express : Upload File

File: server.js

```javascript
var upload = multer({ storage : storage}).single('myfile');
app.get('/',function(req,res){
    res.sendFile(__dirname + "/index.html");
});


app.post('/ uploadFile ',function(req,res){
  upload(req,res,function(err) {
    if(err) {
      return res.end("Error uploading file.");
    }
    res.end("File is uploaded successfully!");
  });
});
app.listen(2000,function(){
  console.log("Server is running on port 2000");
});
```
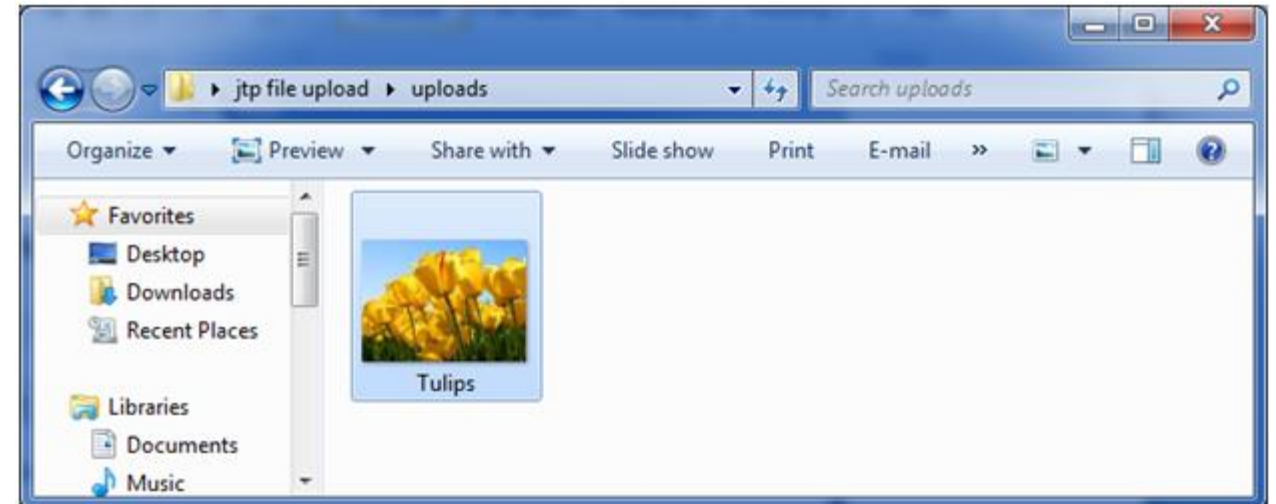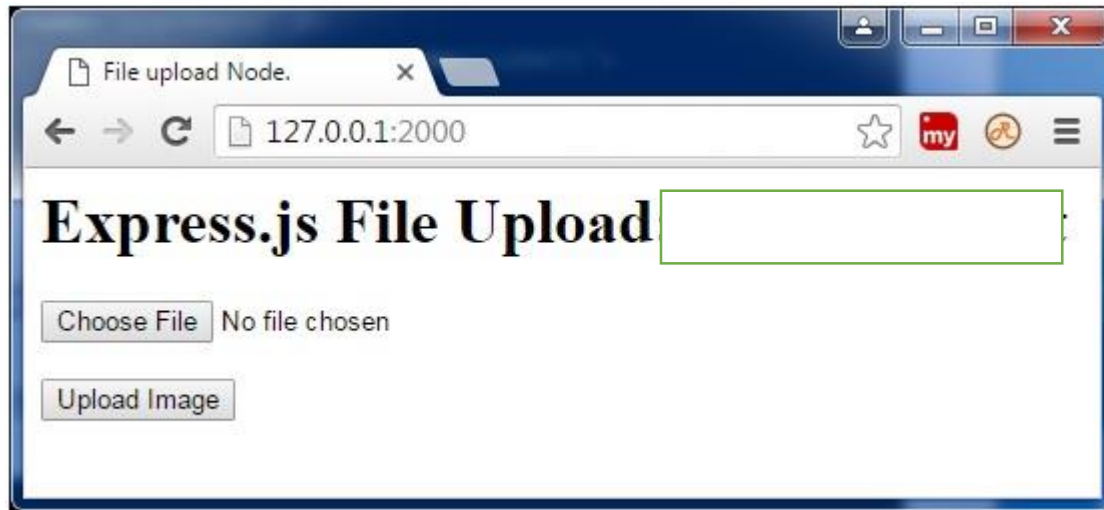
Express : Upload File

node server.js

Open the local page http://127.0.0.1:2000/ to upload the images.

Select an image to upload and click on "Upload Image" button.

Here, you see that file is uploaded successfully. You can see the uploaded file in the "Uploads" folder.