


Files Upload and Download




20.1 Adding a File Picker

- **Input Element:** Use `<input type="file">` to create a file picker.
- **Multiple Files:** Add `multiple` attribute to allow selecting multiple files.
- **File Types:** Use `accept` attribute to restrict file types (e.g., `accept=".jpg, .png"`).

```
<input type="file"
  name="photo"
  class="w-full px-4 py-2 mb-4 border border-gray-300
  rounded-lg focus:outline-none focus:border-blue-500"
/>
```

Add your Home



20.2 Creating Multipart Form

```
exports.postAddHome = (req, res, next) => {
  const { houseName, price, location, rating, photoUrl, description } = req.body;
  console.log(req.body);
}

Server running at: http://localhost:3001
{
  id: '',
  houseName: 'New House',
  price: '1299',
  location: 'kashmir',
  rating: '3.9',
  photo: 'IMG_4705.HEIC',
  description: 'asdfasdf'
}
```

×	Headers	Payload	Preview	Response	Initiator	Timing	Cookies
▼ General							
Request URL:		http://localhost:3001/host/edit-home					
Request Method:		POST					
Status Code:		● 302 Found					
Remote Address:		[::1]:3001					
Referrer Policy:		strict-origin-when-cross-origin					
► Response Headers (8)							
▼ Request Headers							
Raw							
Accept:		text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/png,image/svg+xml,*/*;q=0.8					
Accept-Encoding:		gzip, deflate, br, zstd					
Accept-Language:		en-GB,en;q=0.9					
Cache-Control:		max-age=0					
Connection:		keep-alive					
Content-Length:		114					
Content-Type:		application/x-www-form-urlencoded					
Cookie:		connect.sid=s%3Aage:					
Host:		localhost:3001					
Origin:		http://localhost					

```
44  >
45  <input
46  accept="image/*"
47  <!-- multiple -->
48  <!-- accept="image/jpg,image/png" -->
49  type="file"
50  name="photo"
51  class="border-2 rounded-lg p-3 bg-gray-50 focus:ring-2 focus:ring-indigo-400 outline-none"
52  />
```

node 20.3 Handling Multipart Form Data

The screenshot shows the npm package page for 'multer'. It includes the package name, version (1.4.5-lts.1), and a description: 'Multer is a node.js middleware for handling multipart/form-data, which is primarily used for uploading files. It is written on top of busboy for maximum efficiency.' The page also features a 'Translations' section with links to various languages, an 'Installation' section with the command '\$ npm install --save multer', and a 'Weekly Downloads' chart showing 6,313,138 downloads. The right sidebar contains repository links, homepage, and version/license information.

```
prashantjain@Prashants-MacBook-Pro 16 email and advance auth % npm install multer
added 17 packages, and audited 298 packages in 719ms
50 packages are looking for funding
  run 'npm fund' for details
1 high severity vulnerability
To address all issues, run:
  npm audit fix
Run 'npm audit' for details.
```

node 20.3 Handling Multipart Form Data

```
<form action="/host/<%= editing ? "edit-home" : "add-home">" method="POST" enctype="multipart/form-data"
class="w-full max-w-md">
```

```
const multer = require('multer');
app.use(express.urlencoded());
app.use(multer().single('photo'));
app.use(express.static(path.join(rootDir, 'public')))
```

```
console.log(req.file);
```

```
{
  filename: 'photo',
  originalname: 'IMG_4705.HEIC',
  encoding: '7bit',
  mimetype: 'image/heic',
  buffer: <Buffer 00 00 00 1c 66 74 79 70 68 65 69 63 00 00 00 74 6d
00 00 21 68 64 6c 72 00 00 ... 2246669 more bytes>,
  size: 2246719
}
```



20.4 Saving Image Files

```
app.use(multer({ dest: 'uploads/' }).single('photo'));
```

```
{
  fieldname: 'photo',
  originalname: 'house1.png',
  encoding: '7bit',
  mimetype: 'image/png',
  destination: 'uploads/',
  filename: '0c710a9b2903e323fc38e7926650d159',
  path: 'uploads/0c710a9b2903e323fc38e7926650d159',
  size: 387102
}
```

```
> routers
  uploads
    0c710a9b2903e323fc38e7926650d159
  util
```



20.5 Custom File Names

```
// This defines where uploaded files will be stored and how they'll be named
const storage = multer.diskStorage({
  // Set the destination folder for uploaded files
  destination: (req, file, cb) => {
    cb(null, 'uploads/'); // Files will be saved in the 'uploads' directory
  },
  // Set the filename for uploaded files
  filename: (req, file, cb) => {
    cb(null, new Date().toISOString() + '-' + file.originalname);
  }
});
```

```
app.use(multer({ storage }).single('photo'));
```

```
> routers
  uploads
    0c710a9b2903e323fc38e7926650d159
    2024-11-25T11:26:17.582Z-house1.png
  util
```



20.6 Restricting Upload File Types

```
const fileFilter = (req, file, cb) => {  
  if ([ 'image/jpeg', 'image/png', 'image/jpg' ].includes(file.mimetype)) {  
    cb(null, true);  
  } else {  
    cb(null, false);  
  }  
};
```

```
app.use(multer({ storage, fileFilter }).single('photo'));
```

Adding this filter, now multer would not have the file if it does not match the type and req.file will just be undefined.

```
exports.postEditHome = (req, res, next) => {  
  const { id, houseName, price, location, rating, photoUrl, description } =  
    req.body;  
  
  if (!req.file) {  
    return res.status(400).send('No image provided');  
  }  
}
```



20.6 Restricting Upload File Types

```
if (!req.file) {  
  return res.status(400).send('No image provided');  
}
```

```
const photoUrl = req.file.path;
```

```
{  
  _id: ObjectId('67445aa6e25a19de45a1b82e')  
  houseName : "New House"  
  price : 1299  
  location : "kashmir"  
  rating : 3.9  
  description : "asdfasdf"  
  host : ObjectId('673cacd23e8557da8e22d9b1')  
  __v : 0  
  photoUrl : "uploads/2024-11-25T11:35:47.086Z-house1.png"  
}
```

```
<a href="<%= home.rules %>" download class="text-blue-600 hover:text-blue-800 flex items-center gap-2 text-sm font-semibold hover:underline">  
  <img alt="Download icon" data-bbox="175 745 185 755"/> Download House Rules  
</a>
```

```

exports.postEditHome = (req, res, next) => {
  const { id, houseName, price, location, rating, description } = req.body;
  Home.findById(id)
    .then((home) => {
      home.houseName = houseName;
      home.price = price;
      home.location = location;
      home.rating = rating;
      if (req.files['photo']) {
        fs.unlink(home.photo, (err) => {
          if (err) {
            console.log("error occur while unlink photo ");
          }
        });
        home.photo = req.files.photo[0].path;
      }
      if (req.files['rules']) {
        fs.unlink(home.rules, (err) => {
          if (err) {
            console.log("error occur while unlink photo ");
          }
        });
        home.rules = req.files.rules[0].path;
      }
      home.description = description;
      home
        .save()
        .then((result) => {
          console.log("home Updated:", result);
        })
        .catch((err) => {
          console.error("Failed to Update home:", err);
        });
    })
  });
}

```



20.8 Serving Saved Data

```

app.use(express.static(path.join(rootDir, "public")));
app.use('/uploads', express.static(path.join(rootDir, "uploads")));
app.use(bodyParser.urlencoded({ extended: true }));

```

This is done as like in case of public, things inside public will be served like they are in root folder and the url does not have public in it. Here also either remove uploads/ from the image path, or add the qualifier.