GLA University, Mathura
MINI PROJECT-II
(2020-21)

File-Sharing Web-App

Final Project Report

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ACKNOWLEDGMENT

To list who all have helped us is difficult because they are so numerous and the depth is so enormous.

We would like to acknowledge the following as being idealistic channels and fresh dimensions in the completion of this project.

We take this opportunity to thank GLA University for giving us the chance to do this project.

We would like to thank the department of computer science and engineering, for providing the necessary facilities required for completion of this project.

We would also like to express my sincere gratitude towards my project guide Harvinder Kaur Mam for their exemplary guidance, monitoring and constant encouragement throughout the course of this project.

CERTIFICATE

This is to certify that we the students of b.tech 3rd year of GLA UNIVERSITY have successfully completed the project “File-Sharing Web-app” under the guidance of Mrs.Harvinder kaur.

Signature of the Candidates:

Name of the Candidate:

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PROJECT DESCRIPTION

Abstract

File sharing is one of the oldest applications of the internet. One way of sharing files online is for a user to upload files to a common space on the web and others users can download the files from the common web space.

The objective of this project was to design an online file sharing website where users can upload files and other users can download them. To make the website more user friendly, users were given two space-constrained visualizations of their file system to view space occupied by the files and folders, and three AJAX based file management systems that work like browsing files on a desktop computer with drag and drop etc.

This report discusses the implementation details of the website, and the advantages of having different visualizations of the file system.

Introduction

1.1 General Introduction to the topic

The purpose and main importance of file sharing is to give copies of digital files, information and media with ease and speed to all concerned users.

This project is a real-time file sharing application.File sharing is one of the oldest applications of the internet. One way of sharing files online is for a user to upload files to a common space on the web and others users can download the files from the common web space.

The objective of this project was to design an online file sharing website where users can upload files and other users can download them.

In this project users can upload the file by selecting the file or just doing drag and drop. After that a link will be generated that will work for 24 hours .Users can either send that link to another user or can directly mail it to the other user email address. The other user can click on the link and a download page will appear from there the other user can download the file .

Reason for selecting the topic:-

One of the main advantages of online file sharing is that collaboration is smooth. You can share files instantly, access information quickly, and avoid any unnecessary delays. You can share files in real time with people in any part of the world and this is very useful in this covid pandemic situation.This encourages us for selecting this topic and there are also many file sharing apps available but we try to make more easy and smooth sharing for users.

Area of Computer Science

In this we are using html , css and javascript for the frontend.HTML provides the basic structure of sites, which is enhanced and modified by other technologies like CSS and JavaScript. CSS is used to control presentation, formatting, and layout. JavaScript is used to control the behavior of different elements.On the other hand we will use node js for backend and mangoDB as database.Node.js is a platform built on Chrome's JavaScript runtime for easily building fast and scalable network applications. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices.MongoDB is a document-oriented NoSQL database used for high volume data storage. Instead of using tables and rows as in the traditional relational databases, MongoDB makes use of collections and documents. Documents consist of key-value pairs which are the basic unit of data in MongoDB. Collections contain sets of documents and function which is the equivalent of relational database tables.

1.3 Hardware and Software Requirements

a) Technology Used:

- HTML
- CSS
- Javascript
- Node js

b) Software:

- Visual Studio (Version 1.38)
- MongoDB (database)

c) Hardware Used

- Latest Configuration Laptop

Objective

The objective of this project was to design an online file sharing website where users can upload files and can generate links using which the other user can download the file easily.

Implementation Details

Part 1: Making frontend of the website using html and css**.**

Part 2 : Making frontend interactive by adding javascript**.**

Part 3 : Setting up the project . downloading all the dependencies.Making file upload api using node js.

Part 4 : Creating server , making mangoDB connections ,Making file upload api ,downloading file api and sending mail api using node js.

Part 5 : deploying projects on heroku for free.

Functionalities:

Since the project was done for educational purposes, there was no size limit given to users to upload or download files. The main features of the website are:

a) Upload files:

This part is the heart of the project where the user can upload a file. Part of this page is Atlas enabled. File upload takes place in the form of a wizard control, where the user does the upload in a step by step manner. When the user uploads a file, he/she will be given a progress bar indicator to show what the status of the upload is.

b) Share Files:

In the last step of the upload process, users can choose to share the file. After uploading the file, the user gets the link and then the user sends the link to whom he/she wants to share the file.User can also send the link by mail. When he/she opens the link then the download page is open and in that page download button is available when he/she clicks on the download button then downloading of file will start and he/she easily downloads the file.

Future Scope:-

The website could be made more interactive in future.
Right now the file is not uploaded asynchronously, but if the file is uploaded asynchronously, the user could enter other options and details of the files while the file is being uploaded (like attaching a file in GMail). Another enhancement would be to scan the files for viruses before uploading or downloading.
Also navigation through the file system can be made better by having features like zooming, preview, etc.
The analysis of file system could have been done better, by uploading, downloading and searching files from a different computer that does not host the web application. Analysis would have also been better if files of bigger size (like 1GB or 2 GB) were uploaded and downloaded.

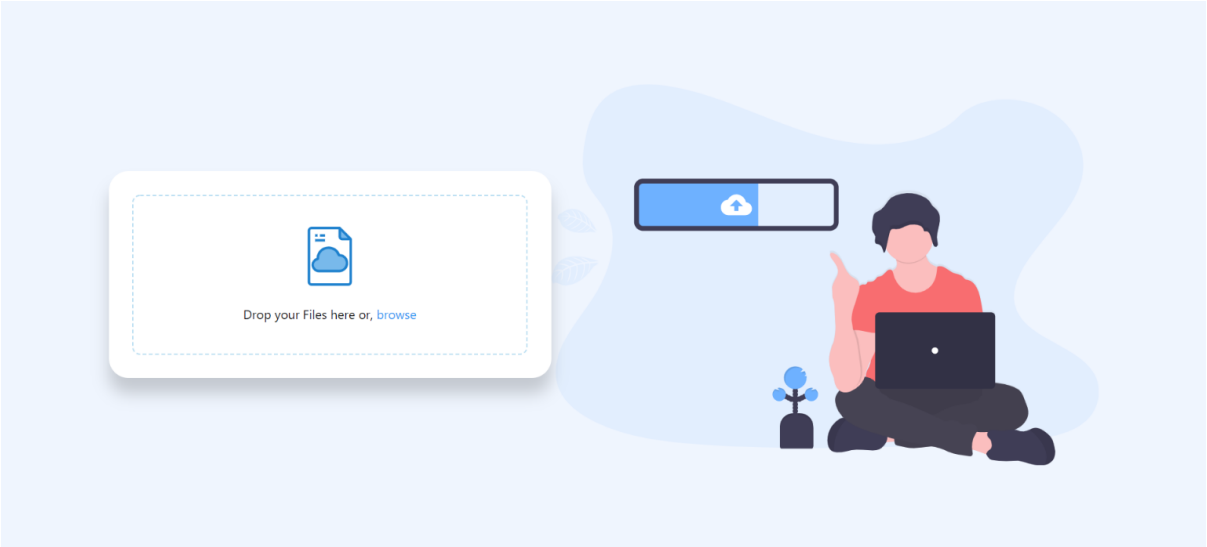
What contribution would the project make and where?

A file-sharing app is the kind of application program that enables and equips effective collaboration and file sharing within the organization. With file-sharing applications, you get to save, share, manage, and collaborate on business-critical files and documents in one place.

Scope for extension into a major project:-

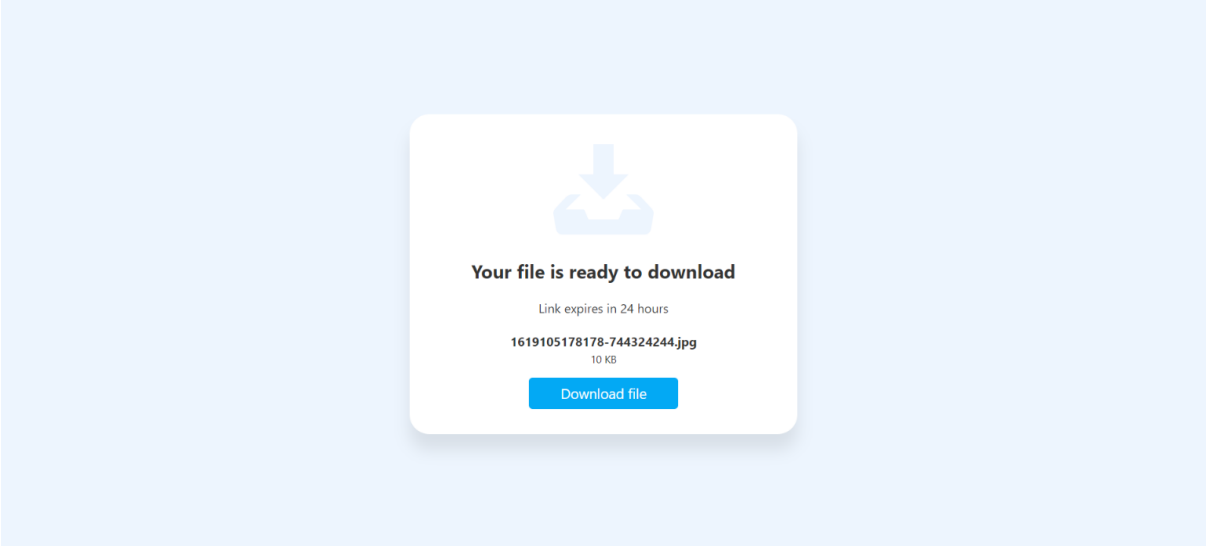
For extension into major projects we can add the feature of scan files for viruses before uploading. If the file contains viruses then it shows notification to the user,
and then it is easy for the user to check whether the file contains the virus or not.

UPLOADING PAGE



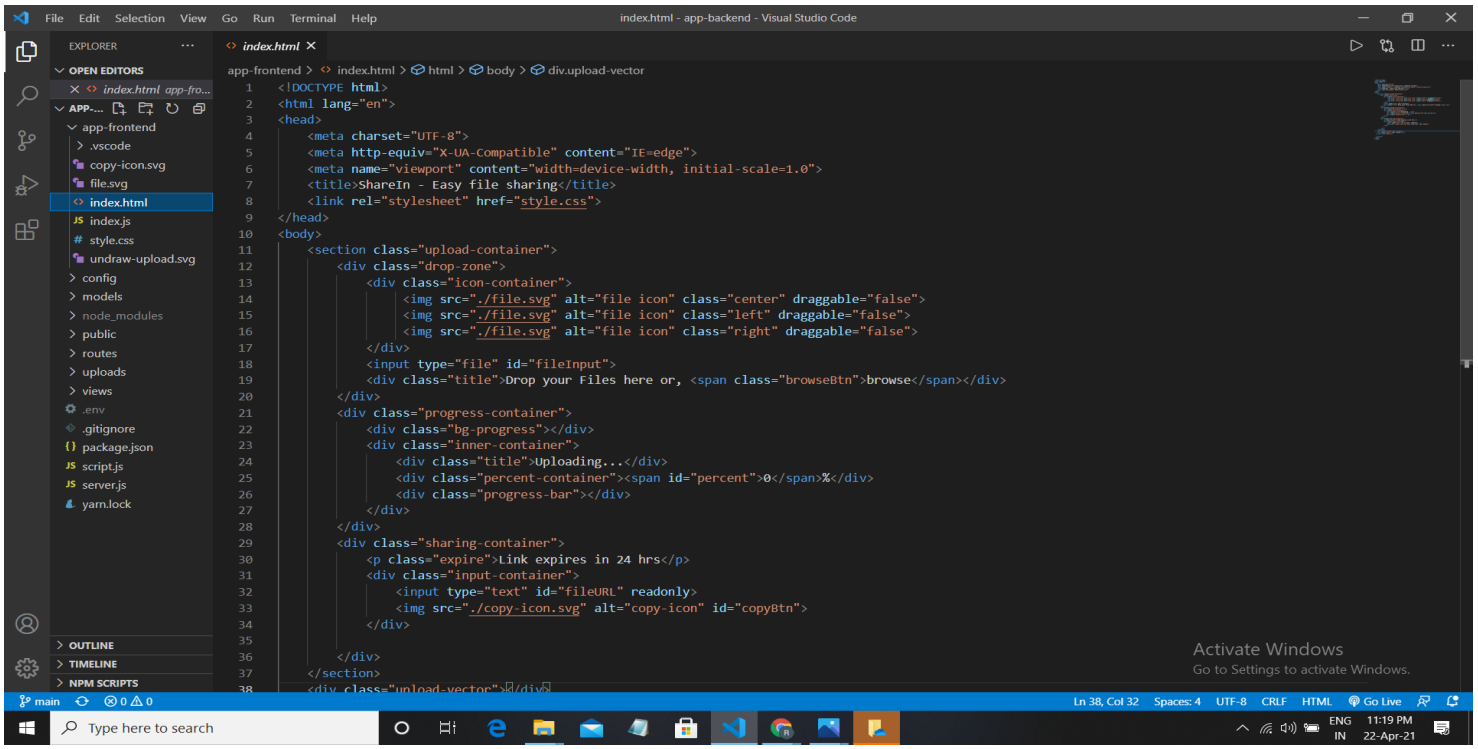
LINK GENERATED

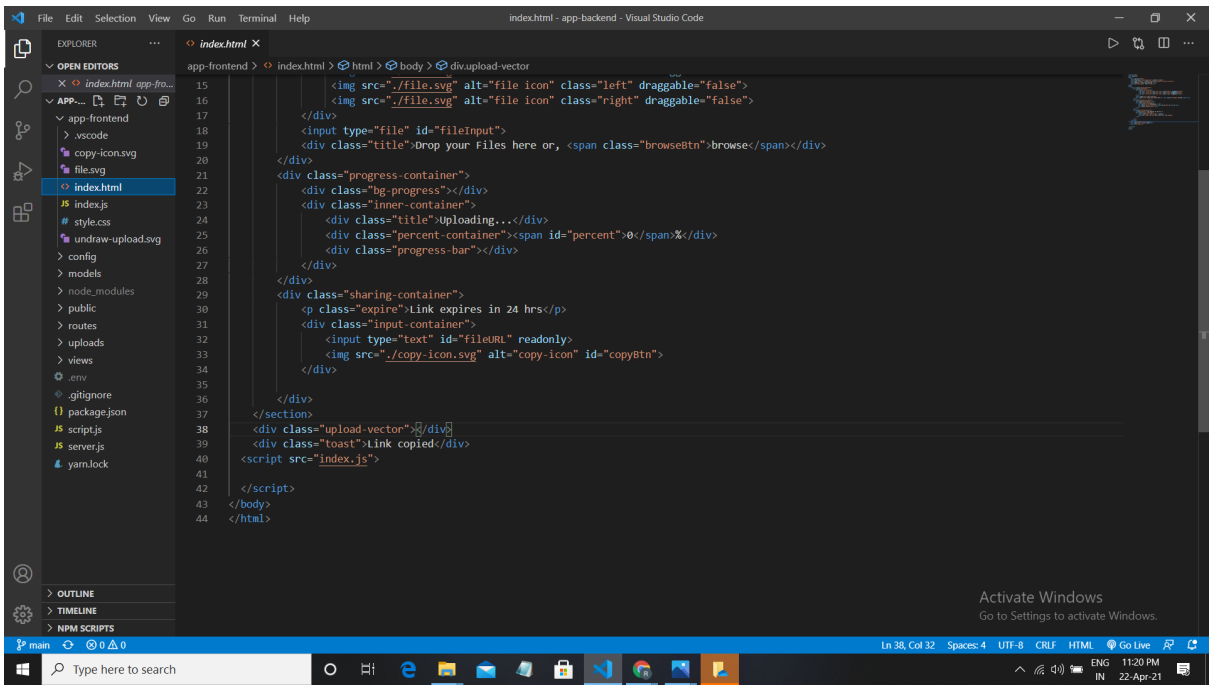
DOWNLOADING PAGE



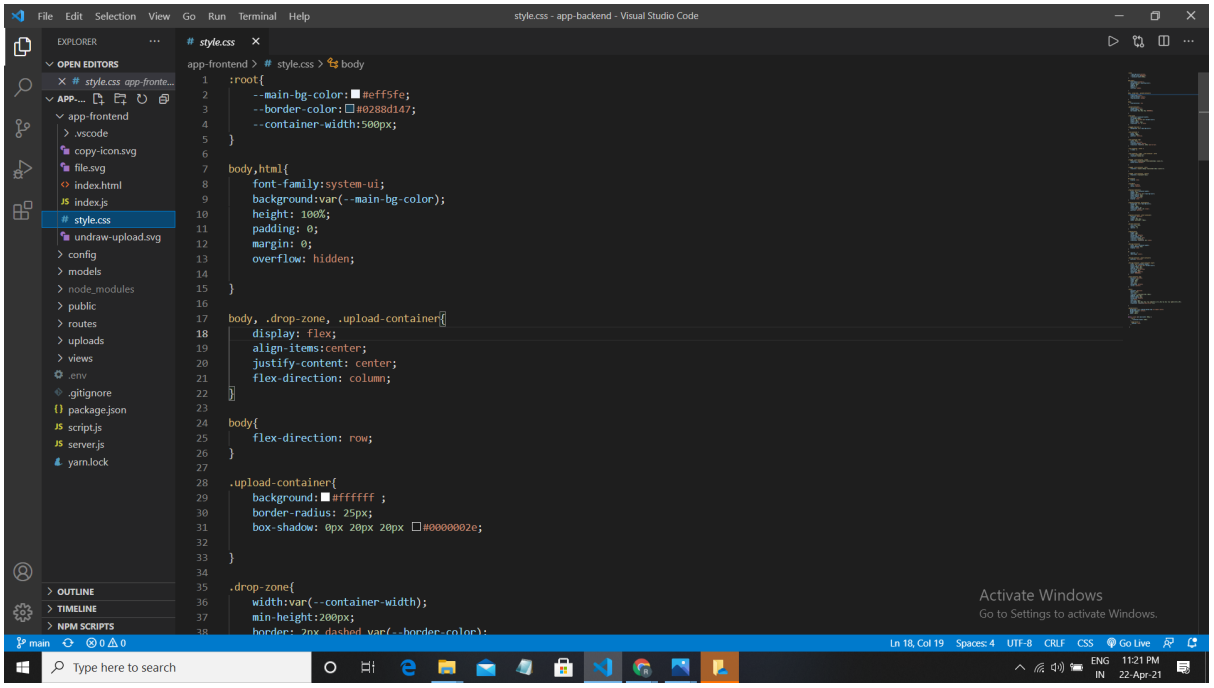
frontend

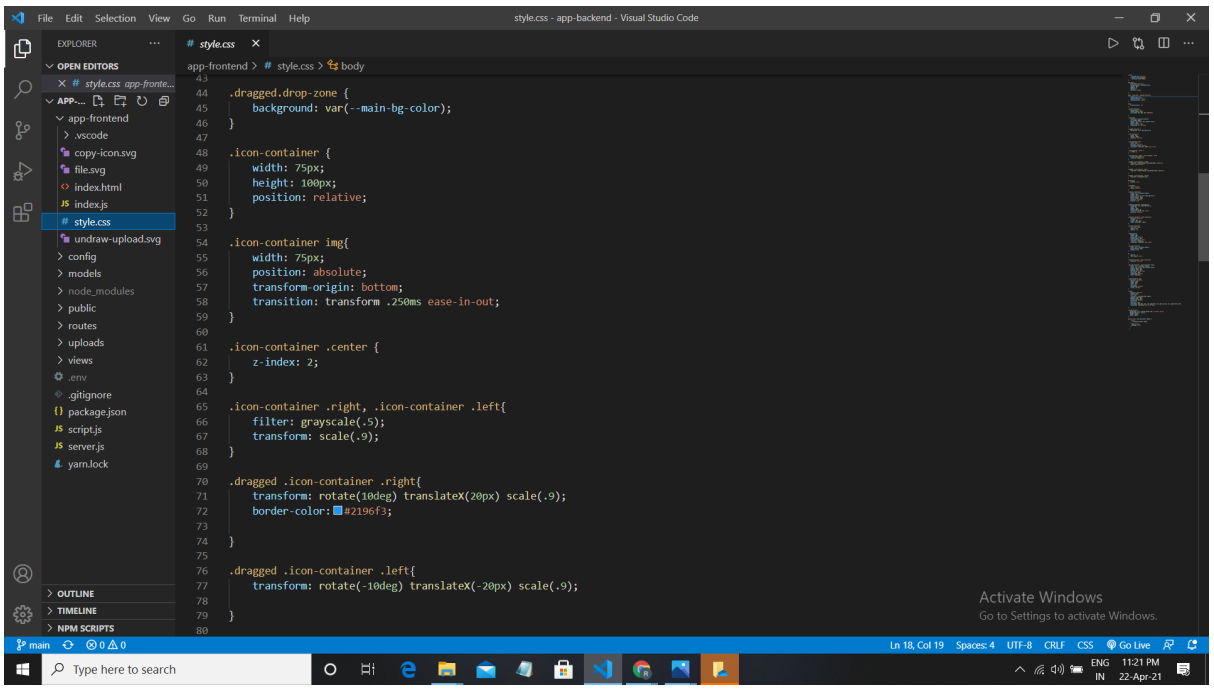
CODE:- index.html

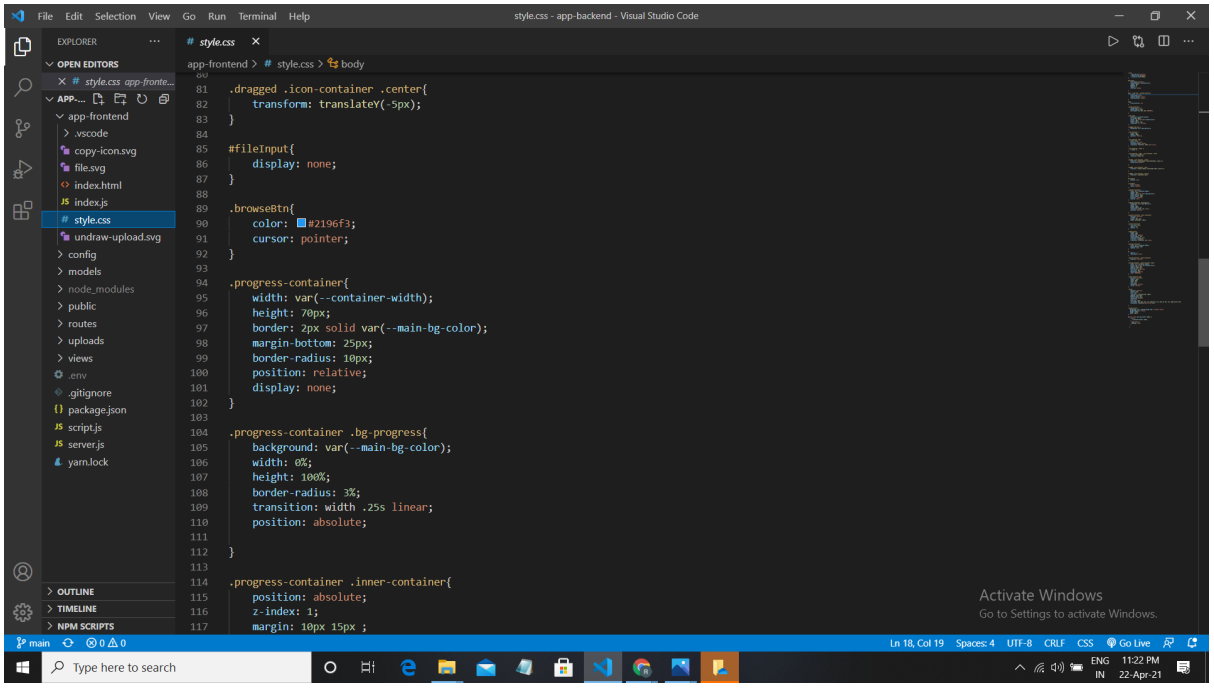


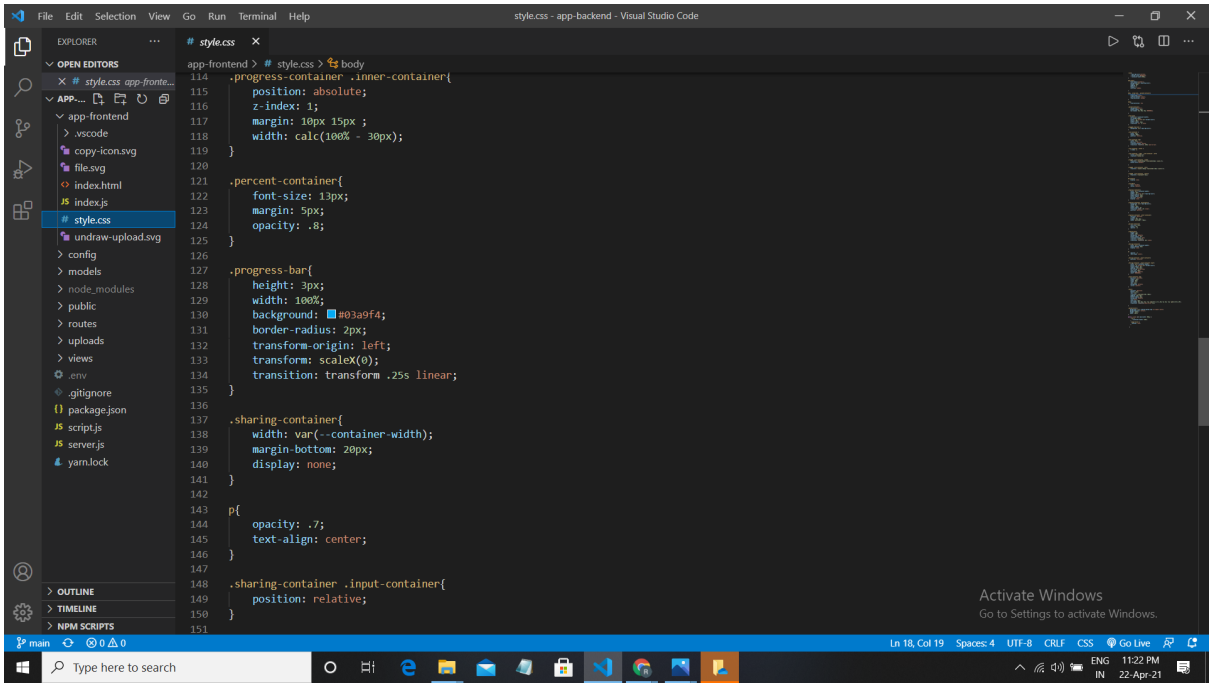


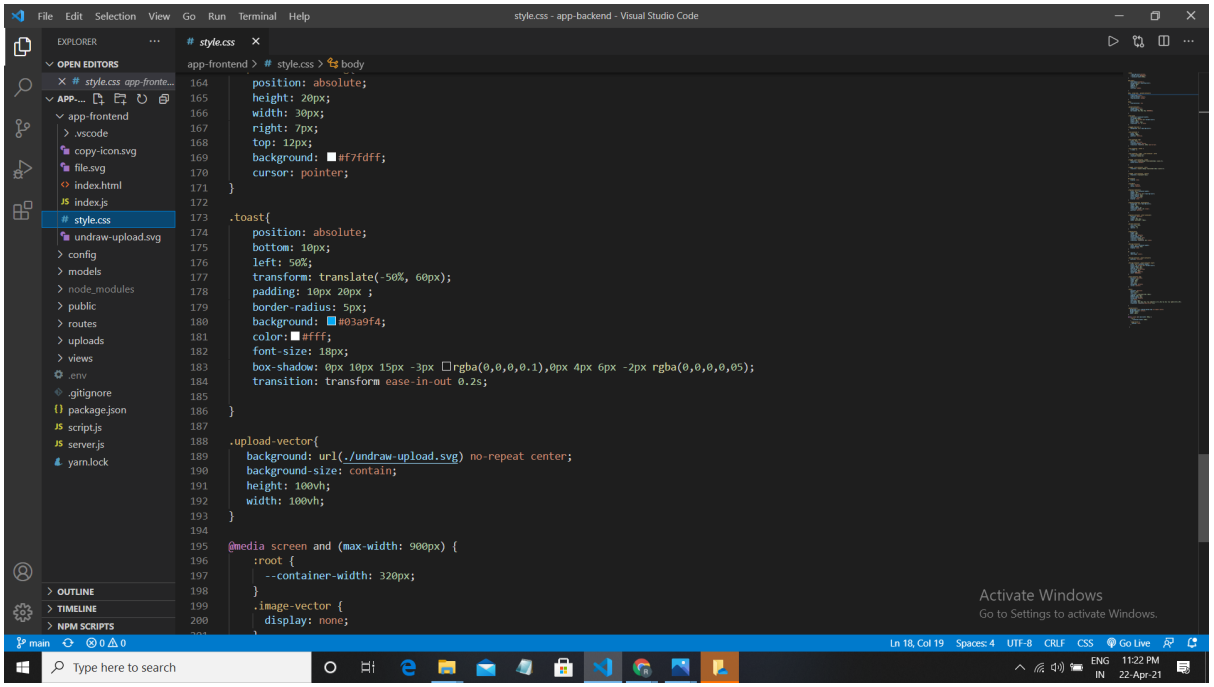
CSS- style.css



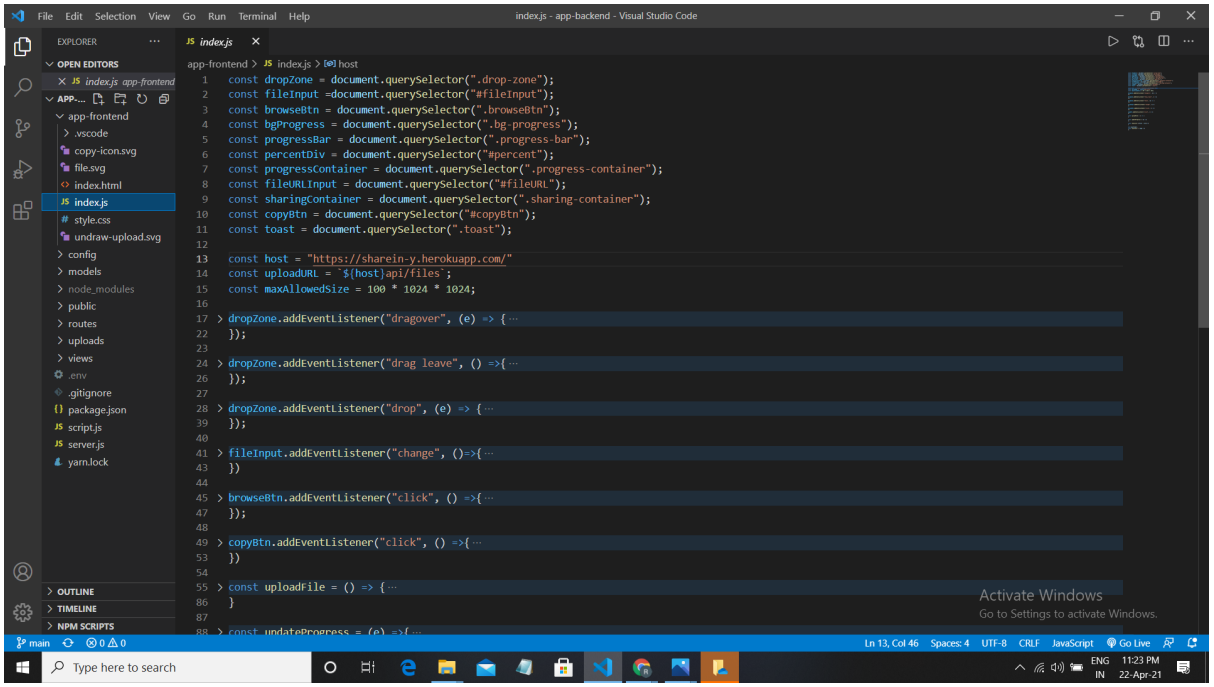

style.css - app-backend - Visual Studio Code
app-frontend > # style.css > body
.dragged.drop-zone {
background: var(--main-bg-color);
}
.icon-container {
width: 75px;
height: 100px;
position: relative;
}
.icon-container img{
width: 75px;
position: absolute;
transform-origin: bottom;
transition: transform .250ms ease-in-out;
}
.icon-container .center {
z-index: 2;
}
.icon-container .right, .icon-container .left{
filter: grayscale(.5);
transform: scale(.9);
}
.dragged .icon-container .right{
transform: rotate(10deg) translateX(20px) scale(.9);
border-color: #2196f3;
}
.dragged .icon-container .left{
transform: rotate(-10deg) translateX(-20px) scale(.9);
}
Activate Windows
Go to Settings to activate Windows.


style.css - app-backend - Visual Studio Code
app-frontend > # style.css > body
.dragged .icon-container .center{
transform: translateY(-5px);
}
#fileInput{
display: none;
}
.browseBtn{
color: #2196f3;
cursor: pointer;
}
.progress-container{
width: var(--container-width);
height: 70px;
border: 2px solid var(--main-bg-color);
margin-bottom: 25px;
border-radius: 10px;
position: relative;
display: none;
}
.progress-container .bg-progress{
background: var(--main-bg-color);
width: 0%;
height: 100%;
border-radius: 3%;
transition: width .25s linear;
position: absolute;
}
.progress-container .inner-container{
position: absolute;
z-index: 1;
margin: 10px 15px ;
Activate Windows
Go to Settings to activate Windows.

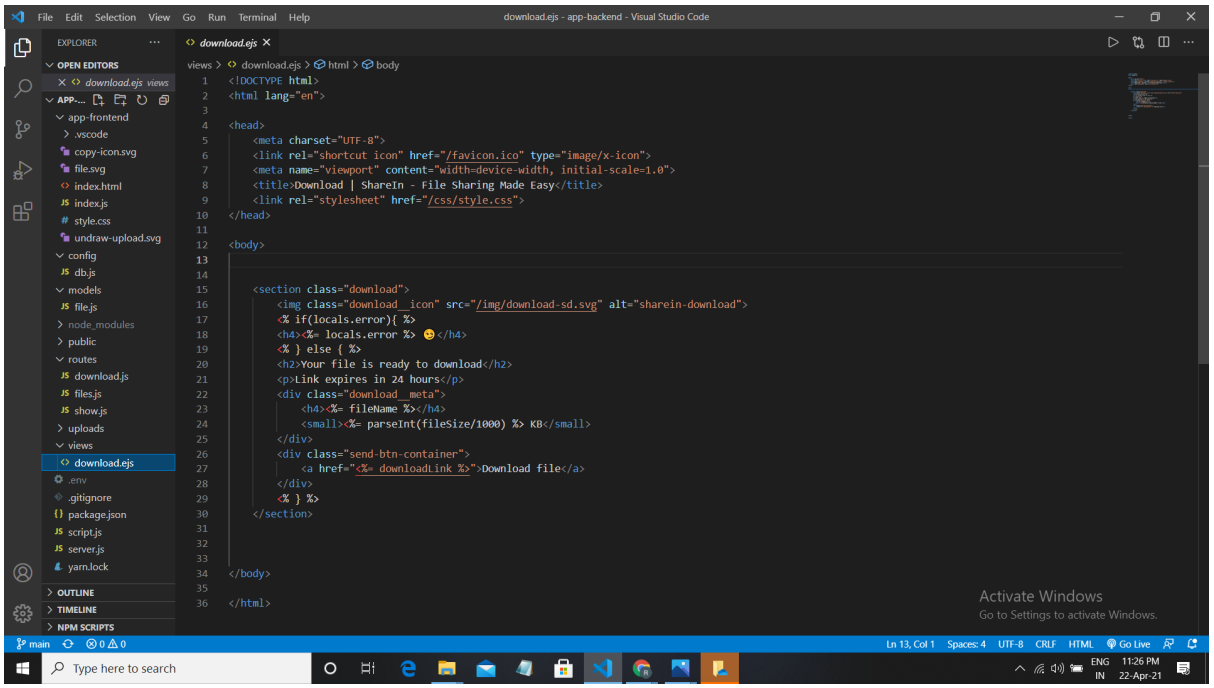




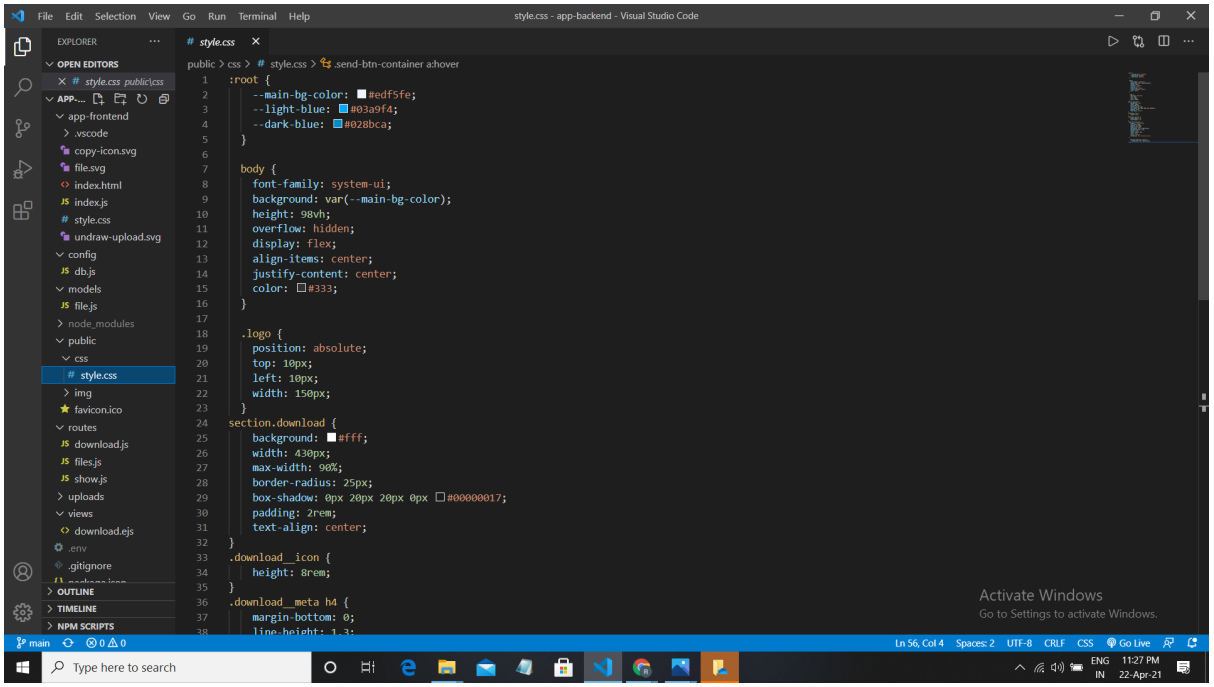
JAVASCRIPT-index.js

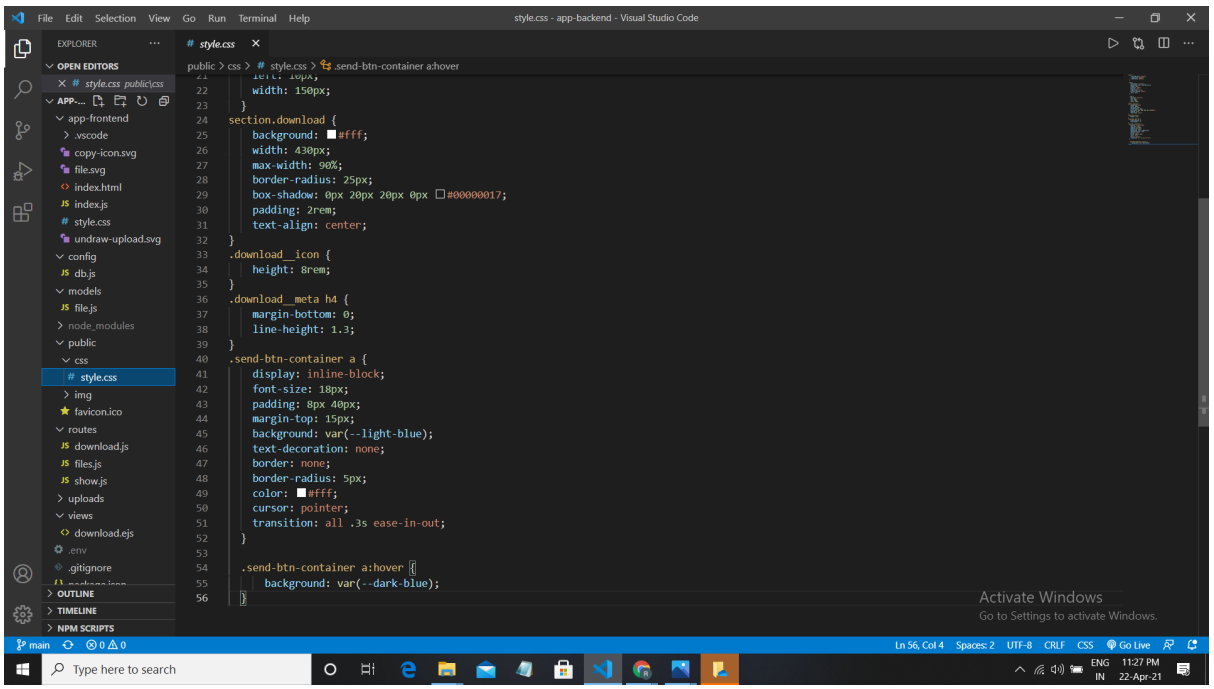


DOWNLOADING PAGE- download.ejs



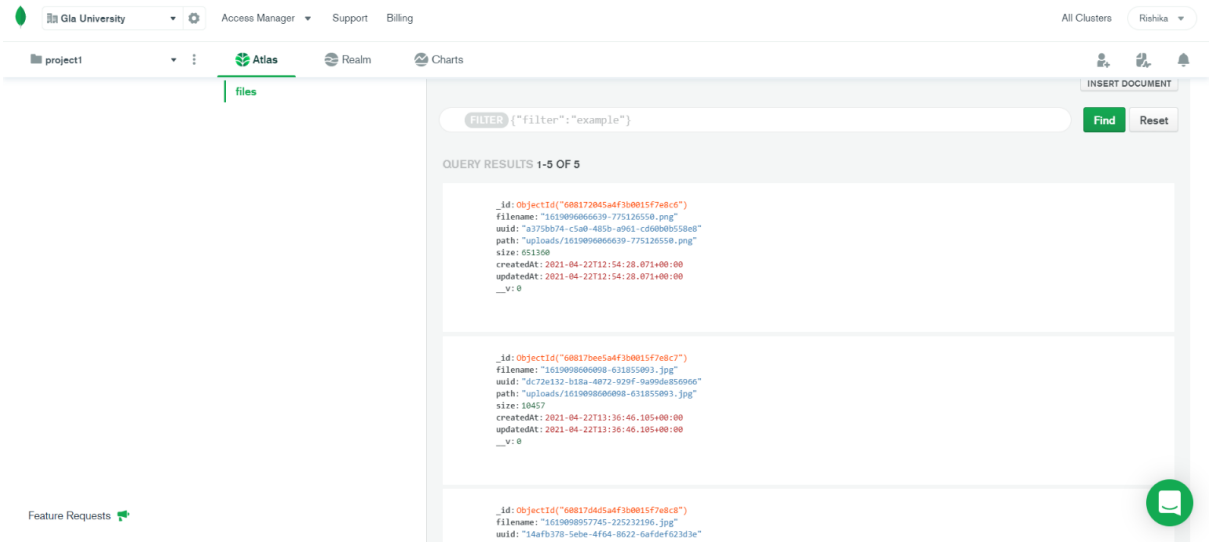
DOWNLOADING PAGE CSS- style.css


File Edit Selection View Go Run Terminal Help
style.css - app-backend - Visual Studio Code
EXPLORER
OPEN EDITORS
style.css public\css
APP-...
app-frontend
.vscode
copy-icon.svg
file.svg
index.html
index.js
style.css
undraw-upload.svg
config
db.js
models
file.js
node_modules
public
css
style.css
img
favicon.ico
routes
download.js
files.js
show.js
uploads
views
download.ejs
.env
.gitignore
OUTLINE
TIMELINE
NPM SCRIPTS
public > css > style.css > .send-btn-container a:hover
:root {
--main-bg-color: #edf5fe;
--light-blue: #03a9f4;
--dark-blue: #028bca;
}
body {
font-family: system-ui;
background: var(--main-bg-color);
height: 98vh;
overflow: hidden;
display: flex;
align-items: center;
justify-content: center;
color: #333;
}
.logo {
position: absolute;
top: 10px;
left: 10px;
width: 150px;
}
section.download {
background: #fff;
width: 430px;
max-width: 90%;
border-radius: 25px;
box-shadow: 0px 20px 20px 0px #00000017;
padding: 2rem;
text-align: center;
}
.download__icon {
height: 8rem;
}
.download__meta h4 {
margin-bottom: 0;
line-height: 1.3;
Activate Windows
Go to Settings to activate Windows.
main
Ln 56, Col 4
Spaces: 2
UTF-8
CRLF
CSS
Go Live
Type here to search
ENG
IN
11:27 PM
22-Apr-21


File Edit Selection View Go Run Terminal Help
style.css - app-backend - Visual Studio Code
EXPLORER
OPEN EDITORS
style.css public\css
APP-...
app-frontend
.vscode
copy-icon.svg
file.svg
index.html
index.js
style.css
undraw-upload.svg
config
db.js
models
file.js
node_modules
public
css
style.css
img
favicon.ico
routes
download.js
files.js
show.js
uploads
views
download.ejs
.env
.gitignore
OUTLINE
TIMELINE
NPM SCRIPTS
public > css > style.css > .send-btn-container a:hover
width: 150px;
}
section.download {
background: #fff;
width: 430px;
max-width: 90%;
border-radius: 25px;
box-shadow: 0px 20px 20px 0px #00000017;
padding: 2rem;
text-align: center;
}
.download__icon {
height: 8rem;
}
.download__meta h4 {
margin-bottom: 0;
line-height: 1.3;
}
.send-btn-container a {
display: inline-block;
font-size: 18px;
padding: 8px 40px;
margin-top: 15px;
background: var(--light-blue);
text-decoration: none;
border: none;
border-radius: 5px;
color: #fff;
cursor: pointer;
transition: all .3s ease-in-out;
}
.send-btn-container a:hover {
background: var(--dark-blue);
}
Activate Windows
Go to Settings to activate Windows.
main
Ln 56, Col 4
Spaces: 2
UTF-8
CRLF
CSS
Go Live
Type here to search
ENG
IN
11:27 PM
22-Apr-21

BACKEND

MongoDb



server.js