PIXAL PERFECTION: TRANSFORMING YOUR PHOTOS WITH OUR CUTTING -EDGE IMAGE EDITING PLATFORM

NAANMUDHALVAN PROJECT REPORT

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INTRODUCTION

1.1 PROJECT OVERVIEW

The image editing platform is a robust online tool designed to provide users with a comprehensive and user-friendly experience for editing and enhancing their images. With a wide range of editing tools and features, users can easily crop, resize, rotate, adjust brightness, contrast, and saturation, as well as apply various filters and effects to bring out the best in their images.

The platform boasts a user-friendly interface that is intuitive and easy to navigate, ensuring that users of all skill levels can effortlessly edit their images. It offers cross-platform compatibility, allowing users to access and edit their images from any device, be it a desktop, laptop, tablet, or mobile device.

1.2 PURPOSE

An image editing platform serves a vital purpose in providing users with the tools and functionalities they need to transform their images into captivating and visually appealing works of art. Whether it's professional photographers looking to enhance their photos, graphic designers seeking to create stunning visuals, or individuals wanting to add a creative touch to their personal images, the platform acts as a versatile and indispensable resource.

The purpose of an image editing platform is to elevate the quality of images. It enables users to adjust various parameters such as brightness, contrast, and color balance, allowing them to enhance the overall appearance and aesthetics of their photos. Imperfections like blemishes, red-eye, and noise can be effortlessly corrected, resulting in a polished and flawless final product.

Composition and cropping tools offered by the platform further contribute to the purpose, enabling users to fine-tune their images'

composition, crop out unwanted elements, and highlight specific subjects. These features enhance the overall visual impact and storytelling potential of the images.

In summary, the purpose of an image editing platform is to empower users with a comprehensive set of tools and functionalities that enhance image quality, enable creative expression, streamline workflows, and facilitate collaboration and sharing. By fulfilling these purposes, the platform becomes an invaluable resource for photographers, designers, artists, and individuals seeking to create visually stunning and impactful images.

2. IDEATION & PROPOSED SOLUTION

2.1 Problem Statement and Definition

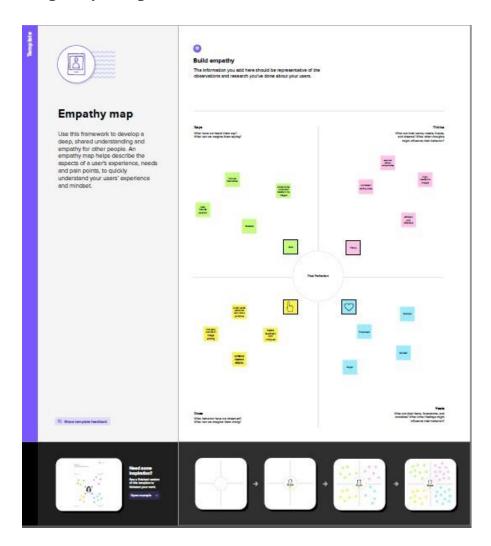
Problem Statement:

Design an image editing platform that provides users with intuitive tools and features to efficiently edit and enhance their images, catering to the diverse needs of amateur photographers, graphic designers, and individuals seeking to enhance their visual content. The platform should offer a seamless and user-friendly experience, enabling users to achieve professional-quality results without extensive technical knowledge or advanced editing skills

Definition:

The image editing platform is a digital application that allows users to modify, enhance, and manipulate digital images to achieve desired aesthetic effects and improve visual quality. The platform should support a wide range of image formats and provide a comprehensive set of editing tools, including but not limited

2.2 Empathy Map Canvas



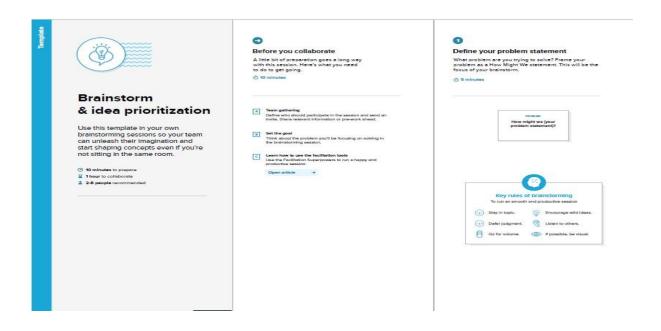
2.3 Ideation & Brainstorming:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving.

Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

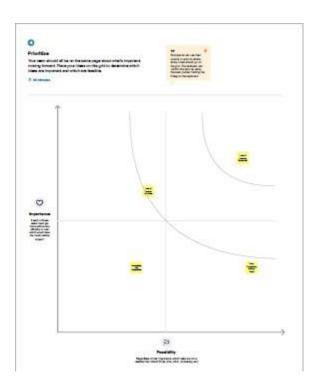
Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

Brainstorm and idea prioritization template









2.4 Proposed Solution:

S.NO	Parameter		Description				
1	Problem	Statement	Supply chain solutions are				
	(Problem to	be solved)	designed to address the complex				
			challenges involved in managing				
			the flow of goods and services from				
			the point of origin to the point of				
			consumption. The objective of				
			these solutions is to improve the				
			efficiency, speed, and accuracy of				
			the supply chain, while reducing				
			costs and minimizing risk.				
			However, there are several issues				
			that can arise in the supply chain,				
			such as demand variability, supply				
			disruptions, inventory				
			management, transportation				

quality logistics, control, and regulatory compliance. These lead issues can to delays, inefficiencies, and lost revenue, ultimately which can impact customer satisfaction and brand reputation. Therefore, the problem supply for statement chain solutions is to develop innovative strategies and technologies that can help organizations manage their supply chains more effectively. This includes optimizing inventory forecasting improving levels, enhancing supplier accuracy, collaboration, streamlining transportation and logistics, and ensuring regulatory compliance. By addressing these challenges, supply chain solutions can help organizations to achieve greater efficiency, resilience, and agility, ultimately enhance and their competitive advantage in the marketplace. To make satisfied customer regarding the delivery and service. Make more publicity regarding products Free delivery to attract the people. To make customers collaborate. Solution is rectifying the problems which was customer

2 Solution Idea description

send through the review process. We should satisfy the customer by maintaining the better quality. We should make online platform most simple to make comfortable for the

		customer. Make sure payment
		methods are secure
3	Novelty / Uniqueness	Quality and quantity. Comfortable prices for make available for everyone To make the remote areas delivery availability Making available of all payment methods for customer comfort Maintain trusted delivery boys. If customer not satisfied full amount return policy 24/7 Customer service centre If there were any queries our agents solve their problems through mail.
4	Social Impact / Customer Satisfaction	
5	Business Model (Revenue Model)	
6	Scalability of the Solution	

	doing more hard work and getting good reviews from the customer From our services we can get more popular our project in public

3. REQUIREMENT ANALYSIS

3.1 Functional Requirements

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub- Task)
FR-1	User	Registration through
	Registration	Form Registration
		through Gmail
		Registration through
		Google Registration through Phone number
FR-2	User	Confirmation
	Confirmation	via Email
		Confirmation
		via OTP
		Confirmation via Phone call
FR-3	Login	User name Pass word
FR-4	Notification	Register mail id

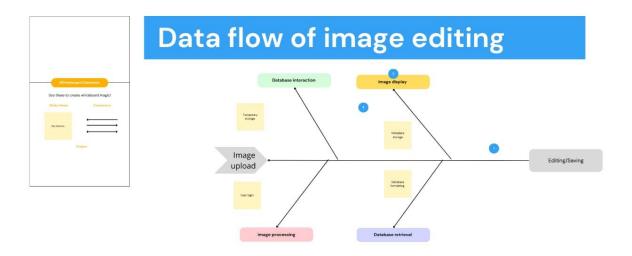
3.2 Non-Functional Requirements

FR	Non-Functional	Description			
No.	Requirement	-			
NFR-	Usability	24/7 service			
1		available Low			
		Complex			
		Simple			
		to use			
		Public			
		access			
	Security	Highly secure			
2		Custom data will not be			
		shared to any one Fully			
		secure platform			
NICD	Daliability	Secure payments			
3	Reliability	Only customer can login his own account Customer data			
		will be maintain private			
		Highly secure payments			
NFR-	Performance	High			
4		performance			
		Easy to			
		login Updation will be done at least one for 30 days			
NFR-	Availability	Customer service			
5	•	through mail Customer			
		service through chat			
		box			
NICD	Caalabilite:	Customer service through call			
NFR-	Scalability	Changes will be made based on			
		the reviews from customer It can perform all customer requirements Example: accurate selection tools, advanced tools etc,			

4 PROJECT DESIGN

4.1 Data flow diagrams

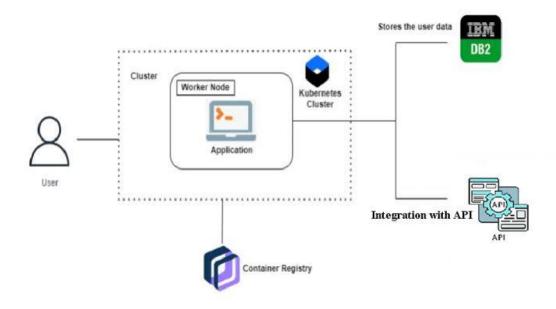
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information where dataisstored.



4.2 SOLUTION ARCHITECTURE

The solution architecture for the image editing platform involves multiple components working together to provide a seamless and efficient editing experience. Here is a high-level overview of the key components and their interactions

the solution architecture combines the user interface, editing engine, AI-assisted editing module, storage and image management, collaboration and sharing, integration and connectivity, scalable infrastructure, and analytics and monitoring components to provide a robust and scalable image editing platform.



4.3 USER STORIES

User Type	Functiona	Task	Acceptan	Priorit	Team
	1		ce	y	Memb
	Requirem		criteria		er
	ent				
	(Epic)				
Customer	Registratio	As a user, I can register	I can access	High	Viswa teja
(Web	n	for the application by	my account /		
user)		entering my email,	dashboard		
		password, and confirming			
		my			
		password.			
		As a user, I will receive	I can receive	Low	Aravinth
		confirmation email once	confirmation		
		I have	email		
			& click confirm		
		application			
		As a user, I can register	I can register	High	Guru
		for the application	& access the		deepa
		through Google	dashboard		
			with Google		
			Login		
		As a user, I can register		Mediu	
		for the application		m	Dhanalaks
		through Gmail			hmi

	Login	As a user, I can log into the application by entering email & password		High	Guru Deepa
	Dashboard	All the operation which the portal can perform	Once login Customer can view dashboard		
Custome r (Web user)	Login & Dashboa rd				
Custom erCare Executive	View number in dashboard	By sending the query or problem through mail agent we send a reply		medium	Viswa Teja
Administra tor		Agent from the team will perform the administrative duties			

5. CODING & SOLUTIONING (Explain the feauters added in the project along with code)

SOURCE CODE

```
HOMEPAGE.html

<!DOCTYPE html>
<html>
<head>
<title>Home Page</title>
link rel="stylesheet" type="text/css" href="homepage.css">
</head>
<body>
<div class="container">
<div class="content">
<h1>Welcome to Pixel Perfection</h1>
A place where creativity meets perfection.
<div class="button-container">
```

```
<a href="login page.html" class="button">Login</a>
    <a href="register.html" class="button">Register</a>
   </div>
  </div>
 </div>
</body>
</html>
HOMEPAGE.css
body {
  background-image: url(image2.jpg);
  background-repeat: no-repeat;
  background-size: cover;
  background-position: center;
  font-family: Arial, sans-serif;
  margin: 0;
  padding: 0;
 }
 .container {
  display: flex;
  justify-content: center;
  align-items: center;
  height: 100vh;
 }
 .content {
  text-align: center;
  color: #fff;
 h1 {
  font-size: 36px;
```

```
margin-bottom: 20px;
 p {
  font-size: 18px;
  margin-bottom: 40px;
 .button-container {
  display: flex;
  justify-content: center;
 .button {
  padding: 10px 20px;
  background-color: #4CAF50;
  color: #fff;
  border: none;
  border-radius: 3px;
  cursor: pointer;
  margin: 0 10px;
  text-decoration: none;
 }
 .button:hover {
  background-color: #45a049;
 Loginpage.html
<!DOCTYPE html>
<html>
<head>
 <title>Login Page</title>
```

```
link rel="stylesheet" type="text/css" href="login page.css">
</head>
<body>
 <div class="container">
  <form action="/login" method="POST">
   <h2>Login</h2>
   <label for="username">Username:</label>
   <input type="text" id="username" name="username" required><br><br>
   <label for="password">Password:</label>
   <input type="password" id="password" name="password" required><br><br>
   <input type="submit" value="Login"><br><br>>
   Oon't have an account? <a href="register.html">Register</a>
   </form>
 </div>
</body>
</html>
Loginpage.css
body {
 background-image: url(image.jpg);
 background-repeat: no-repeat;
 background-size: cover;
 background-position: center;
 font-family: Arial, sans-serif;
 margin: 0;
 padding: 0;
 .container {
  display: flex;
```

```
justify-content: center;
 align-items: center;
 height: 100vh;
}
form {
  border-radius: 5px;
 padding: 20px;
 box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.2);
}
h2 {
 margin-bottom: 20px;
 text-align: center;
}
label {
 margin-bottom: 5px;
}
input[type="text"],
input[type="password"] {
 padding: 10px;
 margin-bottom: 10px;
 border-radius: 3px;
 border: 1px solid #ccc;
}
input[type="submit"] {
 padding: 10px 20px;
 background-color: #4CAF50;
 color: #fff;
```

```
border: none;
  border-radius: 3px;
  cursor: pointer;
 input[type="submit"]:hover {
  background-color: #45a049;
 }
 p {
  margin-top: 10px;
  text-align: center;
Registerpage.html
<!DOCTYPE html>
<html>
<head>
 <title>Registration Form</title>
 link rel="stylesheet" type="text/css" href="register.css">
</head>
<body>
 <div class="container">
  <form action="/register" method="POST">
   <h2>Registration Form</h2>
   <label for="username">Username:</label>
   <input type="text" id="username" name="username" required>
   <label for="email">Email:</label>
   <input type="email" id="email" name="email" required>
   <label for="password">Password:</label>
```

```
<input type="password" id="password" name="password" required>
   <label for="full-name">Full Name:</label>
   <input type="text" id="full-name" name="fullName" required>
   <label for="birthdate">Date of Birth:</label>
   <input type="date" id="birthdate" name="birthdate" required>
   <input type="submit" value="Register">
  </form>
 </div>
</body>
</html>
Register.css
body {
 background-image: url(image1.jpg);
 background-repeat: no-repeat;
 background-size: cover;
 background-position: center;
 font-family: Arial, sans-serif;
 margin: 0;
 padding: 0;
 }
 .container {
  display: flex;
  justify-content: center;
  align-items: center;
  height: 100vh;
 .form-container {
```

```
background-color: #fff;
 border-radius: 5px;
 padding: 20px;
 box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.2);
 margin: 20px;
 width: 300px;
}
form {
 display: flex;
 flex-direction: column;
h2 {
 margin-bottom: 20px;
 text-align: center;
}
label {
 margin-bottom: 5px;
}
input[type="text"],
input[type="email"],
input[type="password"] {
 padding: 10px;
 margin-bottom: 10px;
 border-radius: 3px;
 border: 1px solid #ccc;
input[type="submit"] {
```

```
padding: 10px 20px;
  background-color: #4CAF50;
  color: #fff;
  border: none;
  border-radius: 3px;
  cursor: pointer;
 }
 input[type="submit"]:hover {
  background-color: #45a049;
 }
Upload.html
<!DOCTYPE html>
<html>
<head>
 <title>Image Upload</title>
 <link rel="stylesheet" type="text/css" href="upload.css">
</head>
<body>
 <h1>Upload an Image</h1>
 <form action="/upload" method="post" enctype="multipart/form-data">
  <input type="file" name="image" id="image" accept="image/*" required>
  <input type="submit" value="Upload">
 </form>
 <div id="preview">
  <img id="preview-image" src="#" alt="Preview">
 </div>
```

```
<script src="upload.js"></script>
</body>
</html>
Upload.css
h1 {
  text-align: center;
 }
 form {
  text-align: center;
  margin-bottom: 20px;
 }
 #preview {
  text-align: center;
  margin-top: 20px;
 #preview-image {
  max-width: 500px;
  margin-top: 20px;
 }
Upload.js
const imageInput = document.getElementById('image');
const previewImage = document.getElementById('preview-image');
imageInput.addEventListener('change', (e) => {
 const file = e.target.files[0];
```

```
if (file) {
  const reader = new FileReader();
  reader.addEventListener('load', (e) => {
   previewImage.src = e.target.result;
  });
  reader.readAsDataURL(file);
 } else {
  previewImage.src = '#';
 }
});
Pixel.py
from flask import Flask, render template, request, jsonify
import requests
app = Flask( name )
@app.route('/')
def homepage():
  return render template('homepage.html')
@app.route('/remove bg', methods=['POST'])
def remove_bg():
  try:
     image = request.files['image']
     response = requests.post(
       'https://api.remove.bg/v1.0/removebg',
       files={'image': image},
```

```
data={'size': 'auto'},
       headers={'X-Api-Key': 'YOUR REMOVE BG API KEY'}
    )
    if response.status code == requests.codes.ok:
       result url = 'data:image/png;base64,' + response.content.decode('utf-8')
       return jsonify({'success': True, 'result': result url})
    else:
       return jsonify({'success': False, 'error': 'Failed to remove background'})
  except Exception as e:
    return jsonify({'success': False, 'error': str(e)})
if name == ' main ':
  app.run(debug=True,port=8080)
Flask
from flask import *
import ibm db
import os
import boto3
from botocore.client import Config, ClientError
conn = ibm db.connect("DATABASE=bludb;HOSTNAME=3883e7e4-18f5-
4afe-be8c-
fa31c41761d2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=31498
;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=vnn
69770;PWD=dKgLMEtsEtxRLHuT",",")
print(conn)
app = Flask(name, template folder='template')
@app.route('/')
def home():
  return render template("index.html")
@app.route('/help')
```

```
def help():
  return render template("help.html")
@app.route('/contact')
def contact():
  return render template("contact.html")
@app.route('/login')
def login():
  return render template("login.html")
(a)app.route('/index')
def index():
  return render template("index.html")
@app.route('/register')
def register():
  return render template("register.html")
(a)app.route('/result')
def result():
  return render template("result.html")
(a)app.route('/guided')
def guided():
  return render template("guided.html")
(a)app.route('/admin')
def admin():
  return render template("admin.html")
@app.route('/register1',methods=['POST'])
def register1():
  x = [x \text{ for } x \text{ in request.form.values}()]
  print(x)
  NAME=x[0]
  EMAIL=x[1]
  PASSWORD=x[2]
  sql = "SELECT * FROM REGISTER WHERE EMAIL =?"
  stmt = ibm db.prepare(conn, sql)
  ibm db.bind param(stmt,1,EMAIL)
  ibm db.execute(stmt)
  account = ibm db.fetch assoc(stmt)
  print(account)
```

```
if account:
    return render template('login.html', pred="You are already a member,
please login using your details")
  else:
    insert sql = "INSERT INTO REGISTER VALUES (?, ?, ?)"
    prep stmt = ibm db.prepare(conn, insert sql)
    ibm db.bind param(prep stmt, 1, NAME)
    ibm db.bind param(prep stmt, 2, EMAIL)
    ibm db.bind param(prep stmt, 3, PASSWORD)
    ibm db.execute(prep stmt)
    return render template('login.html', pred="Registration Successful, please
login using your details")
@app.route('/login1',methods=['POST'])
def login1():
  NAME = request.form['NAME']
  EMAIL = request.form['EMAIL']
  sql = "SELECT * FROM REGISTER WHERE NAME =? AND EMAIL=?"
  stmt = ibm db.prepare(conn, sql)
  ibm db.bind param(stmt,1,NAME)
  ibm db.bind param(stmt,2,EMAIL)
  ibm db.execute(stmt)
  account = ibm db.fetch assoc(stmt)
  print (account)
  print(NAME,EMAIL)
  if account:
       return render template('admin.html', pred="Login successful")
  else:
    return render template('login.html', pred="Login unsuccessful. Incorrect
username/password!")
  (@app.route('/result1',methods = ["POST","GET"])
def result1():
  if request.method=="POST":
    f=request.files['image']
    basepath=os.path.dirname(file) #getting the current path i.e where app.py is
present
    #print("current path",basepath)
    filepath=os.path.join(basepath,'uploads',f.filename) #from anywhere in the
system we can give image but we want that image later to process so we are
saving it to uploads folder for reusing
    #print("upload folder is",filepath)
    f.save(filepath)
```

```
return render_template("result.html")
return "Image uploaded successfully"
```

COS_ENDPOINT = "https://s3.jp-tok.cloud-object-storage.appdomain.cloud"

COS_API_KEY_ID

"UKQDmU0zPDyzGzX wYao20jqSVo0jNQY ASt0XM4UxEY"

 $COS_INSTANCE_CRN = "crn:v1:bluemix:public:cloud-object-storage:global:a/8a03f1c86efe4897abd7cd5050702178:6cabfb46-eaaf-4755-a0af-94411770b25d::"$

cos =

ibm_boto3.client("s3",ibm_api_key_id=COS_API_KEY_ID,ibm_service_instance_id=COS_INSTANCE_CRN,

config=Config(signature_version="oauth"),endpoint_url=COS_ENDPOINT)
 cos.upload file(Filename=

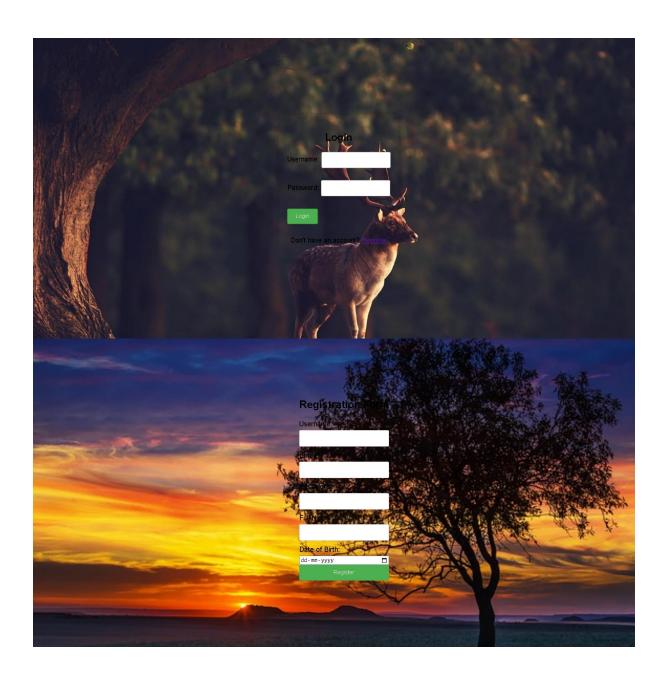
filepath, Bucket='nikhilimages', Key='cadsession.jpg')

return render_template("result.html")

if name == "main": app.run(debug = True,port = 7373)

OUTPUT SCREENS





Upload an Image

Choose file No file chosen

Upload

Preview

Upload an Image

Choose file image2.jpg

Upload





6.RESULT

For an image editing platform project, consider developing a feature-rich, user-friendly web-based platform with a wide range of editing tools and filters, ensuring compatibility across different devices and browsers. Focus on intuitive user experience and efficient image processing to provide a seamless editing workflow for users

7 ADVANTAGES & DISADVANTAGES

Advantages:

Creative Control: Image editing platforms provide users with extensive tools and options to manipulate and transform images according to their creative vision. Users can adjust colors, contrast, saturation, crop, resize, and apply various filters and effects to achieve the desired result.

Professional-Level Editing: Image editing platforms offer advanced features that allow professional photographers, graphic designers, and artists to perform complex editing tasks. These platforms provide precise control over various aspects of an image, such as layers, masks, and blending modes, enabling users to achieve high-quality and professional results.

Image Enhancement: With image editing platforms, users can enhance the visual appeal of their photos by correcting exposure issues, removing blemishes or unwanted objects, sharpening details, and adjusting white balance. These tools help improve the overall quality of an image and make it more visually appealing.

Versatility: Image editing platforms support a wide range of file formats and are compatible with various devices, making it easy to work with images from

different sources. They also offer flexibility in terms of output formats, allowing users to save images in different file types suitable for web, print, or social media.

Learning Resources: Popular image editing platforms like Adobe Photoshop have a vast community of users, tutorials, and online resources available. These resources provide valuable learning materials, tips, and tricks, allowing users to enhance their skills and explore new techniques.

Disadvantages:

Learning Curve: Image editing platforms often have a steep learning curve, especially for beginners. Mastering the various tools and techniques may require time and effort. Users need to invest in learning the software's features and understanding the principles of image editing to effectively use these platforms.

Cost: Some advanced image editing platforms, such as Adobe Photoshop, require a paid subscription or purchase. While there are free alternatives available, they may not offer the same extensive feature set as the premium software. The cost of these platforms can be a disadvantage for users on a tight budget.

System Requirements: Image editing platforms, especially the more resource-intensive ones, demand significant computing power and memory. Users may need to ensure their computer meets the minimum system requirements to run the software smoothly. Older or less powerful machines may struggle to handle the processing requirements, leading to slow performance or crashes.

Complexity: Advanced image editing platforms can be overwhelming due to their extensive features and complex user interfaces. Users may find it challenging to navigate through the vast number of options and tools available, which can result in frustration and hinder the editing process.

Time-Consuming: Depending on the complexity of the edits and the user's skill level, image editing can be a time-consuming process. Achieving the desired result may involve multiple adjustments, iterations, and experimentation, which can take a significant amount of time, especially when working on large or complex projects.

8. CONCLUSION

image editing platforms offer a range of advantages and disadvantages. They provide users with creative control, professional-level editing capabilities, and the ability to enhance images. These platforms are versatile, supporting various file formats and offering extensive learning resources. However, there are also challenges such as the learning curve, cost, system requirements, complexity, and time-consuming nature of the editing process.

To evaluate the performance of an image editing platform, several performance metrics can be considered. These metrics include processing speed, memory usage, user interface responsiveness, editing tools and features, file format support, export/save options, stability and reliability, learning curve, community and support, and integration and compatibility.

Ultimately, the choice of an image editing platform depends on individual needs, preferences, and the specific requirements of the task at hand. It's important to weigh the advantages and disadvantages, consider the performance metrics, and select a platform that best aligns with one's goals and proficiency level in image editing.

9. FEAUTURE SCOPE

The future revenue scope for image editing platforms is promising, driven by several factors that contribute to the growing demand for image editing services and tools. Here are some potential revenue opportunities for image editing platforms:

Subscription Models: Many image editing platforms already offer subscription-based pricing models, providing users with access to a range of features and ongoing updates. As these platforms continue to innovate and introduce new tools and capabilities, they can attract a loyal user base that subscribes to their services, generating recurring revenue.

Enterprise and Professional Users: Image editing platforms can target professional photographers, graphic designers, artists, and creative agencies by offering specialized features, advanced editing tools, and workflow optimization solutions. These professionals often require powerful editing capabilities and are willing to invest in premium software or services, providing a significant revenue stream.