Project Documentation

Date	3 November 2023
Team ID	NM2023TMID02729
Project Name	How to create a Brand Name, Brand Mail
	And Brand Logo In Canva

Build empathy

The information you add here should be representative of the observations and research you've done about your users.

Empathymap

Use this framework to develop a deep, shared understanding and empathy for other people. An empathy map helps describe the aspects of a user's experience, needsand pain points, to quickly understandyour users' experience and mindset.

Says

What have we heard them say? What can weimagine them saying?

Thinks

What are their wants, needs, hopes,and dreams?What other thoughts might influence their behavior?



Does

Feels heir fears

What are their fears, frustrations, andanxieties? What other feelings might influence thei

Ideation Phase Define the Problem Statements

How To Create A Brand Name, Brand Mail And Brand Logo In Canva

Develop a comprehensive guide for creating a brand name, brand logo, and brand email using Canva, a user-friendly graphic design tool, to help individuals and small businesses establish a distinctive and professional online presence.

This guide should include step-by-step instructions, best practices, and tips for using Canva effectively to create a memorable brand identity, encompassing the design of a brand name, logo, and email signature.

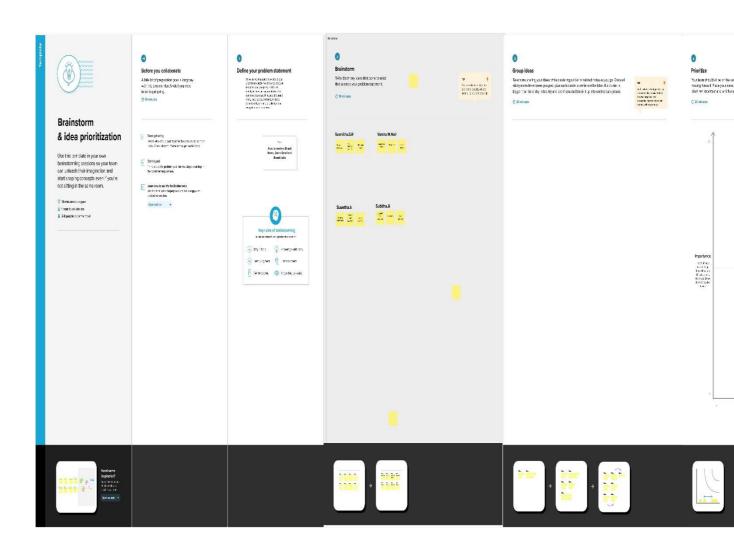
Problem	I am	I'm trying	But	Because	Which makes me
Statement (PS)	(Customer)	to			feel
Performance issues	Content creator	Post a logo	It encounters slow	Users internet connection	frustrated
			loading times	speed	
Subscription cost	student	Find templates for my project	There are limited free templates	The premium versions are costly	Disappointed
Version control	Professional	Work on my new project	It needs collaborativ e work	It has Limited versions	Difficult to contribute

Ideation Phase Brainstorm & Idea Prioritization Template

Date	3 November 2023
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Project Name	How to create Brand name, Brand email and Brand Logo
Maximum Marks	2 Marks

Brainstorm & Idea Prioritization Template:

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 solution.



Project Design Phase-I Proposed Solution Template

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Canva solves this problem by providing a user-friendly platform with a wide range oftemplates and design tools. A brand identity is the visual representation of a company or product. It includes the brand name, logo, colors, and fonts. A strong brand identity can help to build trust and recognition with customers.
2.	Idea / Solution description	The idea behind creating a brand name, logo, and email using Canva is to make it easy for anyone to create a professional- looking brand identity, even if they have noprior design experience. Canva offers a wide range of templates for brand names, logos, and emails. You can browse the templates by category or use the search bar to find a specific template.
3.	Novelty / Uniqueness	Experiment with different colors and layouts. Don't be afraid to experiment withdifferent colors and layouts to find a look that is unique to your brand. Canva's drag- and-drop interface makes it easy to experiment with different designs. Canva allows you to create your own custom branding kit, which includes your brand name, logo, colors, and fonts. This makes iteasy to apply your branding to all of your designs
4.	Social Impact / Customer Satisfaction	Canva makes it possible for anyone to create a professional-looking brand identity, regardless of their design skills or experience. This can help to level theplaying field for small businesses and

		entrepreneurs, and make it easier for themto compete with larger, more established companies. Canva is also affordable and accessible to businesses of all budgets.
5.	Business Model (Revenue Model)	Canva's business model is a combination of both a freemium model and a subscription-based model, with several revenue streams. Canva provides tailored solutions for larger organizations and enterprises. These solutions often include advanced administrative and branding features, custom templates, and support for largeteams. Canva has affiliate and partner programs, allowing individuals and organizations to earn commissions by promoting Canva's paid plans.
6.	Scalability of the Solution	Canva has demonstrated a high degree of scalability in its solution, which has contributed to its widespread success and popularity. Canva's user base has grown exponentially since its inception. It has attracted millions of users worldwide, ranging from individuals to businesses of all sizes. The platform's scalability allows itto handle a large and diverse user base effectively. Canva is available to users in multiple languages, making it accessible topeople around the world. Its internationalization efforts have played a crucial role in expanding its user base.

Project Design Phase-I Solution Architecture

Solution Architecture:

Creating a solution architecture block diagram involves visually representing the components and interactions of a system or solution.

At the top of your diagram, include a title and a brief description to explain the purpose of thearchitecture.

Show any external interfaces that the solution interacts with, such as users, third-party services, or external systems. These are typically depicted as labeled arrows entering and exiting the diagram.

Example - Solution Architecture Diagram:

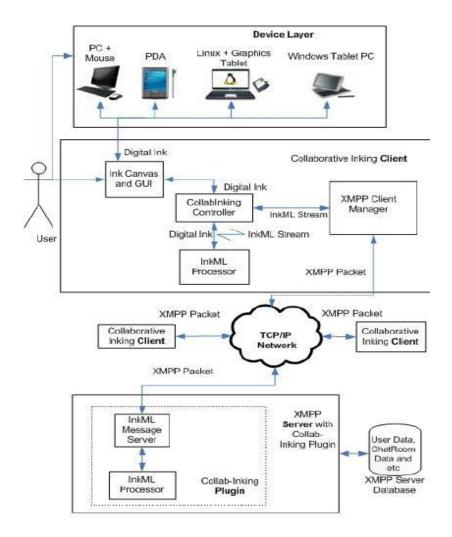


Figure 1: Architecture of canva

Project Design Phase

Determine The Requirements

Customer Journey Map







- Use your brand name a of your touchpoints.
- Personalize your community their name in your emanders of their name of t
- Be responsive to custo
 When customers reach
 promptly and professio
 Go the extra mile for you
 - Go the extra mile for ye involve offering free sh gift wrapping.

6

Requirement Analysis

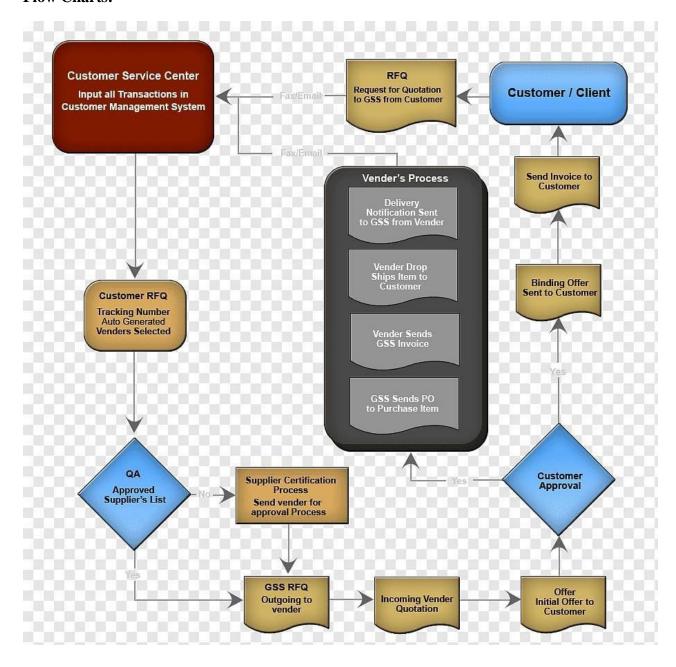
A. Functional Requirements:

FR No.	Functional Requirement	Sub
	-	Requirement(Story/Sub-
		Task
FR-1	Distinctivenes	Highly Distinctive
FR-2	Memorability	Simplicity

B. Non-functional Requirements:

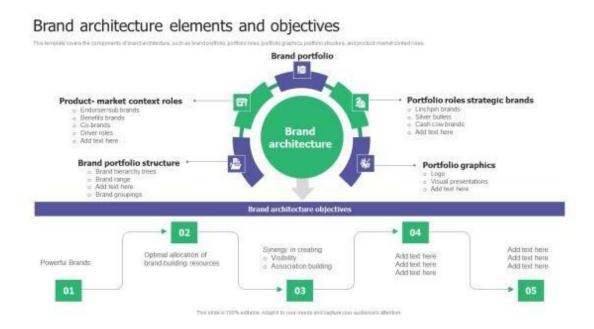
FR No.	Non-Functional Requirement	Description
NFR-1	Emotional Appeal	The name should evoke
		positive emotions or
		sentiments, such as trust,
		joy, excitement, or
		nostalgia, depending on the
		brand's
		intended image and values.
NFR-2	Cultural Sensitivity	The name should consider
		cultural nuances and avoid
		anyunintentional offense or
		misinterpretation in different
NED 2		regions or markets.
NFR-3	Scalability and adaptability	While primarily non-
		functional, the name should
		be adaptable and able to
		evolve with the brand's
		growth and changes over time.
NFR-4	Aesthetic and Visual	Think about how the name
111117-4	Harmony	fits with the brand's visual
	Harmony	identity, logo, and design
		elements. It should create a
		cohesive and visually
		appealing
		brand image.
NFR-5	Competitive Positioning	The name should position
		yourbrand appropriately
		within the competitive
		landscape. It should reflect
		your unique
		selling points or market
		niche.

Flow Charts:



Technical Architecture:

Brand name, logo, and Gmail can be described as the underlying structure and systems that support the brand's visual identity and email communication. By implementing a well-designed technical architecture, companies can ensure that their brand is used consistently and effectively across all channels, both internally and externally.



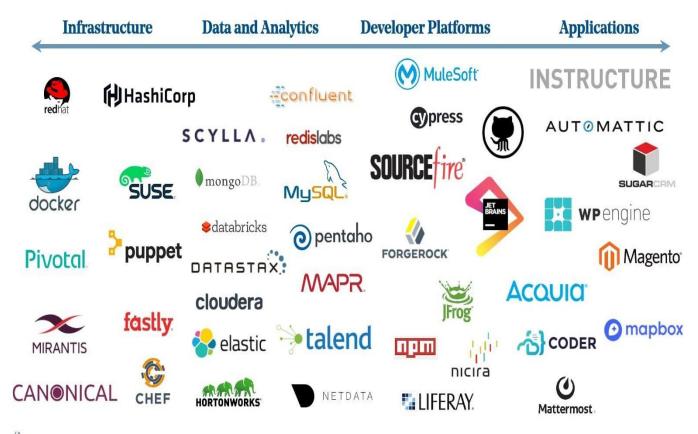
Open Source Frameworks

Branding and Logo Design:

Open-source tools like GIMP (GNU Image Manipulation Program) and Inkscape can be used for graphic design, including creating and editing logos. For branding guidelines and assets management, you can use various open-source content management systems (CMS) like Drupal or WordPress.

Email Services:

If you're looking to set up an open-source email server, you can consider using software like Postfix, Dovecot. Zimbra is another option that offers both open-source and commercial versions. If you want amore comprehensive email solution with collaboration tools, you can look into open-source groupware solutions like Zimbra, Kopano, or SOGo.



Third Party API's

1. Brand Name and Logo:

Clearbit: Clearbit offers an API that provides company information, including brand names and logos.

Brandfolder: Brandfolder is a digital asset management platform that offers an API for accessing brandassets, including logos.

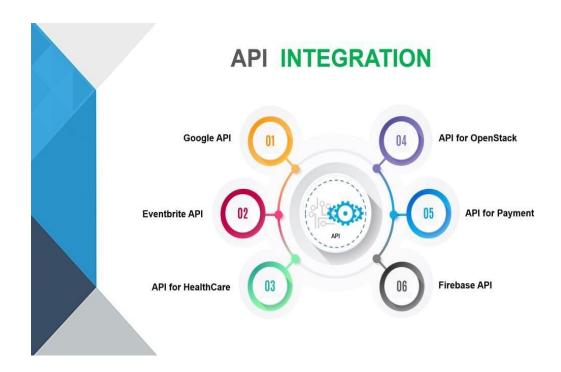
Brandsync: Brandsync provides an API for fetching brand assets, including logos, from their database.

2. Gmail-related APIs:

Google Gmail API: Google offers an official API for accessing Gmail data, including sending and receiving emails, managing labels, and more.

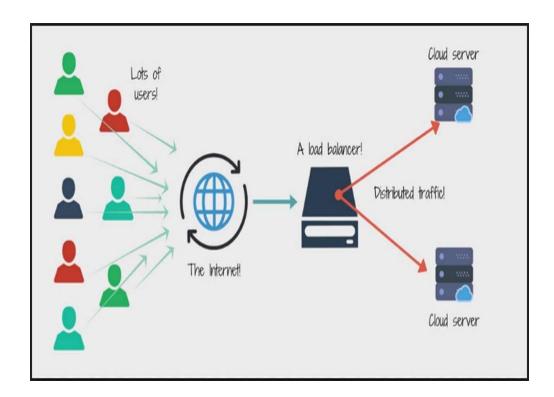
SendGrid: SendGrid, now part of Twilio, offers an API for sending and managing emails, which can be used for Gmail integration.

Nylas: Nylas provides an email API that can be used to connect with Gmail and other email providers.



Cloud Deployment

- 2. To create a brand logo in the cloud, you can use a cloud-based logo design platform such as Canva, Logo Maker, or Looka. These platforms offer a variety of logo templates and design tools that you can use to create a professional-looking logo for your business.
- 3. To get started, create an account on the cloud-based logo design platform of your choice. Once you have created an account, you can start browsing through the logo templates. When you find a template that you like, you can customize it to match your brand identity. You can change the colors, fonts, and graphics of the template to create a logo that is unique to your business.
- 4. Once you are happy with your logo design, you can download it in a variety of formats, including SVG, PNG, and JPEG. You can then use your logo on your website, social media pages, and marketing materials.
- 5. Create a dedicated folder for your logo files in your cloud-based storage service. This will make it easy to find your logo files when you need them.



No. Of Functional Features Included In The Solution

Logo Design Tools: Comprehensive tools that allow users to create logos from scratch or modify existing ones. This includes features like shape drawing, layering, alignment, and object manipulation.

Customizable Templates: A library of professionally designed logo templates that users can customize to fit their brand's identity, enabling quick logo creation with a tailored touch.

Image Upload Capability: The ability to upload custom images, graphics, or icons for incorporation into the logo, ensuring the logo represents the brand accurately.

Text and Typography Options: Access to a wide range of fonts, text styles, and text effects for creating and editing text elements within the logo and email branding materials

Color Palette Selection: A color palette tool that offers a spectrum of colors, gradients, and color matching to maintain consistent brand colors in both the logo

and email branding.

Export Options for Various File Formats: Allows users to save logos in different file formats like PNG, SVG, JPEG, and more, ensuring compatibility with various use cases and platforms.

Branding Tools for Consistency: Features for creating and managing branding assets like brand guidelines, color codes, and style elements to maintain a consistent brand identity across all materials.

Email Template Customization: Tools for designing email templates with customizable headers, footers, and other branding elements, ensuring brand consistency in email communication.

Integration with Email Platforms: Seamless integration with email services and clients to directly apply branding elements and signatures to outgoing emails, enhancing brand recognition

Code layout, Readability and Reusablity

Code layout:

The layout of code for creating or working with logos can vary depending on the programming language and libraries or frameworks you're using. However, I can provide a simple example of a Python script for creating a basic logo using the Pillow library. This example demonstrates a code layout for a logo creation task:

```
from PIL import Image, ImageDraw, ImageFont
```

```
# Define logo parameters
logo_text = "My Logo"
font_size = 36
output_file = "my_logo.png"
# Create a blank image
width, height = 200, 200
image = Image.new("RGB", (width, height), "white")
draw = ImageDraw.Draw(image)
# Choose a font and calculate text size
font = ImageFont.truetype("arial.ttf", font_size)
text_width, text_height = draw.textsize(logo_text, font)
# Calculate text position for centering
x = (width - text_width) / 2
```

```
y = (height - text_height) / 2
# Choose text color
text_color = (0, 0, 0) # Black
# Add text to the image
draw.text((x, y), logo_text, fill=text_color, font=font)
# Save the image as a logo
image.save(output_file)
```

In this layout:

Import necessary libraries, in this case, the Pillow library for image processing.

Define parameters for the logo, including the text, font size, and output file name.

Create a blank image with specified dimensions and a white background.

Use the ImageDraw module to draw on the image.

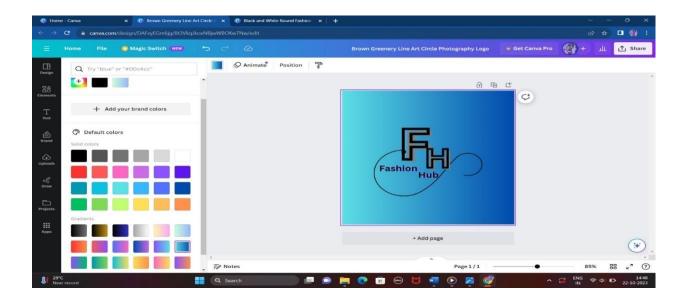
Choose a font and calculate the size of the text to be added to the logo.

Calculate the position for centering the text.

Choose the text color (in this case, black).

Add the text to the image.

Save the image as a logo with the specified output file name.



This layout is a simplified example for creating a text-based logo. In a real-world application, you may have more complex logo designs with images, shapes, and additional branding elements. The code structure would depend on the specific requirements of your logo design

Readability and Reusability

Readability and legibility are crucial factors in logo design because they determine how easily people can understand and recognize your brand based on your logo. Here's a breakdown of the two terms:

Readability:

Readability primarily relates to the clarity of text within a logo. If your logo includes text, whether it's the company name or a tagline, it should be easily readable. Key considerations for ensuring readability include:

Font Choice: Select a legible and appropriate font. Avoid overly decorative or complex fonts that can be hard to read.

Font Size: Ensure that the text is large enough to be easily read, especially when the logo is scaled down for various applications.

Spacing: Adequate spacing between letters (kerning) and lines (leading) is essential for clarity.

Reusablity

Reusability of a logo is an important consideration in branding and design. A logo is a fundamental visual element of a brand's identity, and it should be versatile and easily adaptable for use in various contexts. Here are some key aspects of logo reusability:

Scalability: A reusable logo should scale well from small to large sizes without losing its clarity and impact. It should be equally effective on a business card, a website, a billboard, or any other medium.

Color Variations: A versatile logo should work in various color schemes. It should have both color and monochrome versions for different applications. Consider full-color, single-color, and grayscale variations.

File Formats: Ensure that your logo is available in multiple file formats, such as vector formats (SVG, AI, EPS) for scalability and raster formats (PNG, JPEG) for web and print. This makes it easy to use the logo across different platforms and media.

Clear Design: Keep the design simple and uncluttered. Avoid intricate details and complex elements that may not reproduce well in all sizes or media.

Utilization of algorithms dynamic programming optimal memory utilization

Dynamic programming is a useful technique for optimizing problems with overlapping subproblems, and it can be applied to various aspects of logo design and manipulation, including memory utilization. However, it's important to clarify what you mean by "phase utilization" and how you intend to optimize memory usage in the context of logo design. Below are some key considerations for optimizing memory utilization in logo creation using dynamic programming:

```
#include <stdio.h>
// Function to perform post-processing on the logo design data
void postProcessLogoData() {
    // Apply algorithms or dynamic programming here to modify the logo
design
    // For example, you could change the color scheme or add text
programmatically.
    printf("Logo design data post-processed.\n");
}
int main() {
```

```
// Step 1: Use Canva to design the logo.

// Step 2: Export logo design data from Canva.

// Step 3: Post-process the logo data using the C program.
postProcessLogoData();
return 0;
}
```

Optimal Subproblem Decomposition: Identify subproblems that can be solved independently and have overlapping substructure. In logo design, this might involve breaking down complex design tasks into smaller, reusable components.

Memoization: Use memoization techniques to store the results of subproblems in memory. This can help avoid redundant calculations and optimize memory usage. In logo design, you might cache intermediate design elements or color information for reuse.

Tabulation: Consider tabulation (bottom-up dynamic programming) as an alternative to memoization. This approach can optimize memory utilization by avoiding recursive function calls and storing results in an array or table.

Data Compression: Implement techniques for memory-efficient data storage. For example, you can use data compression algorithms to reduce the memory footprin

The specific approach you take to optimize memory utilization in logo design using dynamic programming will depend on the nature of your logo creation algorithm and the particular requirements of your application. Dynamic programming can be a powerful technique for efficiently solving problems with overlapping subproblems, but its

application to logo design should be tailored to your specific use case and design goals.

Debugging and Traceability

Debugging:

Debugging a brand logo and mail creation service requires careful attention to various components anderror handling. To demonstrate debugging in a simplified manner, let's consider a Python script that creates a brand logo and simulates email branding with debugging using the print statement. In a real service, you would use logging and more sophisticated debugging tools:

Logging and Debugging Tools:

Implement logging to record events, errors, and important activities in your service. Use Python's logging module or a similar tool.

Set different log levels (e.g., debug, info, error) to capture different types of information.

Use debugging tools and libraries (e.g., Python's pdb or ipdb) to step through your code and inspectvariables when issues arise.

n or next: Execute the current line and move to the next

one.s or step: Step into a function or method.

c or continue: Resume execution until the next

breakpoint.q or quit: Quit the debugging session.

p variable_name: Print the value of a variable.

1 or list: Show the source code around the current

position.h or help: Get help on available commands.

Structured Log Entries:

Create structured log entries that include timestamps, the nature of the event, relevant user information, and details of the event.

Include tracebacks in error log entries to identify the exact location of the issue in the code.

Monitoring and Alerts:

Set up monitoring systems to track the performance and behavior of your service.

Configure alerts to notify you or your team when critical errors or anomalies occur.

Unique Identifiers:

Assign unique identifiers (e.g., transaction IDs) to each logo and email branding task. Log these identifiers along with log entries to trace individual actions.

Traceability

Traceability in the context of brand logos refers to the ability to track and maintain a record of various aspects related to logo creation, usage, and management. This traceability can be crucial for ensuring consistency, monitoring changes, and managing the branding process efficiently. Here are key elements to consider for traceability in brand logos:

Version Control: Implement a version control system for logos. Maintain a history of logo iterations, including design changes, updates, and revisions. This allows you to revert to previous versions if needed.

Timestamps: Add timestamps to logo files and metadata to keep track of when logos were created or modified. This helps maintain a chronological record of logo changes.

User Activity Logs: Record and log all user actions related to logo creation, modification, and usage. This includes who made changes, what changes were made, and when they were made.

Usage Tracking: Monitor where and how logos are used. Keep records of where logos appear, such as on websites, documents, social media profiles, and email signatures.

Metadata Tags: Attach metadata tags to logo files, including information like brand guidelines, approved colors, fonts, and usage restrictions. These tags provide context for logo usage.

Change Control Process: Implement a formal change control process that requires approvals for logo modifications. This process can include documenting reasons for changes and obtaining the necessary permissions.

Asset Management System: Use an asset management system to catalog and organize logo files. Assign unique identifiers or reference numbers to each logo for easy retrieval and reference.

Documentation: Maintain detailed documentation regarding logo design guidelines, style guides, and best practices. This documentation should include information about logo versions, file formats, and usage instructions.

By implementing these traceability measures, you can maintain a comprehensive record of brand logo changes, usage, and compliance, which is valuable for ensuring brand consistency and compliance with branding guidelines.

Exception Handling

Exception handling in a service that creates brand name logos and manages email branding is essential to ensure smooth user experiences and to address potential issues that may arise. Here are some key considerations for exception handling in such a service:

```
def create_logo(text, font_size, output_file):
  try:
    # Create a blank image with a white background
     width, height = 500, 200
    image = Image.new("RGB", (width, height), "white")
     draw = ImageDraw.Draw(image)
    # Define text and font
    font = ImageFont.truetype("arial.ttf", font_size)
    # Calculate text size and position
    text_width, text_height = draw.textsize(text, font)
     x = (width - text_width) / 2
    y = (height - text\_height) / 2
    # Choose text color
     text\_color = (0, 0, 0) # Black
```

```
# Add text to the image
  draw.text((x, y), text, fill=text_color, font=font)
  # Save the image as a logo
  image.save(output_file)
  print(f"Brand logo created successfully and saved as {output_file}")
  except FileNotFoundError:
  print("Font file not found. Make sure the font file 'arial.ttf' is available.")
  except Exception as e:
  print(f"An error occurred: {e}")
 # Test the create_logo function
 try:
create_logo("My Brand", 40, "brand_logo.png")
create_logo("Another Brand", "invalid_font_size", "brand_logo.png")
except Exception as e:
print(f"Test Error: {e}")
```

In this example, we have an **create_logo** function that creates a brand name logo and saves it to a file. Exception handling is applied:

If the font file ("arial.ttf") is not found, it catches a FileNotFoundError and provides a specific error message.

For other exceptions, it catches the generic Exception and prints the error message.

Model performance metrics

Evaluating the performance of brand logos involves assessing their effectiveness in achieving the intended branding objectives. Unlike quantitative metrics used in data analysis, logo performance metrics are typically subjective and based on design and marketing principles. Here are some key aspects to consider when assessing the performance of brand logos:

Measure the logo's ability to establish brand recognition. A strong logo should be easily identifiable and associated with the brand it represents. Assess how well the logo achieves this objective through surveys and consumer feedback.

A successful logo is one that remains memorable in the minds of consumers. Evaluate the logo's memorability by conducting recall tests or asking individuals to describe the logo from memory.

Examine how well the logo distinguishes the brand from its competitors. A logo should communicate what sets the brand apart in a distinctive way.

Ensure that the logo is relevant to the brand's products, services, values, and target audience. A logo should resonate with the intended customer base.

Assess how well the logo adapts to various applications, including digital and print media, different sizes, and color variations. A versatile logo retains its impact in diverse contexts.

Evaluate the logo's consistency in its application across all brand collateral, including websites, business cards, social media, and packaging. Inconsistent logo usage can dilute brand identity.

Conduct surveys or focus groups to gather feedback on how consumers perceive the logo. This feedback can provide insights into consumer sentiment and associations with the logo.

Consider whether the logo design has the potential to remain relevant and effective over an extended period. A logo that withstands design trends can be an asset to a brand.

Assess the effectiveness of color choices and typography in conveying brand personality and values. Ensure that the logo's colors and fonts align with the brand's identity.

Test the logo in real-world scenarios to evaluate its impact and effectiveness. For example, you can conduct A/B testing with different logo variations to assess which one resonates best with the target audience.

Ensure that the logo adheres to copyright and trademark laws. Non-compliance can lead to legal issues and negatively affect brand performance.

Continually review and update the logo based on feedback from stakeholders and customers. Brands often evolve, and the logo should reflect these changes.

Measuring the performance of a brand logo is an ongoing process that involves gathering feedback, conducting market research, and staying attuned to changes in the market and brand goals. A well-designed and effective logo can significantly contribute to a brand's success and recognition.