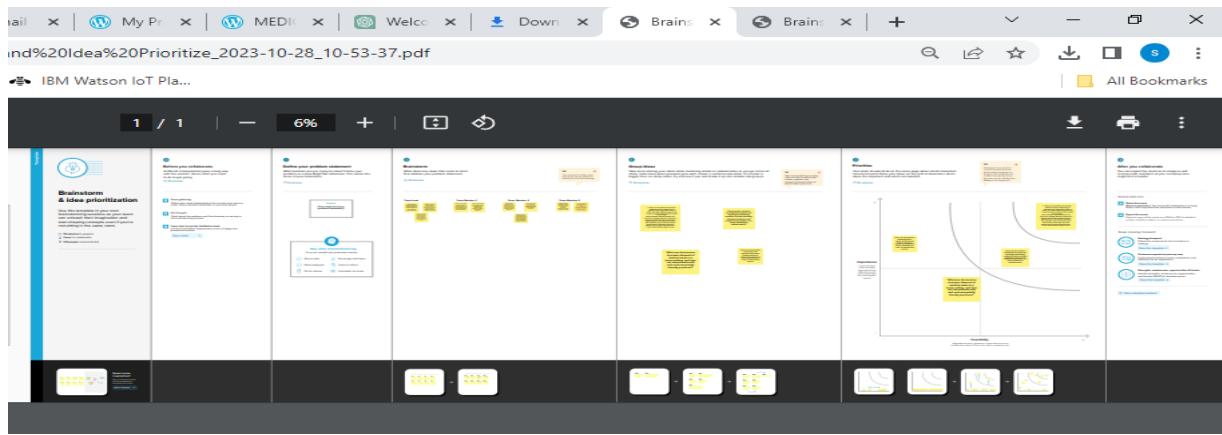


BRAINSTORMING AND IDEA PRIORITIZATION

NAME	S.SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How To Create A Brand Promo Video Using Canva

Page Link:

<https://app.mural.co/t/landingpage4369/m/landingpage4369/1698486759674/452bf4aa66c0b0336b0bd0d0342d1b6f5b81aa7?sender=u83846649c59736fc18bc0774>



P

Project Design Phase-||

CLOUD DEPLOYMENT

TEAM LEAD	S. SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How To Create A Brand Promo Video Using Canva

Creating a brand promo video using Canva is a fantastic way to showcase your brand. Here's a step-by-step guide to help you get started:

1. **Sign In or Sign Up:** If you don't have a Canva account, sign up for one. If you're already a user, log in to your account.
2. **Choose Your Canvas:** Click on "Create a design" and select the "Custom dimensions" option. Input the dimensions you need for your video (typically 16:9 for widescreen or 9:16 for vertical videos).
3. **Select a Template:** Browse Canva's extensive template library for video designs. Pick one that aligns with your brand's style and message.
4. **Add Media:** Canva allows you to upload your images, videos, or choose from their stock media library. Import your brand's visuals to customize your video.
5. **Text and Graphics:** Include text, logos, and graphics to reinforce your brand's identity. Canva offers various fonts and graphic elements to choose from.
6. **Music and Sound:** Enhance your video with music or sound effects. Canva provides a selection of audio tracks, or you can upload your own.
7. **Edit and Arrange:** Drag and drop elements to arrange them as you like. Use Canva's editing tools to trim videos, adjust colors, and add filters.
8. **Transitions:** Add transitions between scenes for a professional touch. Canva offers a variety of transitions to choose from.

9. **Preview and Test:** Play your video within Canva to see how it looks and sounds. Make any necessary adjustments.

10. **Download or Share:** Once you're satisfied, click the "Download" button and choose the video format you prefer (e.g., MP4). You can also share directly to social media platforms.

11. **Branding:** Ensure that your video aligns with your brand's visual identity, including colors, fonts, and style.

12. **Optimize for Sharing:** If you plan to share your video on social media, be sure to create versions optimized for each platform (e.g., square for Instagram, widescreen for YouTube).

13. **Engage Your Audience:** Share your brand promo video with your audience and engage with their feedback and comments.

Remember to experiment, get creative, and tailor your video to your brand's unique message and style. Canva's user-friendly interface and templates make it accessible for all skill levels.

Project Development Phase-II

Debugging & Traceability

TEAM LEAD	S. SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How to Create a Brand Promo Video Using Canva

Debugging and traceability are essential aspects of developing a platform like Canva for creating brand promo videos. Here's how they can be applied to enhance the development and user experience:

1. **Error Logging and Reporting:**

- Implement a robust error logging system that records any issues, such as crashes, glitches, or unexpected behaviors. Make it easy for users to report problems. This helps developers identify and fix issues quickly.

2. **Traceable User Actions:**

- Track and record user actions within the platform, creating a detailed log of their interactions. This traceability assists in understanding how users use the platform and identifying where issues may arise.

3. **Automated Testing:**

- Develop automated test suites to verify the functionality of the platform. Include unit tests, integration tests, and user scenario tests to catch and fix bugs during development.

4. **Version Control:**

- Use version control systems like Git to track changes to the platform's codebase. This allows for easy identification of when and where issues were introduced and enables rollbacks when necessary.

5. **Real-Time Debugging Tools:**

- Integrate real-time debugging tools within the platform for developers to diagnose and fix issues quickly. These tools should provide insights into the platform's internal processes.

6. **User Activity Logs:**

- Maintain logs of user activities, such as project creation, editing, and sharing. This information can be valuable for both improving the user experience and diagnosing problems.

7. **Bug Tracking System:**

- Implement a bug tracking system that allows users and developers to report and track issues. This system should provide detailed information about each reported bug, its status, and the steps to reproduce it.

8. **Monitoring User Feedback:**

- Actively monitor user feedback, both positive and negative, from various channels, including user reviews, social media, and customer support interactions. This feedback can reveal recurring issues and improvement opportunities.

9. **Performance Profiling:**

- Use profiling tools to analyze the platform's performance. Identify bottlenecks or resource-intensive operations and optimize them to enhance the user experience.

10. **Regression Testing:**

- Continuously run regression tests to ensure that new updates or features do not introduce new bugs or conflicts with existing functionality.

11. **Data Analytics:**

- Utilize data analytics to track user engagement, conversion rates, and user drop-off points within the platform. This data can help pinpoint areas in need of improvement.

12. **User-Centric Design:**

- Prioritize a user-centric design approach, emphasizing user feedback and usability testing to prevent user-related issues.

By integrating debugging and traceability practices into the development process of Canva for creating brand promo videos, you can identify and resolve issues efficiently, maintain a high level of user satisfaction, and continuously improve the platform based on user feedback and usage data.

Ideation Phase

Define the Problem Statements

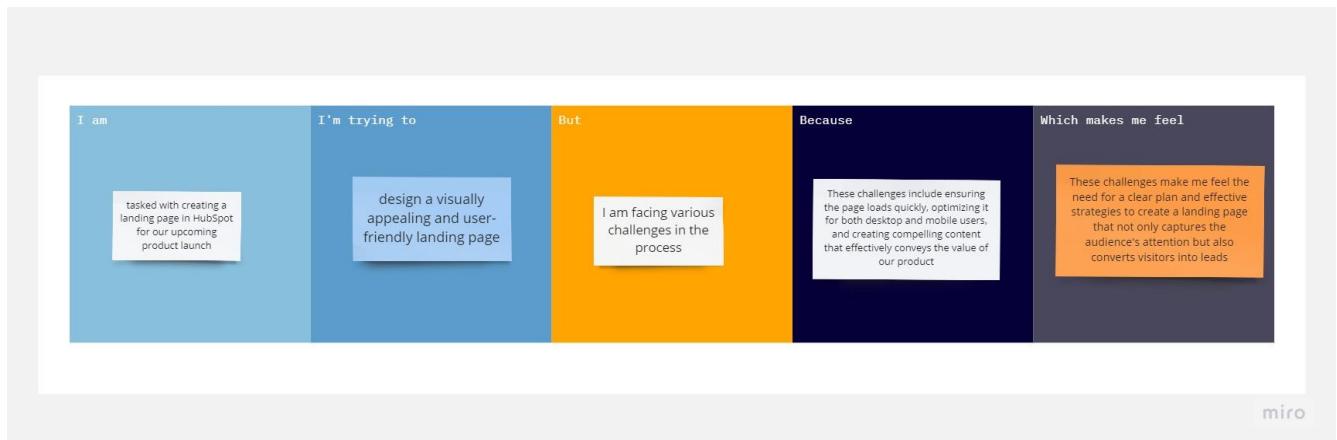
Name	S.Sakthivel
TeamID	4F07E5A652C42CBA2034CBD38BFE3B33
Project Name	How to Create a brand promo using canva

Customer Problem Statement Template:

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.

A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you'll also be able to empathize with your customers, which helps you better understand how they perceive your product or service.

The Problem Statement in creating a landing page in HubSpot:



REFERENCE LINK:

https://miro.com/app/board/uXjVMLRn6Jo=/?share_link_id=6172747214

1

The various problem statements are defined by the various persons related to workers health and safety are tabulated below:

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Landing page creator	design a visually appealing and user-friendly landing page	I am facing various challenges in the process	These challenges include ensuring the page loads quickly, optimizing it for both desktop and mobile users, and creating compelling content that effectively conveys the value of our product	These challenges make me feel the need for a clear plan and effective strategies to create a landing page that not only captures the audience's attention but also converts visitors into leads

Project Design Phase-||

Determine The Requirements (Customer Journey Maps)

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key steps for creating a landing page in HubSpot with a focus on incorporating customer journey mapping:

S.NO	STEP	DESCRIPTION
1.	Define Your Audience	Identify key touchpoints and emotional triggers.
2.	Define Your Video's Goal	Determine the specific objective of your brand promo video.
3.	Script Your Story:	Devlope a script match out of customers journey stage
4.	Storyboard the Video	Create a visual storyboard that aligns with the script.
5.	Design in Canva	Use Canva to design the visuals for your video
6.	Choose the Right Template:	Canva offers video templates Customized that
7.	Incorporate Text and Graphics	Add text and graphics that narrate the customer's experience and journey
8.	Visualize Pain Points and Solutions	Emphasize the pain points and how your product
9.	Highlight Customer Feedback:	If applicable, include customer testimonials or reviews that
10.	Use Transitions:	Incorporate smooth transitions between scenes to guide viewers
11.	Add a Voiceover or Captions	Use voiceover narration or captions to articulate the story
12.	Include a Call to Action	At the end of the video, insert a clear CTA that encourages viewers
13.	Optimize for Mobile and Web	Ensure that your video is mobile-friendly and web-optimized
14.	Test and Review	Preview the video and gather feedback from colleagues.

15.	Measure and Analyze	After the video is live, monitor its performance.
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EMPATHY MAP

NAME	S.SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How To Create A Brand Promo Video Using Canva

Empathy map link:

<https://app.mural.co/t/retroeditioncars8570/m/retroeditioncars8570/1699027323397/720b1afe8d1be66131148c8a1189546996e73bee?sender=uaf988088bea9a9701b308519>



Project Development Phase

Exception Handling

TEAM LEAD	S. Sakthivel
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How to Create a Brand Promo Video Using Canva

Creating a landing page in HubSpot primarily involves designing and managing content within the HubSpot platform, so traditional exception handling as you might find in software development isn't directly applicable. However, there are situations where you may need to handle exceptions or errors related to the design and functionality of your landing page. Here's how you can address such issues in the context of creating a landing page in HubSpot:

Form Error Handling: If you're using forms on your landing page to collect user data, you can set up error handling for form submissions. HubSpot provides the ability to customize form validation and error messages, ensuring that users receive clear feedback if they make mistakes when submitting the form.

Custom JavaScript Errors: If you've added custom JavaScript to your landing page, use try...catch blocks to handle errors and exceptions that may occur. Log error messages to the browser console or send them to your server for debugging.

Error Pages: If a user encounters an error when accessing your landing page (e.g., a broken link or a missing resource), consider creating a custom error page to provide a better user experience. HubSpot allows you to design custom error pages that can redirect users to a relevant location.

Testing and QA: Implement thorough testing and quality assurance (QA)

Project design phase-||

Requirement Analysis (Functional, Operational, Technical) / Flow Charts

TEAM LEAD	S. SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How to Create a Brand Promo Video Using Canva

S.NO	Requirement Type	Requirement Description
	Functional Requirements	
1.	User Account Management	Users should be able to create and manage their Canva accounts
2.	Template Selection	Provide a library of video templates with various styles
3.	Custom Canvas Creation	Allow users to specify custom dimensions for their video canvas to match their preferred platform
4.	Media Upload and Management	Users should be able to upload their own images,
5.	Drag-and-Drop Interface	Implement a user-friendly interface that enables users to easily drag
6.	Text and Graphics Tools	Provide tools for users to add and customize text, logos, icons, and graphics within the video.

S.NO	Operational Requirements	
1.	Software Access and Availability	Ensure that Canva is accessible through web browsers and mobile
2.	User Onboarding:	Provide a user-friendly onboarding process, including tutorials and guide
3.	Media Library Maintenance	Regularly update and maintain a media library with a wide variety of images, videos
4.	Template Library Management	Continuously expand and manage a library of video templates
5.	User Support and Help Center	Maintain a help center with comprehensive documentation and FAQs

6.	Customer Support	Offer responsive customer support through multiple channels, such as chat, email, or phone
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S.NO	Technical Requirements	
1.	Cross-Platform Compatibility	Ensure that Canva is accessible and functions well on various operating systems.
2.	Web Browser Support	Support a range of web browsers, such as Chrome, Firefox, Safari, and Edge.
3.	Mobile App Development	Develop and maintain mobile apps for iOS and Android devices.
4.	Responsive Web Design	Implement responsive web design to adapt the Canva interface to different screen sizes and orientations.
5.	Media Processing	Implement media processing capabilities to handle image and video uploads.
6.	Real-Time Editing	Ensure that users can edit and preview their brand promo videos in real time, with smooth performance.

Project Design Phase-||

OPEN SOURCE FRAMEWORKS

NAME	S.SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How To Create A Brand Promo Video Using Canva

1. **HTML/CSS/JavaScript:** You can create your landing page layout using HTML for structure, CSS for styling, and JavaScript for interactivity. HubSpot provides a code editor where you can directly input your HTML, CSS, and JavaScript code.
2. **Bootstrap:** Bootstrap is a popular open-source front-end framework that provides a responsive grid system and a variety of pre-designed components. You can integrate Bootstrap into your HubSpot landing page to create a mobile-friendly and visually appealing design.
3. **jQuery:** jQuery is a fast, small, and feature-rich JavaScript library. It simplifies things like HTML document traversal and manipulation, event handling, and animation. You can use jQuery to enhance the interactivity and user experience of your landing page.
4. **Font Awesome:** Font Awesome is a popular icon toolkit that allows you to use scalable vector icons that can be customized instantly with CSS.
5. **Animate.css:** If you want to add animations to your landing page elements, Animate.css is a library of ready-to-use CSS animations.

Here's a basic example of how you can include Bootstrap and jQuery in your HubSpot landing page:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Custom Landing Page</title>
    <link
        href="https://cdn.jsdelivr.net/npm/bootstrap/dist/css/bootstrap.m
in.css" rel="stylesheet">
        <link href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/6.0.0/css/all.min.css" rel="stylesheet">
        <link
        href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/4.1.1/an
imate.min.css" rel="stylesheet">
    <style>
        /* Custom CSS styles */
    </style>
</head>
<body>
    <!-- Your landing page content here -->

    <script src="https://code.jquery.com/jquery-
3.6.0.min.js"></script>
    <script
        src="https://cdn.jsdelivr.net/npm/bootstrap/dist/js/bootstrap.bun
dle.min.js"></script>
    <script>
        // Your custom JavaScript code
    </script>
</body>
</html>
```

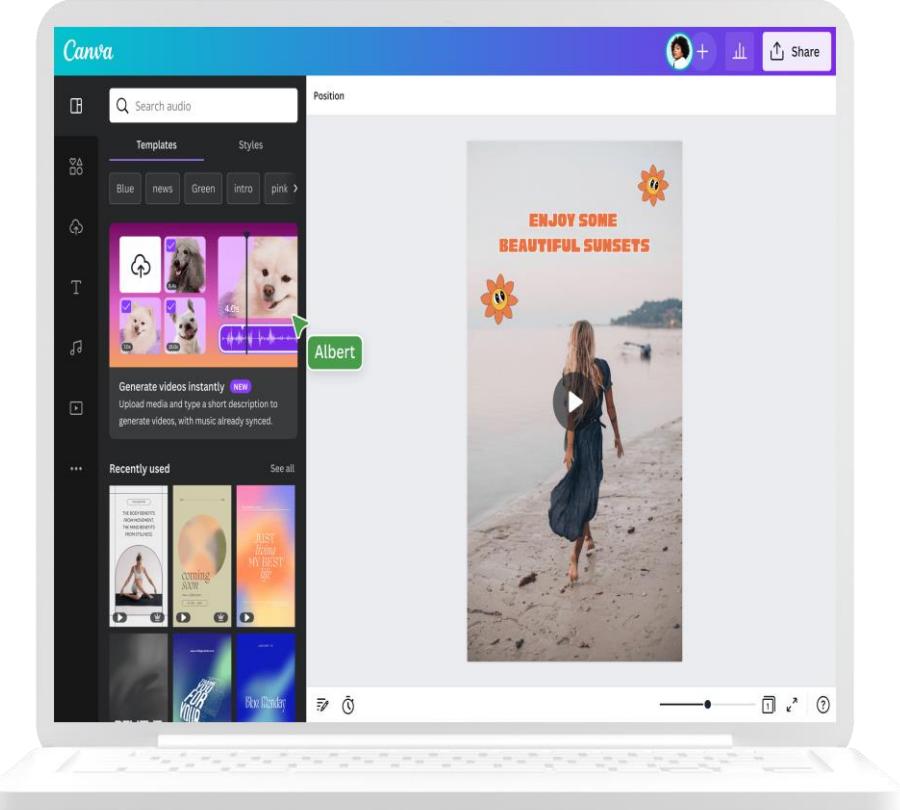
In this example, Bootstrap, Font Awesome, and Animate.css are included via CDN links, and you can start building your landing page layout and interactivity within the `<body>` section and the accompanying `<style>` and `<script>` tags.

Remember to customize the HTML, CSS, and JavaScript according to your specific landing page requirements. HubSpot's code editor allows you to directly input and customize your code to create a fully customized landing page experience.

Performance and Final Submission Phase

Model Performance Metrics

TEAM LEAD	S.Sakthivel
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How to Create a Brand Promo Video Using Canva

PARAMETER	SCREENSHOT
Output	 A screenshot of a computer monitor displaying the Canva software interface. The main workspace shows a video thumbnail of a woman walking on a beach at sunset. The video has a title overlay that reads "ENJOY SOME BEAUTIFUL SUNSETS". On the left side of the screen, there's a sidebar with various tools and a template library. A green callout box labeled "Albert" points to a specific element in the sidebar. The overall interface is clean and modern, typical of a professional video editing tool.

Project Design Phase-I
Proposed Solution Template

NAME	S.SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How to Create a Brand Promo Video Using Canva

Proposed Solution Template:

S.No.	Parameter	Description
1	Problem Statement (Problem to be solved)	Well, to provide you with a proposed solution, I'll need to know the problem you're trying to address. Could you please provide me with the problem statement? Once you do, I'll be happy to assist you in proposing a solution!
2	Idea / Solution description	Awesome! I'm excited to hear your idea or solution description! Please go ahead and share the details with me
3	Novelty / Uniqueness	To create a captivating landing page in HubSpot, focus on novelty and uniqueness. Craft compelling content that grabs visitors' attention, presenting fresh ideas, exclusive offers, or innovative solutions. Employ striking visuals, custom designs, and interactive elements to set your page apart. Tailor your messaging to resonate with your audience's distinct needs and interests. Implement cutting-edge features like personalized user experiences or dynamic content. Utilize A/B testing to refine your page based on what truly resonates with your audience. By infusing novelty and uniqueness into your landing page, you'll engage visitors, encourage conversions, and leave a lasting impression.
4	Social Impact / Customer Satisfaction	That's great! Social impact and customer satisfaction are vital for any business or organization. Can you please provide more information about the specific problem you're addressing or the solution you've come up with? I'd love to hear more so I can provide relevant suggestions or insights
5	Business Model (Revenue Model)	, the revenue model, a crucial component of any business. There are various revenue models you can explore depending on your business nature. Here are a few popular ones: Direct Sales: You sell products or services directly to customers at a set price. Subscription Model: Customers pay a recurring fee to access your product or services regular basis.

		<p>Freemium Model: You offer a basic version of your product or service for free and charge for additional features or enhanced offerings. Advertising Model: You generate revenue by displaying advertisements on your platform or website. Licensing Model: You license your product or intellectual property to other companies in exchange for a fee or royalty.</p>
6	Scalability of the Solution	<p>Ah, scalability, the ability to grow and adapt without compromising performance or efficiency. It's an important aspect to consider when building a solution. Here are a few factors that contribute to the scalability of a solution:</p> <ul style="list-style-type: none"> Infrastructure: Ensure your solution is built on a flexible and scalable infrastructure, such as cloud computing services, that can handle traffic. Architecture: Design your system with scalability in mind, using modular and distributed architectures like microservices or serverless architecture. This allows you to scale different components independently. Database Optimization: Choose a database that can handle growing data volumes and access patterns efficiently. Consider techniques like data sharding and caching. Load Balancing: Distribute incoming requests across multiple servers to avoid bottlenecks and ensure optimal resource utilization. Automation: Implement automated processes for deploying, scaling, and monitoring your solution. This helps you to adapt quickly to changing demands. Horizontal Scaling: Consider scaling horizontally by adding more servers or instances instead of relying solely on vertical scaling (upgrading hardware). This allows for better resource utilization and cost-effectiveness.

Project Design Phase-I Solution Architecture

NAME	S.SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How to Create a Brand Promo Video Using Canva

Solution Architecture:

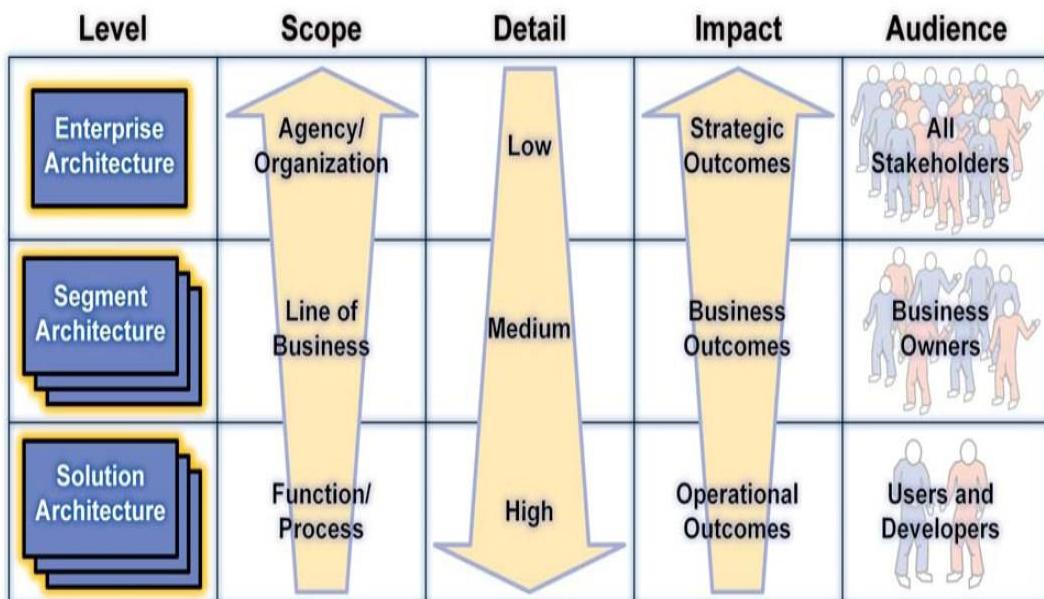
Ah, solution architecture! Solution architecture, similar to technical architecture, is a discipline that focuses on designing the structure and layout of solutions to specific problems or challenges.

In the world of IT, solution architecture involves understanding the requirements and objectives of a project and then designing a solution that addresses those needs. It's all about finding the most efficient, effective, and practical way to solve a problem or meet a particular goal.

Solution architects work closely with stakeholders, such as clients, project managers, and developers, to gain a thorough understanding of the problem they are trying to solve. They analyze requirements, evaluate existing systems or processes, and propose a solution that aligns with the client's goals and constraints.

The architecture of a solution may encompass several components, including software, hardware, networks, and data. Solution architects consider factors like scalability, performance, security, and cost-effectiveness when designing the solution.

Solution Architecture for landing page in HubSpot



Flow of the Project:

Ah, the flow of a project!

A project typically follows a series of steps, often referred to as the project life cycle, to ensure its successful execution. While the specific flow can vary depending on the project and its requirements, here's a general overview:

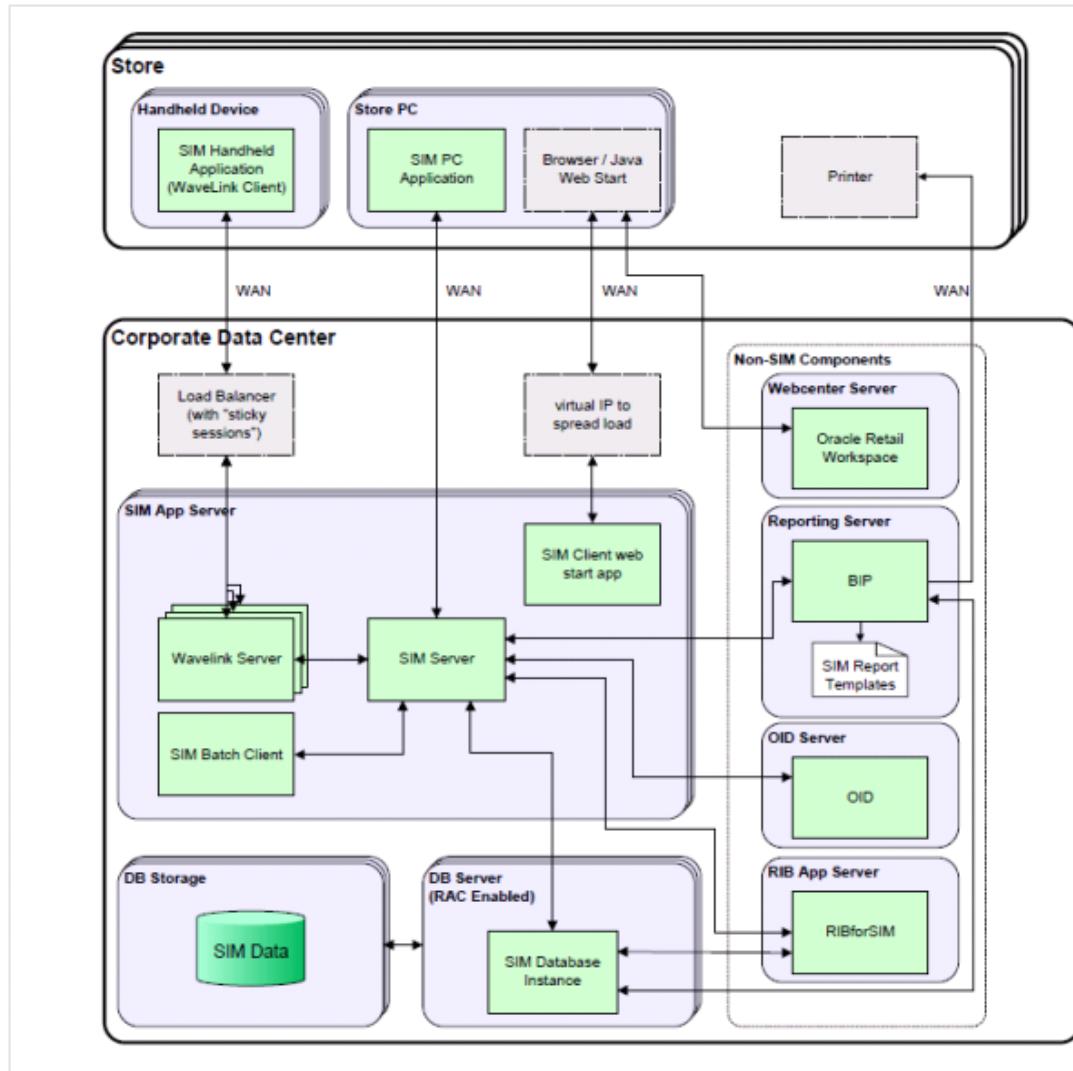
1. Project Initiation: This is where the project is conceived, and its objectives and scope are defined. Key stakeholders come together, identify the project's feasibility, and make the decision to proceed or not.
2. Planning: In this phase, the project team creates a detailed plan that outlines the tasks, resources, timeline, and budget required to complete the project successfully. This includes identifying risks, establishing communication channels, and defining project milestones.
3. Execution: This is where the project plan is put into action. The project team carries out the tasks outlined in the plan, and progress is monitored and tracked. Regular meetings and status updates keep everyone aligned.
4. Monitoring and Control: Throughout the project, the team monitors progress, identifies any deviations from the plan, and takes corrective actions as needed. This phase includes tracking budget, timelines, and quality, as well as addressing any risks or changes that arise.
5. Closure: Once the project has achieved its objectives, it enters the closure phase. This involves documenting lessons learned, conducting post-implementation reviews, and ensuring a smooth handover to the client or operational team. Celebrations are definitely in order! ☺☺

Remember, this is a simplified version, and each project can have its unique twists and turns. But in general, a well-structured flow helps keep things organized, ensures effective communication, and increases the chances of project success. So, go with the flow and make your project shine!

Project Design Phase-||

Technical Architecture

TEAM LEAD	S. SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How to Create a Brand Promo Video Using Canva



Ah, third-party APIs! They are like handy tools that allow you to access and integrate external services or functionality into your own applications.

Third-party APIs, which stands for Application Programming Interfaces, are developed by companies or organizations to provide

developers with a way to interact with their services or data. By using these APIs, you can leverage the power and functionality of these external services within your own applications, websites, or software.

There are a wide variety of third-party APIs available, catering to different needs and industries. For example, you can find APIs for social media platforms like Twitter or Facebook, payment gateways such as PayPal or Stripe, mapping services like Google Maps, weather data providers, and so on.

To use a third-party API, you typically need to sign up for an account with the service provider, obtain an API key or access token, and then make API calls to fetch or manipulate data. These API calls can be made using various programming languages and frameworks, depending on your preference and the API's documentation.

Using third-party APIs can add powerful functionality to your applications, save development time, and enhance the overall user experience. Just make sure to read and follow the API documentation provided by the service provider to understand how to properly integrate and use their API.

So, go ahead and explore the vast world of third-party APIs to add some extra sparkle to your apps! And remember, always check the documentations and terms of use to ensure smooth integration!

Project Design Phase-||

Third-Party API's

TEAM LEAD	S.SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How to Create a Brand Promo Video Using Canva

Ah, algorithms and dynamic programming, two fascinating subjects! While creating a landing page in HubSpot doesn't require diving deep into algorithmic or dynamic programming concepts, let's explore how these principles apply in general and touch upon optimizing memory utilization.

Algorithms play a crucial role in solving problems efficiently and can be used to enhance various aspects of web development. They help in tasks like sorting elements, searching for specific data, or optimizing the performance of a website. However, when it comes to creating landing pages in HubSpot, the platform's focus is more on providing a user-friendly interface and pre-built functionality, so you don't need to worry about implementing complex algorithms yourself.

Dynamic programming is a technique used to break down complex problems into smaller overlapping subproblems, solving each subproblem only once, and storing the results for future reference. While dynamic programming can be applicable in certain development scenarios, it's not typically needed for designing and building landing pages in a marketing platform like HubSpot.

As for optimal memory utilization, it's always important to consider the size and efficiency of the assets used in your landing page, such as images and videos. By optimizing their file sizes without sacrificing quality, you can minimize the memory footprint and improve loading times. HubSpot offers various features to help optimize memory utilization, such as image compression and lazy loading.

Remember, when it comes to creating landing pages in HubSpot, focusing on content, design, and user experience will yield the best results. So, embrace the creative process and let HubSpot handle the technical complexities!

Project Development Phase-II

Utilization Of Algorithms, Dynamic Programming, Optimal Memory Utilization

TEAM LEAD	S. SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT NAME	How to Create a Brand Promo Video Using Canva

The utilization of algorithms, dynamic programming, and optimal memory utilization can significantly enhance the process of creating a brand promo video using Canva. Here's how these concepts can be applied:

1. **Optimal Image and Video Compression Algorithms:**

- Implement algorithms for efficient image and video compression to reduce the size of media files without compromising quality. This ensures faster uploading and smoother editing within Canva.

2. **Dynamic Programming for Scene Transitions:**

- Use dynamic programming techniques to optimize scene transitions in the video. This involves determining the most visually appealing and seamless way to transition between different scenes or frames.

3. **Efficient Memory Handling:**

- Optimize memory utilization by loading only the necessary assets and resources into memory during video editing. This minimizes memory overhead and ensures smoother performance.

4. **Real-Time Rendering Optimization:**

- Apply algorithms for real-time rendering to process and display video previews while users are editing. Optimize the rendering process for fast and responsive feedback.

5. **Auto-Save and Recovery:**

- Implement an auto-save feature that uses dynamic programming to periodically save the user's project progress. This ensures that users can recover their work in case of interruptions or crashes.

6. **Multi-Threaded Processing:**

- Utilize multi-threading algorithms to distribute processing tasks efficiently, allowing users to edit and preview their videos while background tasks, such as rendering, are in progress.

7. **Optimal Audio Synchronization:**

- Use dynamic programming techniques to synchronize audio elements with the video, ensuring that background music, voiceovers, and sound effects are perfectly timed.

8. **Memory Buffer Management:**

- Efficiently manage memory buffers for video and audio processing, optimizing memory allocation and deallocation for real-time editing.

9. **Optimal Asset Loading:**

- Load media assets such as images, videos, and audio clips on-demand, ensuring that only the required assets are stored in memory at any given time.

10. **Dynamic Quality Adjustment:**

- Implement algorithms to dynamically adjust the quality of media elements based on the user's editing needs, optimizing performance and memory usage.

By incorporating these algorithmic and memory optimization techniques into the Canva platform for creating brand promo videos, you can provide users with a seamless and efficient video editing experience, ensuring that they can work on their projects without performance bottlenecks and memory constraints.

Project Development Phase

CODE-LAYOUT, READABILITY AND REUSABILITY

NAME	S.SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT	HOW TO CREATE A BRAND PROMO USING CANVA

Code Layout:

1. Consistent Indentation: Use consistent and clear indentation (e.g., tabs or spaces) to structure your code. Follow industry-standard conventions for your chosen programming language.
2. Whitespace: Use whitespace judiciously to separate code blocks and make your code more readable. Avoid excessive or inconsistent use of whitespace.
3. Naming Conventions: Follow a consistent naming convention for variables, functions, classes, and other code elements. Use meaningful and descriptive names to make your code self-documenting.
4. Comments: Include comments to explain complex logic, algorithmic steps, or any non-obvious code. Make sure comments are concise, relevant, and up-to-date.
5. Code Organization: Organize your code into logical modules or files. Use directories and packages to structure your project. Maintain a clear directory structure.

6. Consistency: Adhere to a consistent coding style and formatting throughout your project. Use linters or code formatting tools to enforce code consistency.

Readability:

1. Descriptive Function and Variable Names: Choose descriptive and meaningful names for functions and variables. A well-named function should indicate its purpose, and variable names should be self-explanatory.
2. Limit Line Length: Keep lines of code to a reasonable length (e.g., 80-120 characters) to improve readability. Break long lines into multiple lines when necessary.
3. Avoid Deep Nesting: Minimize deep nesting of loops and conditionals. Deeply nested code can become difficult to read and understand.
4. Modularization: Divide your code into small, manageable functions or methods with a single responsibility. This promotes code reuse and makes it easier to understand.
5. Use Design Patterns: Apply design patterns to solve common problems in a standardized and readable way. Well-known design patterns enhance code understandability.

6. Consistent Coding Style: Maintain a consistent coding style for your team or project. Agree on conventions for formatting, naming, and documentation.

Reusability:

1. Functions and Libraries: Create functions and libraries that encapsulate common functionality. This allows you to reuse code across different parts of the system.
2. Parameterization: Design functions and modules with parameters that make them adaptable to various use cases. Avoid hardcoding values that could change.
3. Encapsulation: Encapsulate code in classes and objects, promoting code reuse through inheritance and composition.
4. Library and Module Management: Utilize external libraries and modules for common tasks whenever possible. Libraries like jQuery, Axios, or NumPy can save development time and improve reusability.
5. Version Control and Packaging: Use version control systems (e.g., Git) to manage your codebase. Package your code into reusable components, libraries, or microservices when applicable.
6. API Design: If your system exposes APIs or services, design them with reusability in mind. Follow RESTful principles or other best practices for API design.

7. Documentation: Document your code, APIs, and libraries comprehensively. Good documentation facilitates code reuse by explaining how to use your code effectively.

Project Development Phase

No. Of Functional Features Included In the Solution

NAME	S.SAKTHIVEL
NM ID	4F07E5A652C42CBA2034CBD38BFE3B33
PROJECT	HOW TO CREATE A BRAND PROMO USING CANVA

Functional Feature	Description
User Authentication and Authorization	- User registration and login. - Role-based access control to manage user permissions.
Campaign Management	- Create, edit, and delete campaigns. - Specify campaign name, objectives, and budget. - Choose bidding strategies. - Manage multiple campaigns.
Ad Group Management	- Create, edit, and delete ad groups. - Define ad group names and targeting options. - Organize ad groups within campaigns.
Ad Copy Creation and Management	- Create ad copies with headlines, descriptions, and display URLs. - Enable A/B testing for ad variations. - Schedule ad copy changes.
Keyword Management	- Research and select relevant keywords. - Organize keywords into ad groups. - Define negative keywords to enhance ad relevance.
Landing Page Management	- Specify landing pages for ads. - Ensure landing page quality and relevance to ad content.
Bid Management	- Set keyword bids and bidding strategies. - Adjust bids based on performance data.
Audience Targeting	- Define audience targeting options, such as demographics and interests. - Implement remarketing strategies.
Ad Scheduling	- Schedule ad display times and dates. - Define ad rotation settings.
Conversion Tracking	- Set up conversion tracking to measure campaign success. - Define conversion actions and values.
Real-Time Notifications	- Send real-time alerts and notifications for campaign-related events (e.g., budget changes, policy violations).
Performance Reporting and Analytics	- Generate custom reports with key performance metrics (e.g., CTR, conversion rates, ROAS). - Provide data visualizations for campaign analysis.
Data Storage and Management	- Store campaign data, user profiles, and performance metrics securely. - Implement data encryption and regular backups.

Google Ads API Integration	<ul style="list-style-type: none"> - Communicate with the Google Ads API for campaign creation, management, and optimization. - Manage authentication and access to Google Ads.
Compliance Management	<ul style="list-style-type: none"> - Ensure adherence to Google Ads policies and guidelines to avoid policy violations. - Conduct regular reviews and updates for policy compliance.
Monitoring and Logging	<ul style="list-style-type: none"> - Implement real-time system health and performance monitoring. - Log system activities for debugging and auditing.
Security Measures	<ul style="list-style-type: none"> - Implement strong data encryption protocols to protect sensitive information. - Enforce role-based access control to ensure data privacy.
Containerization and Orchestration	<ul style="list-style-type: none"> - Use containerization (e.g., Docker) and orchestration (e.g., Kubernetes) for resource management.
Continuous Optimization	<ul style="list-style-type: none"> - Continuously monitor campaign performance. - Regularly analyze data insights and make adjustments to optimize campaigns.