Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	03 NOVEMBER
Team ID	NM2023TMID09230
Project Name	Building A Website Using Canva
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	**Graphic Design Capabilities**	a. Canva should provide a user-friendly interface for managing design layers. Users should be able to easily arrange and organize elements within their designs. This includes the ability to move, reorder, group, and lock layers, making it simpler to create complex and visually appealing website graphics. b. Canva should support vector graphics, allowing users to create and edit scalable graphics that maintain their quality across different screen sizes. Vector graphic support is crucial for creating icons, logos, and other design elements that need to be crisp and clear on both desktop and mobile devices.
FR-2	**Template Library**	a. The template library should offer a wide range of categories and themes suitable for various website types, such as blogs, e-commerce sites, portfolios, and business websites. This ensures that users can find templates tailored to their specific needs. b. Users should be able to easily customize and adapt the templates to match their brand, content, and design preferences. This includes the ability to change colors, fonts, images, and layout elements, allowing for a high degree of template personalization.
FR-3	**Image Editing and Enhancement**	a. Canva should support non-destructive editing features, allowing users to make changes to images and graphics without altering the original file. This ensures that users can experiment with various edits and revert to the original version if needed. b. The platform should offer a library of filters, effects, and enhancements that users can apply to images and graphics to achieve visual styles.

FR-4	**Typography Options**	a. Canva should allow users to adjust the spacing between individual characters in a text element, enabling precise control over kerning and letter spacing. This is essential for achieving optimal readability and aesthetics in typography. b. Users should have the ability to align text elements both horizontally and vertically within their designs c. Canva should prioritize web-safe fonts to ensure that text elements render consistently and legibly across various web browsers and devices. It should also provide previews or guidelines to help users understand how selected fonts will appear on the web
FR-5	**Color Management**	a. Canva should include a color palette generator or recommendation tool that helps users create harmonious color schemes. This can be based on color theory principles like complementary, analogous, or triadic color combinations, aiding in the selection of visually pleasing colors for website elements. b. Canva should support the creation and management of global color swatches. This means users can define a set of primary and secondary brand colors that can be easily applied across multiple design elements
FR-6	**Collaboration and Sharing**	a. Canva should offer real-time collaboration features, allowing multiple users to work on the same design simultaneously. This should include the ability to see changes made by others in real-time, chat or comment within the design workspace, and track version history. b. Users should have the capability to set access permissions and sharing controls for their designs. This includes the ability to grant or restrict editing, commenting, or viewing access to specific users or groups. Additionally, users should be able to generate shareable links with various levels of access (view-only, comment, edit) and set expiration dates for those links for enhanced security and control.

FR-7	**Export Options**	a. Canva should support the export of designs in multiple file formats such as PNG, JPEG, SVG, PDF, and more, allowing users to choose the format that best suits their website needs. Additionally, users should be able to export designs at various resolutions to ensure compatibility with different display sizes and devices. b. Canva should provide the ability to batch export multiple designs or design elements simultaneously, streamlining the process of preparing assets for a website. Furthermore, it should offer options for image compression and optimization to help reduce file sizes for faster website loading without compromising quality.
FR-8	**Responsive Design Preview**	a. Canva should offer a responsive design preview feature that allows users to see how their designs will appear on various devices and screen sizes, including desktop computers, tablets, and mobile phones. This ensures that the website maintains a consistent and appealing layout on different platforms. b. The responsive design preview should provide interactive testing capabilities, allowing users to interact with the preview to check how elements respond to different screen sizes. This includes checking the functionality of navigation menus, buttons, and other interactive features on various devices to ensure a smooth user experience.
FR-9	**Prototyping and Wireframing**	a. Canva's prototyping and wireframing tools should support the creation of interactive elements, including clickable buttons, links, and navigation menus. Additionally, it should allow for defining transitions between screens or pages to simulate user interactions and flow. b. The platform should enable collaborative feedback on prototypes and wireframes. Users should be able to share prototypes with team members or stakeholders, collect comments and feedback directly within the tool, and conduct usability testing to validate the website's user experience design.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Performance and Scalability**	a. Canva should ensure that the website designs load quickly, providing a responsive and smooth user experience. The platform should aim for fast load times, especially for graphics and designs, to prevent user frustration and improve engagement. b. Canva's infrastructure should be designed to automatically scale resources, such as servers and storage, based on demand.
NFR-2	**Usability and User Interface**	a. Canva's user interface should be intuitive and easy to navigate. It should follow established design principles to ensure that users can quickly understand and utilize the platform's features without the need for extensive training or assistance. b. Canva should maintain a consistent user experience throughout the platform. This includes a uniform design language, standardized workflows, and predictable interactions to minimize confusion and frustration for users as they move through different areas of the platform.
NFR-3	**Compatibility**	a. Canva should be compatible with a wide range of web browsers, including but not limited to Google Chrome, Mozilla Firefox, Apple Safari, Microsoft Edge, and Internet Explorer, to ensure that users can access and use the platform without significant issues on their preferred browsers.
NFR-4	**Security**	a. Canva should implement strong data encryption protocols to protect user data and design assets. This includes encrypting data both in transit (during communication) and at rest (when stored on servers) to safeguard against unauthorized access and data breaches. b. Canva should provide secure user authentication mechanisms, including multi-factor authentication (MFA) options, to ensure that only authorized individuals can access and modify designs.
NFR-5	**Data Backup and Recovery**	a. Canva should implement automated and regular data backup procedures to ensure that all user design assets and data are routinely backed up. These backups should be performed at specified intervals, and the system should retain multiple backup versions for a reasonable period.

		b. Canva should support point-in-time recovery, allowing users to restore their designs and data to a specific historical state in case of accidental data loss, user errors, or system failures. This feature should provide flexibility and control over data recovery, reducing the risk of permanent data loss.
NFR-6	**Availability and Uptime**	a. Canva should be designed with a high-availability architecture that minimizes downtime and service interruptions. This includes redundancy, failover mechanisms, and load balancing to ensure that the platform remains accessible to users even in the event of server failures or maintenance activities. b. Canva should establish and adhere to a Service Level Agreement (SLA) that defines the expected uptime and availability guarantees for users. The SLA should include provisions for compensation or service credits in the event of extended downtime or disruptions that breach agreed-upon availability targets.

NFR-7	**Compliance and Privacy**	a. Canva should comply with relevant data privacy regulations, such as GDPR (General Data Protection Regulation) in the European Union, and provide users with tools and features to manage their data and privacy settings. This includes options for data access, deletion, and consent management. b. Canva should implement clear data retention policies and practices, specifying how long user data and design assets are stored on the platform. Users should be informed about these policies and have the ability to request the deletion of their data in accordance with applicable data protection laws.
NFR-8	**Collaboration Support**	a. Canva should offer robust version control and history tracking features, allowing users to view and restore previous versions of their designs. This helps teams collaborate effectively and provides a safety net in case of accidental changes or design issues. b. Canva's real-time collaboration features should perform smoothly and responsively, even when multiple users are actively editing and collaborating on the same design simultaneously.

NFR-9	**Scalable Infrastructure**	a. Canva's infrastructure should support elastic resource allocation, allowing the platform to dynamically adjust server capacity, storage, and network resources based on demand. This ensures that the platform can handle sudden spikes in user activity and maintain performance during peak usage periods.