

CANVA

Um Al-Qura University

College of Engineering and Computing

Department of Computer Science

Made by: Sarah Al-Amari - Taif Al-Shairy

October 2024

Contents

1	Abstract	3
2	Introduction	3
3	Canva program requirement	3
3.1	Functional requirement	3
3.2	Non-Functional requirement	4
4	Canva Program Tasks	4
5	The purpose and services of Canva	4
6	Survey about canva	5
7	Comparison	7
8	System Architecture	7
9	Data Model	8
9.1	Use Case	8
10	Technical specifications	9
11	Conclusion	9
12	GitHub link	10

1 Abstract

The report provides a comprehensive overview of Canva, a versatile online design platform that helps users easily create graphic content through various templates. It allows users to design business cards, logos, and presentations without the need for advanced design skills. We reviewed some of Canva's requirements and tasks, the purpose of Canva and the services it provides, conducted a survey with some users about Canva, and compared Canva with other similar programs. In the design phase, we mentioned the system architecture and use case and mentioned the technical specifications of Canva. This is a summary of what you will read in this report.

2 Introduction

Design programs are essential tools in the world of creativity, as they allow users to create professional and attractive visual content. These programs include a variety of applications ranging from graphic design and photo editing to motion graphics design and website development. Through these tools, designers can express their ideas and turn them into reality. Among these programs, the Canva platform stands out, which aims to facilitate the design process for users of all levels. Canva was founded in 2013 and provides a simple and easy-to-use user interface. Canva features a wide range of ready-made templates and resources such as images, graphics and fonts and allows users to create various designs such as presentations, prints, charts and publications. Canva has become one of the most popular design tools in the world, helping individuals and companies achieve their creative ideas effectively.

3 Canva program requirement

3.1 Functional requirement

- The program requires an internet connection to enable synchronization of edits across multiple devices.
- The program requires the user to create an account to save their designs and access them easily from multiple devices.
- The program must allow the user to create a new project through the user interface (UI) where they can select a template or a custom design.
- The program must allow the user to upload images from their device or choose from the built-in image library.
- The program must include “Undo” and “Redo” buttons that enable the user to undo recent changes or redo them.

3.2 Non-Functional requirement

- **Performance:** The program should be responsive, with short loading times to ensure a smooth user experience.
- **Usability:** The user interface should be clear and easy to navigate, with instructions and tutorials available for new users.
- **Compatibility:** The program should work on multiple operating systems (such as Windows, macOS, iOS, Android) and support various browsers.
- **Security:** Users' personal data should be protected, with options for securing accounts such as two-factor authentication.
- **Updates:** Regular updates should be provided to improve performance and add new features, with prompt addressing of security vulnerabilities.

4 Canva Program Tasks

- **Templates:** Canva provides many free ready-made templates that can be used and modified with ease. It also offers templates for designing PowerPoint presentations.
- **Tools:** Canva has a variety of tools for editing images and videos, including drawing tools, text, inserting images, sounds, and charts.
- **Group Design:** In Canva, you can invite your friends to work on designs collaboratively, which saves time and effort.
- **Automatically Save Modifications:** Canva automatically saves your presentation, so there is no need to worry if the Internet is disconnected.

5 The purpose and services of Canva

Canva app aims primarily to enable users to create attractive and professional designs easily, as it provides ready-made templates and tools that can be used to create various types of designs such as publications, logos, cards, advertisements and more. It was designed to solve a set of problems for users and enable them to create professional designs without the need for high skills. It is a comprehensive design platform that facilitates the creation of creative content, which meets the diverse needs of individuals and companies.

6 Survey about canva

As part of an assignment on Canva, we conducted a survey to gather user feedback on their familiarity with the app and their satisfaction with its features. We analyzed the data to find out their opinions.

Q1: The question aims to collect information about people's awareness of Canva, a platform used to design various contents such as posts, posters, and presentations. All users who answered the question have previous knowledge of Canva.



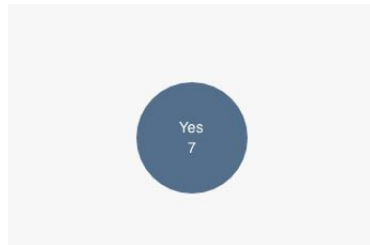
Q2: The question aims to gather opinions about Canva. The responses show that 5 out of 7 users reported no flaws, indicating general satisfaction. However, 2 users mentioned some flaws, highlighting differing experiences.



Q3: The question targets users' experiences with the ease of use of the Canva user interface. The answers show that all users found the interface easy to use, indicating a comfortable and positive



Q4: The question aims to gather information about whether users will share their knowledge of Canva with their friends. All users reported that they will share their knowledge of the platform, The results suggest that Canva is not just a design tool, but has become a recommended platform among friends and colleagues, reflecting its positive impact within the user community.



Q5: The question aims to gather feedback on potential additions to the Canva program. As indicated in the results, some users expressed a desire for enhancements, such as improving video editing tools and quality, adding more fonts for the Arabic language, creating folder organization, enhancing text options with additional tools, and providing more customization features for images. These suggestions reflect users' needs for a more versatile and comprehensive design platform.

تحسين جودة الفيديوهات، أدوات تحرير للفيديوهات أكثر .
خطوط أكثر للغة العربية .
-
إنشاء مجلدات
لا يوجد
No , thanks
نعم ارجب في تحسين تخصيص النصوص واادوات تحرير الصور في كانفا

Through the opinions, we find that many prefer Canva, but it lacks some features. Canva is an easy-to-use application, so many see it as an important and necessary application for editing. With the addition of the features that users mentioned previously, It will enhance the user experience.

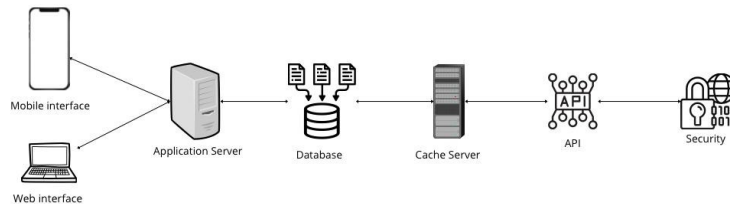
7 Comparison

	Canva	PicArt Photo&Video	Adobe Express
Advantage	Easy user interface photo and video editing Ready-Made Templates collaborative Design	Professional Tools Stickers and Emojis Image Layers Object Removal Trim and Merge Videos	Esey to use Variety of Templates Integration with Other Adobe Tools
Disadvantage	Limited free features internet dependency	Advertisements Complex interface	Limited features in the free version internet connection required

For beginners and those who need quick content creation, Canva is the best option due to its simplicity and the large variety of templates it offers. On the other hand, if your focus is more on advanced photo and video editing, Picsart photovideo stands out with its powerful editing tools, especially when dealing with visual content. For professionals looking for more advanced design capabilities and seamless integration with other Adobe products, Adobe Express is the ideal choice, offering robust design tools with the professional touch of Adobe.

8 System Architecture

The system architecture diagram shows a setup where mobile and web interfaces connect to an application server. The application server manages interactions with a database for data storage and a cache server to speed up data access. These components communicate via an API, with a security layer ensuring data protection.



9 Data Model

9.1 Use Case

The image shows a use case that illustrates the interaction between the user and the Canva app. The user starts with four main steps:

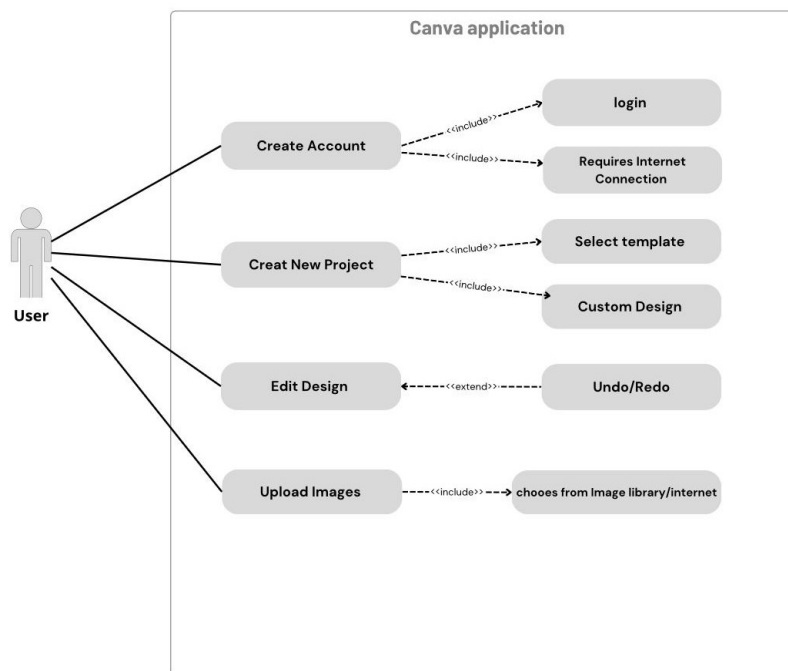
Create an account: This step involves logging in and requires an internet connection.

Create a new project: This option includes a template or custom design.

Edit design: The user can make changes to the design, with the ability to undo/redo the changes.

Upload images: Allows the user to select images from the image library or from the internet.

The dashed lines connect these actions to the sub-options they relate to, showing how to use the various features in the app



10 Technical specifications

The technical specifications of the Canva application are as follows:

- Database: Canva has extensive needs for storing user data, designs, images, so they use a mix of databases. They use MySQL or PostgreSQL, and they may use databases like NoSQL, Cassandra, or MongoDB to store unstructured data like multimedia content.
- Memory: Canva requires high-spec servers for data processing, typically using servers with memory starting at 16 GB and potentially reaching 64 GB or more, depending on user load and design size..
- Services: Canva relies heavily on cloud infrastructure, primarily using Amazon Web Services (AWS) for powerful virtual servers via EC2 and file storage through S3. They may also utilize Google Cloud Platform (GCP) for some parts of their infrastructure to ensure scalability and flexibility.
- Programming language: JavaScript, Python, Ruby.

11 Conclusion

The report indicates that Canva is an ideal choice for beginners and people who need to create quick and simple content. However, it has some limitations that have been noted by users, which can be improved, such as enhancing video editing tools and increasing the options available for other languages such as Arabic.

References

- [1] " ". *Tatbeekat*, tatbeekat.com/b/---.
- [2] "Optimising S3 Savings." *Canva Dev Blog*, canva.dev/blog/engineering/optimising-s3-savings/.
- [3] "What is Canva and How Does it Work for Education." *Tech Learning*, techlearning.com/how-to/what-is-canva-and-how-does-it-work-for-education.
- [4] "Service-Aligned Data Platform Architecture." *Canva Dev Blog*, canva.dev/blog/engineering/service-aligned-data-platform-architecture/.
- [5] " ". *Smart Media*, smartmediajo.com/ar/business-ar/--/.

12 GitHub link

Canva GitHub