



Figure 1: Documentation

Instagram

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## 1 Task Schedule

<b>Danah</b>	<b>Samar</b>
Introduction	Abstract
Requirements	Programming languages used
Statistics	Statistics
Design 1	Design 2
Conclusion	Existing Systems

## **2 Abstract**

This documentation focuses on Instagram, one of the most prominent social media platforms, providing a comprehensive exploration of its features and functionalities. It aims to highlight how the platform can be used for personal expression and to strengthen human connections. Since its launch, Instagram has offered users a dynamic space to share personal experiences and convey ideas through photos and videos.

The documentation also analyzes Instagram's impact on communication among friends and family, as well as its vital role in supporting entrepreneurs through effective marketing strategies and increased brand awareness. The platform's popularity underscores its influence in both personal and professional realms, making it an essential tool in the digital age. By providing insights on how to maximize the user experience, this documentation seeks to give readers a thorough understanding of Instagram's role in contemporary society.

## **3 Chapter 1**

### **3.1 Introduction**

In the era of modern technology, Instagram stands out as one of the most prominent social platforms that express art and human connection. Since its inception, Instagram has become a window for users to share their personal moments and convey their ideas through photos and videos. With a variety of filters and creative tools, each user can create their own world and share their stories with a wide audience.

Instagram is a social media application designed primarily for sharing photos and videos. It enhances communication between friends and family, providing an easy and enjoyable platform for sharing content. Additionally, Instagram offers strong support for entrepreneurs, contributing to the growth of their businesses. Due to its high popularity, it has become an effective tool for marketing projects and increasing brand awareness.

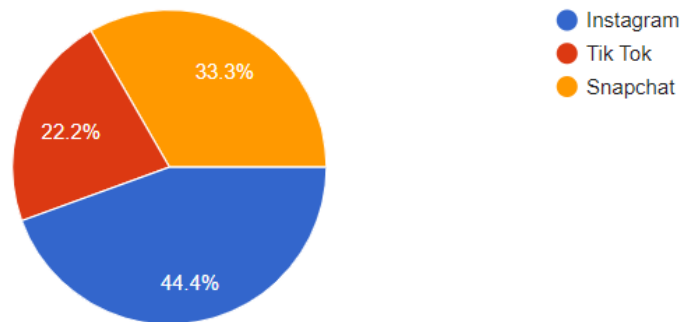
### 3.2 Statistics

Survey Link <https://forms.gle/q6cVSYdmFnE2FfuL7>

Below are the pictures included in the survey/interview analysis:

ما هو التطبيق الأكثر استعمالاً لديك

9 responses

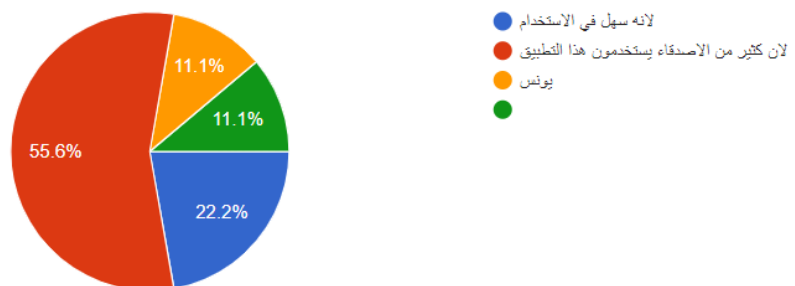


#### 3.2.1 1. Figure 1: Distribution of Most Frequently Used Social Media Applications

The survey shows that Instagram is the most used app, with 44.4% of responses, followed by TikTok with 33.3%, and Snapchat with 22.2%. This suggests that Instagram remains popular among users, TikTok is gaining strong competition, while Snapchat is used by a smaller percentage.

سبب اختيارك لهذا التطبيق

9 responses



#### 3.2.2 2. Figure 2: Reasons for Choosing the Preferred Social Media Application

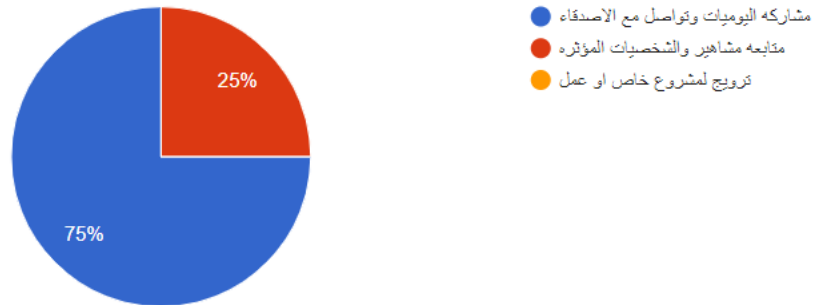
The survey shows that the main reason for using Instagram is that many friends

use it, with 55.6% of responses, followed by ease of use at 22.2%, and then fun and neutrality at 11.1%. This indicates that Instagram remains popular among users, with many people using it primarily to stay connected with friends

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8 responses



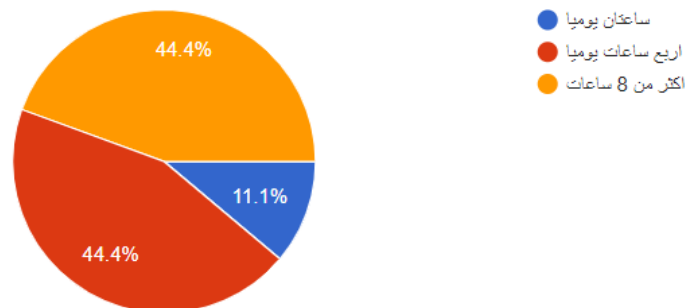
### 3.2.3 3. Figure 3: Purpose of Using the Social Media Application

The survey shows that the majority of participants (75%) use the app to share their daily lives and connect with friends, while 25% indicated that they use it to follow celebrities and influencers. Notably, there were no responses expressing the intention to promote a personal project or business, which suggests a general satisfaction with the app's features, along with some concern about whether compensation aligns with the level of engagement.

كم ساعه تقضي من يومك في استخدام هذا التطبيق



9 responses



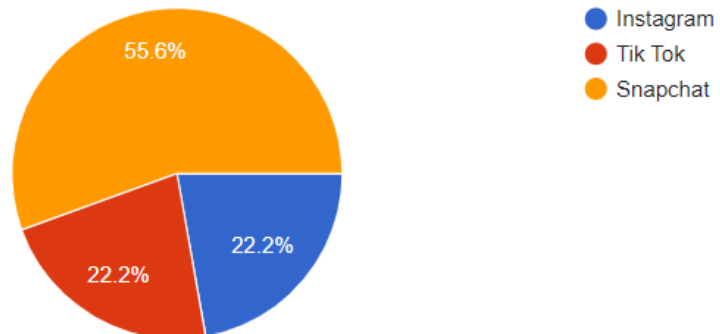
### 3.2.4 4. Figure 4: Time Spent per Day on the App

The survey shows that the largest percentage of participants (44.4%) believe that their usage of this app takes about 8 hours daily. Following that, another

44.4% of participants feel that their usage takes more than 4 hours. Finally, 11.1% of participants think that usage ranges from 2 hours daily. Therefore, it seems that using this app is enjoyable and requires a significant amount of time each day according to the responses of the survey participants.

إذا كان لديك مشروع ,ما التطبيق الذي ستروج لعملك فيه

9 responses

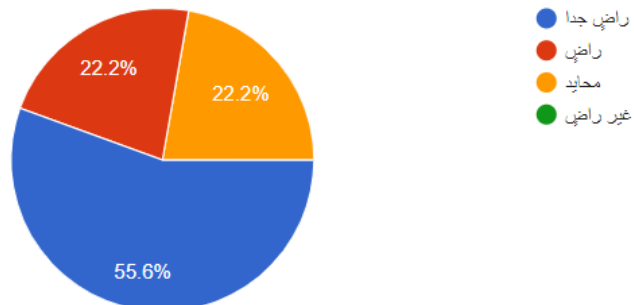


### 3.2.5 5. Figure 5: The App You Will Use to Promote Your Product

The survey shows that the largest percentage of participants (55.6%) are very satisfied with the app's various features. An equal percentage (22.2%) of participants expressed their satisfaction or neutrality regarding the app's benefits. Therefore, it appears that the overwhelming majority of participants are satisfied or at least neutral about the app's features, with no participants expressing dissatisfaction.

ما مدا رضاك عن مميزات التطبيق المختار

9 responses





### **3.2.6 6. Figure 6: Duration of Satisfaction with the App**

The survey shows that 55.6% of users prefer digital marketing through Snapchat, followed by an equal 22.2% for marketing through Instagram and TikTok. This indicates that users may not be aware of Instagram's more effective features compared to Snapchat, as many people use it primarily for connecting with friends.

## **3.3 Problems Addressed by Instagram**

### **3.3.1 Difficulty in Communication**

Instagram has facilitated communication between friends and family, strengthening social connections.

### **3.3.2 Support for Businesses**

Instagram provides significant support for entrepreneurs, contributing to the growth of their projects.

### **3.3.3 Brand Building**

It has helped in building and promoting brands effectively, increasing awareness of them.

## **3.4 Existing Systems**

### **3.4.1 Snapchat**

#### **Advantages of Snapchat**

- **Temporary Content:** Allows users to send photos and videos that disappear after viewing, creating a more private and ephemeral experience.
- **Snapchat Stories:** Users can publish stories consisting of a series of snaps that last for 24 hours, allowing the sharing of daily moments in a continuous format.
- **Innovative Filters and Effects:** Offers a variety of fun filters and visual effects, including augmented reality (AR) effects that add a creative touch to photos.

#### **Disadvantages of Snapchat**

- **Limited Audience Range:** It is more popular among younger demographics, which may limit its appeal to older age groups.
- **Complex Interface:** Some users find the app's interface less intuitive compared to other social media platforms, making navigation difficult.

### **3.4.2 TikTok**

#### **Advantages of TikTok**

- **Viral Content:** TikTok allows users to create and share short-form videos that have the potential to go viral quickly, providing wide exposure in a short period.
- **For You Page (FYP):** The algorithm-driven feed curates personalized content, allowing users to discover new creators and trends based on their preferences, enhancing engagement and discovery.
- **Creative Tools and Effects:** TikTok offers a wide range of video editing tools, innovative filters, and effects including augmented reality (AR) and interactive features, which encourage creativity and artistic expression.

#### **Disadvantages of TikTok**

- **Younger Audience Dominance:** TikTok is primarily popular among younger users, particularly teenagers and those in their twenties, which may limit its appeal to older demographics and professional audiences.
- **Short-Lived Content:** The focus on fast-paced viral content means that videos often lose relevance quickly, making it challenging for creators and brands to maintain consistent long-term engagement without producing frequent new content.

### 3.5 Snapchat vs TikTok vs Instagram Comparison

Issue	Snapchat	TikTok	Solution in Instagram
Temporary Content	Content disappears after viewing or after 24 hours, limiting the ability to retain important moments	Focuses on fast-paced viral content, leading to quick loss of relevance	Offers flexibility with permanent posts or temporary Stories (24 hours), allowing users to preserve important content
User Demographics	More popular among younger audiences, limiting appeal to older age groups	Primarily focuses on younger users	Attracts all age groups, offering a mix of features catering to various demographics
Business Engagement	Less support for businesses and entrepreneurs	Focuses more on viral content, limiting stable brand building	Powerful marketing tools like paid ads, advanced analytics, and direct shopping features
User Interface	Some users find navigation difficult	Simple but monotonous video scrolling	Well-organized, easy-to-use interface
Filters and Effects	Focuses more on personal interaction	Mainly focuses on short videos	Wide variety of filters and effects, advanced editing tools

## 4 Chapter 2

### 4.1 Functional Requirements for Instagram

#### 4.1.1 User Requirements

- Create a user account: Users should be able to create an account using email, phone number, or social media login.
- User Login/Logout : Users must be able to log in and out of their accounts.
- Photo/Video Upload : Users should be able to upload photos and videos from their devices.
- Following/Unfollowing : Users can follow or unfollow other users to curate their feed.
- User Profile Customization : Users should be able to customize their profiles with a profile picture, bio, and personal information.

#### 4.1.2 System Requirements

- Database Management: The system must have a database to store user information, including account details, media files, and interactions.
- Content Delivery Network (CDN): The system should utilize a CDN for efficient delivery of photos and videos to enhance loading speed and performance.
- Security Protocols: The system must implement security protocols to protect user data and privacy, including encryption for sensitive informationb

### 4.2 Non-Functional requirements for Instagram

#### 4.2.1 Performance

Response Time: The application should load within 2 seconds for 95% of user requests.

#### 4.2.2 Security

Data Encryption: All sensitive data should be encrypted both in transit (using HTTPS) and at rest.

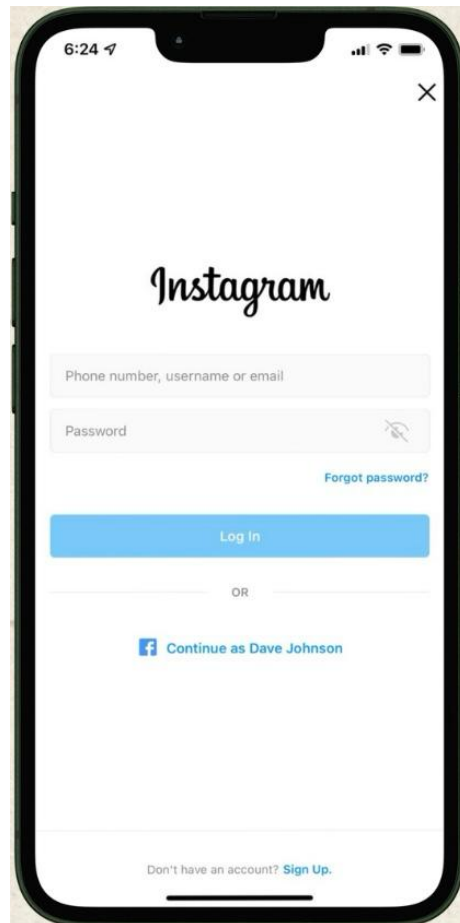
#### 4.2.3 Maintainability

Code Quality: The codebase should follow best practices to facilitate easier maintenance and updates.

## 5 Chapter 3

### 5.1 Design 1 Interfaces of Instagram Application

This section describes the various interfaces of the Instagram application, including login screens, dashboards, and other key user interface elements.



5.1.1 figure: Instagram Login Interface

In the login page, users can choose to either create a new account or log into an existing one. The login options include using a phone number, email address, or username, along with entering a password. If there is no existing account, users can create a new one using either their phone number or email address. Additionally, there is an option to link their Facebook account for easier registration and login.



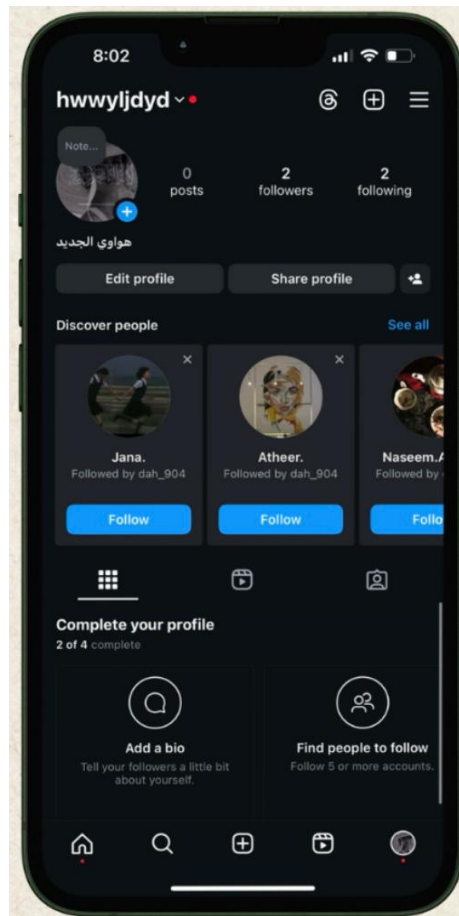
### 5.1.2 figure: Instagram Home Feed Interface

The Instagram homepage features a bar at the bottom of the screen that facilitates navigation between the app's interfaces. Through this bar, users can view the stories of their friends and the people they follow, as well as see their posts.



**5.1.3 figure: Instagram Direct Messaging Interface**

In this page, we can message friends directly and also add them to a private group, making it easier to communicate and share posts on Instagram.



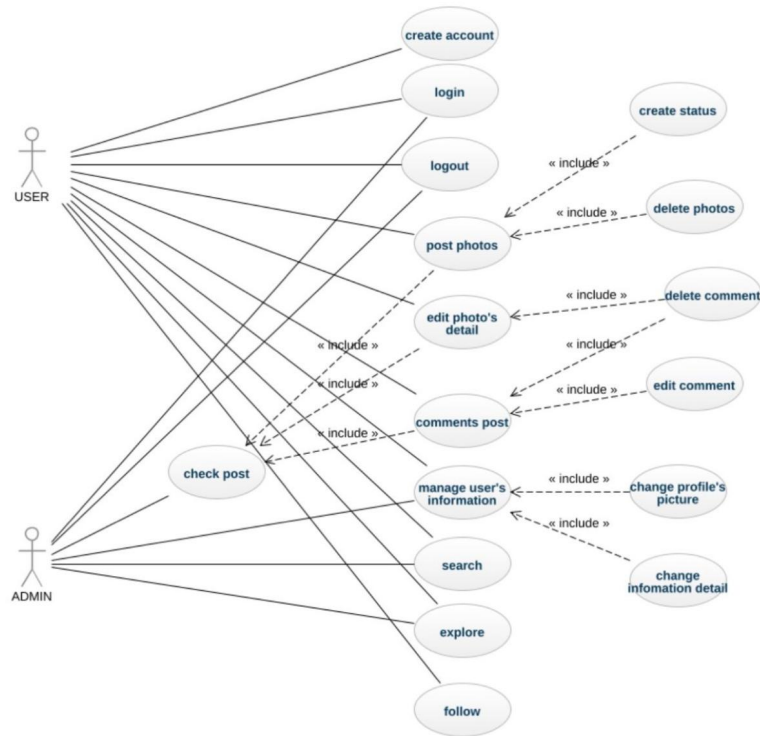
**5.1.4 figure: Instagram Profile Page Layout**

In this page, we can message friends directly and also add them to a private group, making it easier to communicate and share posts on Instagram.



## 5.2 Design 2

### Structure of the Instagram System and Its Uses



#### 5.2.1 figure: use case for the Instagram application

This diagram illustrates the use case for the Instagram application. As shown, there are two types of users: the regular user and the administrator. The diagram outlines the operations that each of them can perform, helping to understand the interactions and tasks available for each category.

##### Instagram User

- 1. Creating a New Account: Users can easily create a new account on Instagram.
- 2. Logging In: Accessing their accounts by entering their credentials.
- 3. Logging Out: Signing out of their accounts to protect their privacy.
- 4. Posting Photos and Content: Users can upload photos and videos and share them with followers.

- 5. Adding Stories: Providing temporary stories that disappear after 24 hours.
- 6. Editing Photo Details: Modifying descriptions and tags associated with the uploaded content.
- 7. Commenting on Posts: Adding comments to friends' posts
- 8. Deleting Photos: The ability to remove unwanted posts.
- 9. Editing Comments: Modifying comments that were previously added.
- 10. Searching: Looking for new users or specific content.
- 11. Exploring: Discovering new content through the "Explore" section.
- 12. Following Other Users: Following others to stay updated on their latest posts

#### Instagram Admin

- 1. Reviewing Posts: Checking content to ensure it meets community standards.
- 2. Managing User Information: Controlling and updating user data when necessary.
- 3. Changing Profile Picture: Updating the user's account picture.
- 4. Editing Profile Details: Updating personal information for users.

### 5.3 The programming language used in the Instagram application

- 1. Python: Primarily used for server-side development and data processing.
- 2. JavaScript: Used for front-end application development.
- 3. React: A JavaScript library used for building user interfaces.
- 4. HTML/CSS: Used for formatting and designing web pages.
- 5. Java: Used in some server components.
- 6. SQL: Used for managing databases.

## 6 Conclusion

In conclusion, we can affirm that Instagram is one of the most prominent social media platforms that has significantly influenced how individuals interact and share their content. We have reviewed the functional and non-functional requirements that make Instagram a preferred choice for many, such as ease of use and distinctive features like Stories and interactive content. We also compared Instagram with other applications like TikTok and Snapchat, revealing that each platform has its unique advantages. While TikTok focuses on short, creative videos, Snapchat offers a more spontaneous and immediate interaction experience. In this context, Instagram remains ahead due to its diverse features and its ability to integrate visual content with social interactions. The ongoing competition in the social media app landscape requires Instagram to innovate and adapt to the changing needs of users. Ultimately, Instagram is not just a tool for sharing photos; it is a comprehensive platform that contributes to shaping individuals' digital identities and enhancing their communication in an increasingly digital world.

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