

Kingdom of Saudi Arabia

Ministry of Education

Prince Sattam Bin Abdulaziz University

College of Sciences and Humanities in Al-Aflaj



المملكة العربية السعودية

وزارة التعليم

جامعة الأمير سطام بن عبدالعزيز

كلية العلوم والدراسات الإنسانية في الأفلاج

Project About :

WhatsApp

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Year: 1445

Introduction:

WhatsApp is a free and cross-platform messaging app that allows you to make voice and video calls, send text messages, and share photos and documents with others. It is available on iOS, Android, Windows phone, and web. WhatsApp is one of the most popular messaging apps in the world, with over 2 billion active users.

Problem and Proposed solution:

Expensive SMS fees, WhatsApp offers unlimited messaging and calls over an internet connection. Group chats, feature allows users to chat with multiple people at the same time. Slow transmission, WhatsApp features allow for faster sending of the message. Device incompatibility, WhatsApp is available on wide range of devices.

Work plan: Waterfall

The first stage Requirements: At this stage, the functional and technical requirements of the project are determined.

The second stage Desing: In this phase, the application is designed according to the requirement identified in the first phase.

The third stage Implementation: At this stage, the code is written and tested.

Fourth stage testing: At this stage, the application is tested to ensure that it meets the specified requirements.

The fifth stage Publishing: At this stage, the application is deployed to users.

WhatsApp application may use Waterfall for initial development of core functionality, agile for developing new features and updates, and DevOps the gap between development teams and ensure speedy delivery of the software.

Background:

The idea for WhatsApp came to Jan Koum in 2009, while he was working at Yahoo. Jan and his co-founder Brian Acton They used their own money to fund the development of the app. It was a simple app that only allowed users to send and receive text messages. In2013, Facebook acquired WhatsApp for 19 billion.

2- Project requirements

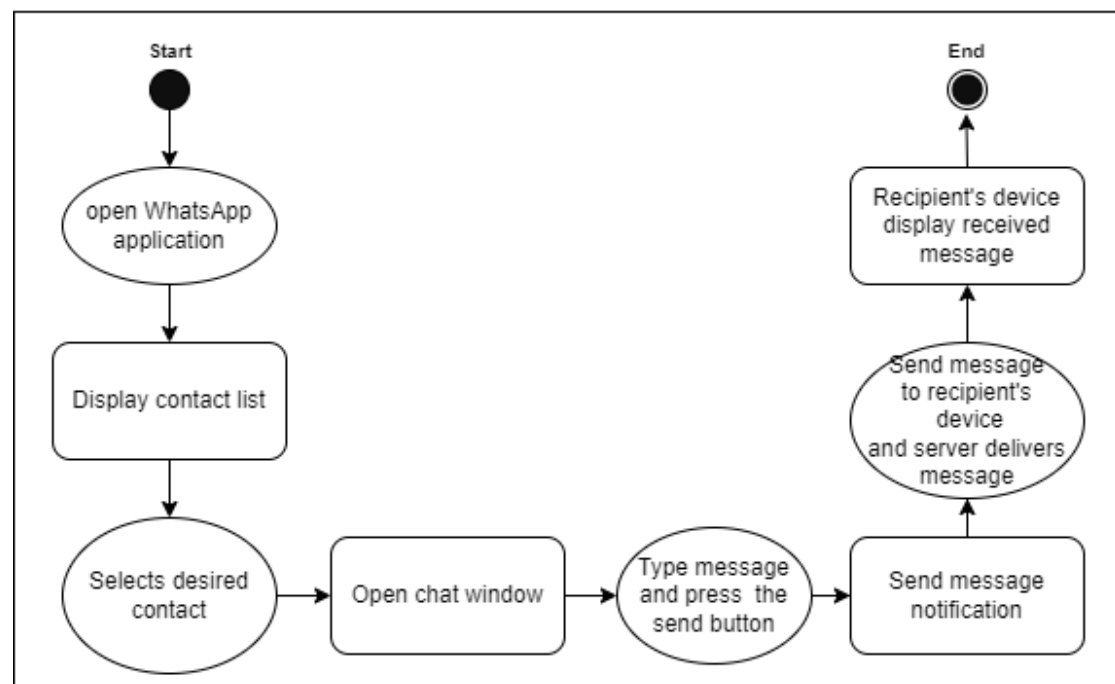
Functional requirements:

1. Sending the message to the addressee at the same time.
2. Show a flag when the message arrives and another flag to .
3. The ability to delete the message.
4. Group messaging of 256 people.
5. Login using phone number.
6. Search by mobile number and by its registered name.
7. Chat archiving and muting.
8. Chat backups and restore.

Non-Functional requirements:

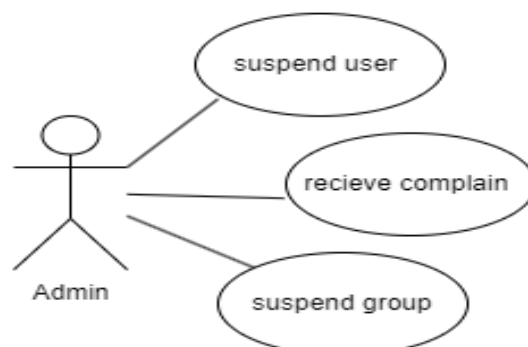
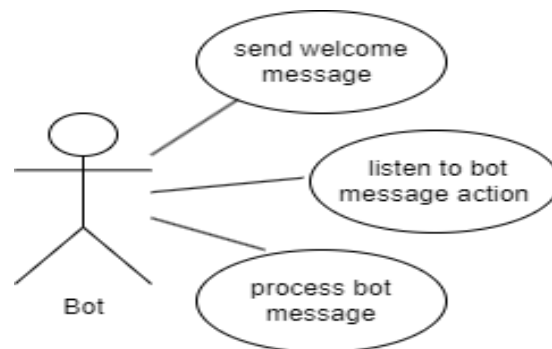
1. Scalable architecture.
2. Secure authentication.
3. Test program before delivery.
4. Provides all languages.

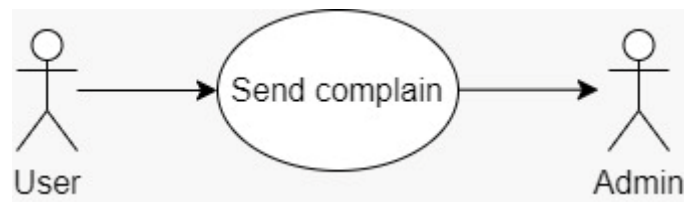
3- Activity diagram:



4- Project Use Case Modelling:

Actor	Roles
User	Create/edit/save/update/hide/ browse profile -add/ delete/find user - create group - find chat -find/view/send/ forward media – send/view/forward message - send/view/find/ forward document - send/view/ forward location - browse/ find/update status - send complain - set welcome message- set option bot message- set action bot message
Bot	send welcome message - process bot message - listen to bot message action
Admin	suspend user - recieve complain - suspend group





Send Complain

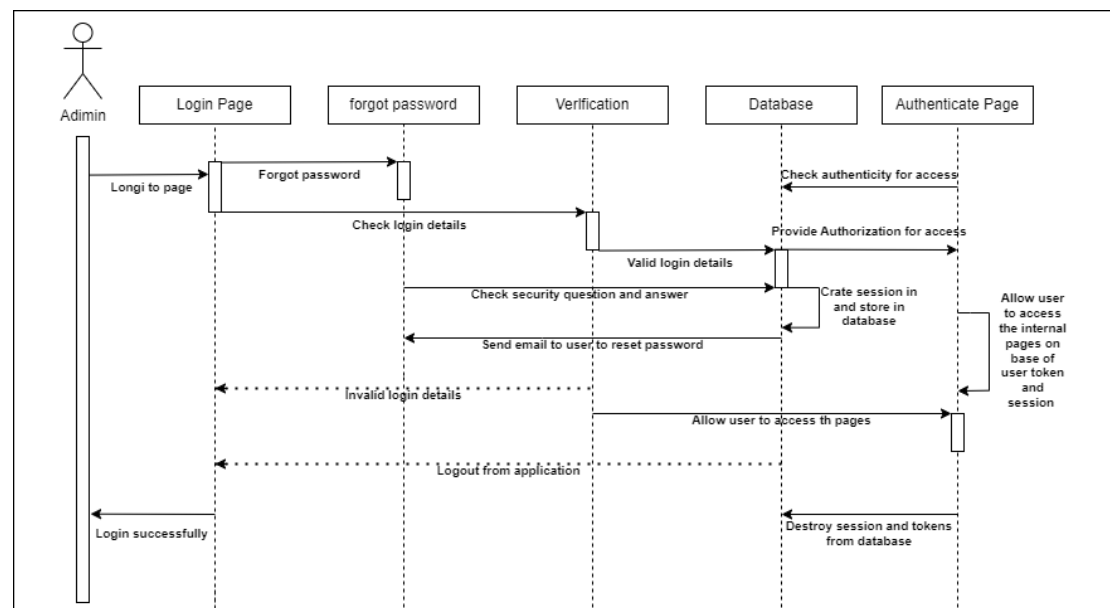
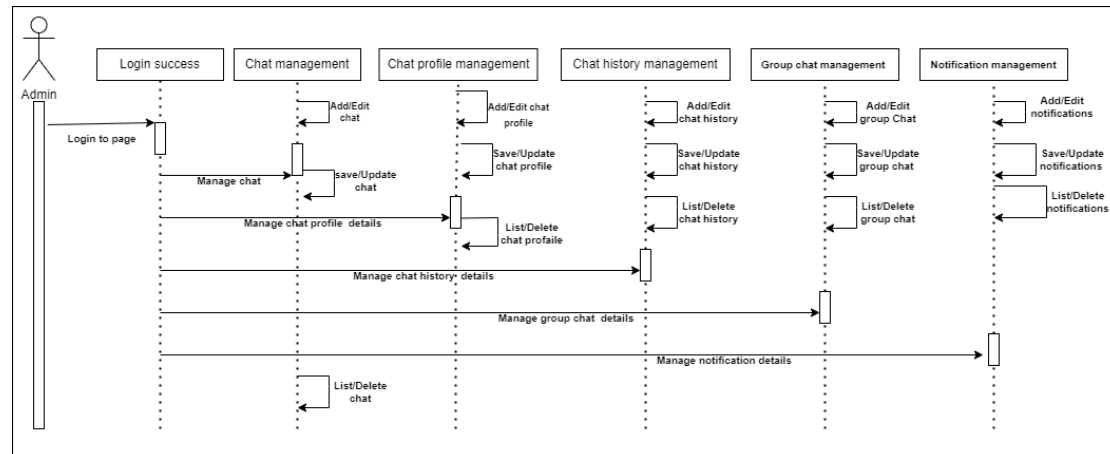
Actors	User, Admin
Description	The user sends a message to the admin to send a related complaint to another user to suspend his account
Data	Usre information, the complaint
Stimulus	User command to suspend Account
Response	Account suspension
Comments	The account will be suspended if the reports are real or numerous



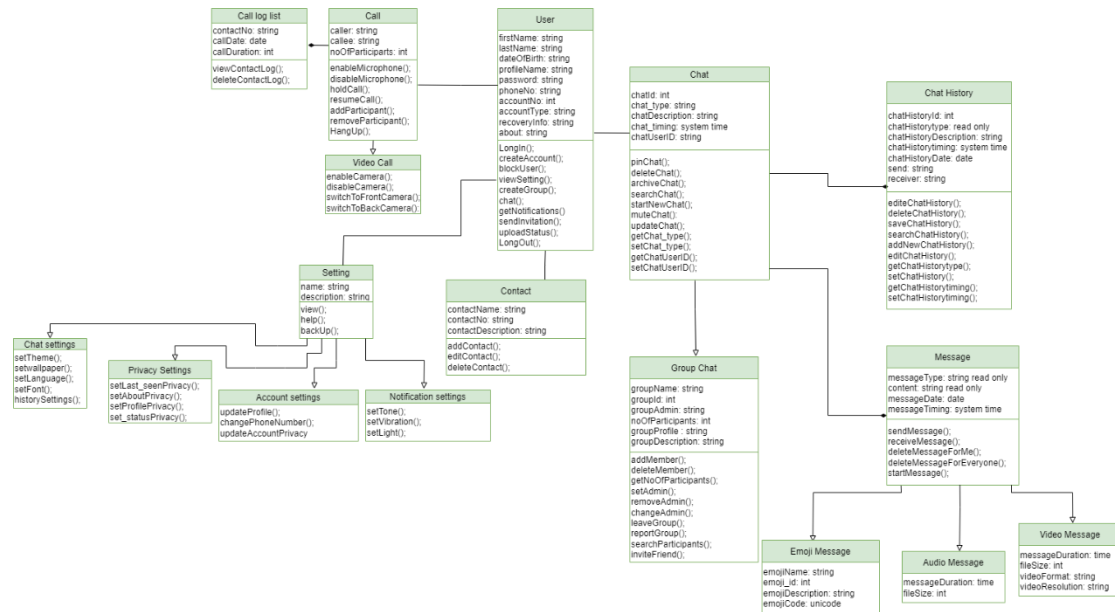
Send Complain

Actors	User, user
Description	A user sends conversations, media, files, location, and stickers to the other user
Data	Pictures, videos, voice notes (media), and documents
Stimulus	He wants to talk and have a conversation with the user
Response	Sharing daily events and trending news
Comments	

5- Sequence diagram:



6- class diagram:



The Reviewer:

1- Visual Pardigm

<https://www.visual-paradigm.com/guide/uml-unified-modeling-language/uml-class-diagram-tutorial/>

2- <https://creately.com/guides/sequence-diagram-tutorial/>