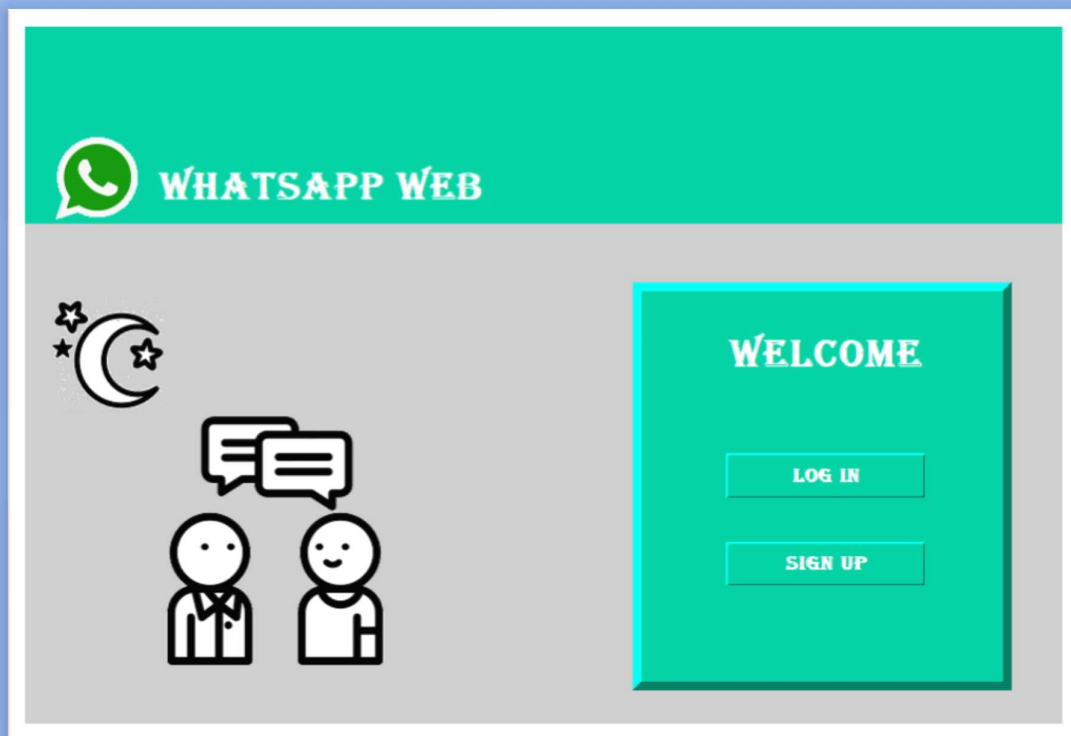# WHATSAPP WEB

WHATSAPP WEB

WELCOME

LOG IN

SIGN UP

PREPARED BY:

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DATE: 26-04-2019

PURPOSE:

THIS PROJECT HELPS IN CONNECTING PEOPLE OVER TEXT. REGISTERED USERS CAN COMMUNICATE VIA MESSAGES (WPpITHIN SECONDS) BY USING THIS PLATFORM. THE PLATFORM AIMS IN CONNECTING PEOPLE DISTRIBUTED GLOBALLY.

DESCRIPTION:

TO USE THIS THIS PLATFORM,FIRSTLY THE USER HAVE TO REGISTER THEMSELVES WITH A PHONE NUMBER AND A SECURE PASSWORD.ONCE REGISTERED ,THEIR CREDIENTIALS WILL BE SAVED ON THE SERVER DATABASE.THEN THE USER CAN LOGIN WITH THE CREDENTIALS , ONCE VERIFIED THE USER IS ALLOWED TO USE THE PLATFORM ON A FULL FLEDGE.TO CONNECT TO A USER A REQUEST NEEDS TO BE SEND,THAT CAN BE SIMPLY DONE BY KNOWING THE REGISTERED PHONE NUMBER OF THE PERSON TO WHOM YOU WANT TO COMMUNICATE.AFTER THIS, THE USERS REGISTERED ON THIS PLATFORM CAN COMMUNICATE OVER TEXT.

OPERATING ENVIRONMENT:

OPERATING SYSTEM HAVING JAVA VIRTUAL MACHCINE INSTALLED CAN USE THIS SOFTWARE (WITH DECENT INTERNET FACILITY TO SEND AND RECEIVE TEXTS).

DESIGN CONSTRAINTS:

- PHONE LENGTH SHOULD BE OF EXACT 9 DIGITS(INTEGER).
- PASSWORD CAN BE OF THE LENGTH ANYWHERE BETWEEN 0 TO 20.
- A TEXT SIZE CAN NOT BE GREATER THAN 1000 CHARACTERS.

FEATURES:

- AUTO SYNC ENABLED ONCE THE REFREASH BUTTON IS PRESSED.
- COLOR SCHEME CLASSIFICATION AND TEXT ALIGNMENT FOR SENT AND RECEIVED TEXTS.BLUE FOR SENT TEXTS AND BLACK FOR RECEIVED TEXTS.RIGHT ALIGNMENT FOR SENT TEXTS AND LEFT ALIGNMENT FOR RECEIVED TEXTS.
- TIMESTAMP NOTED FOR LOGIN AND MESSAGE SENT.
- IF THE USER ENTERS THE WRONG PASSWORD THEN IT PROMPTS THAT THE ENTERED PASSWORD IS INCORRECT.
- IF THE USER ENTERS A UNREGISTERED PHONE NUMBER THEN IT AGAIN PROMPTS AN ERROR SAYING THAT THE USER DOES NOT EXIST.
- THE DATABASE IS ALWAYS IN COMMITED STATE(IE EVERY MESSAGE SENT IS CONSIDERED AS A UNIQUE TRANSACTION AND IS COMMITED AUTOMATICALLY).
- Text message send on pressing 'Enter' i.e., return key.
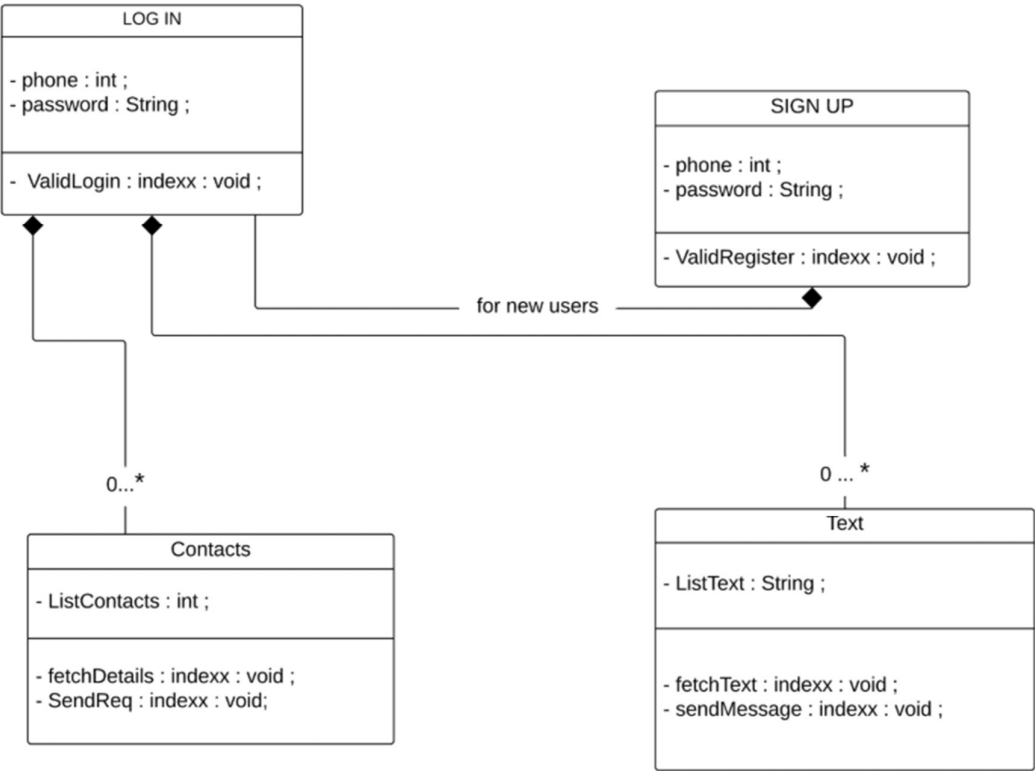- LOGOUT BUTTON TO EXIT.

SYSTEM REQUIREMENTS:

- ✓ JAVA VIRTUAL MACHINE INSTALLED
- ✓ DECENT INTERNET CONNECTIVITY.
- ✓ 70 MB RAM REQUIREMENT
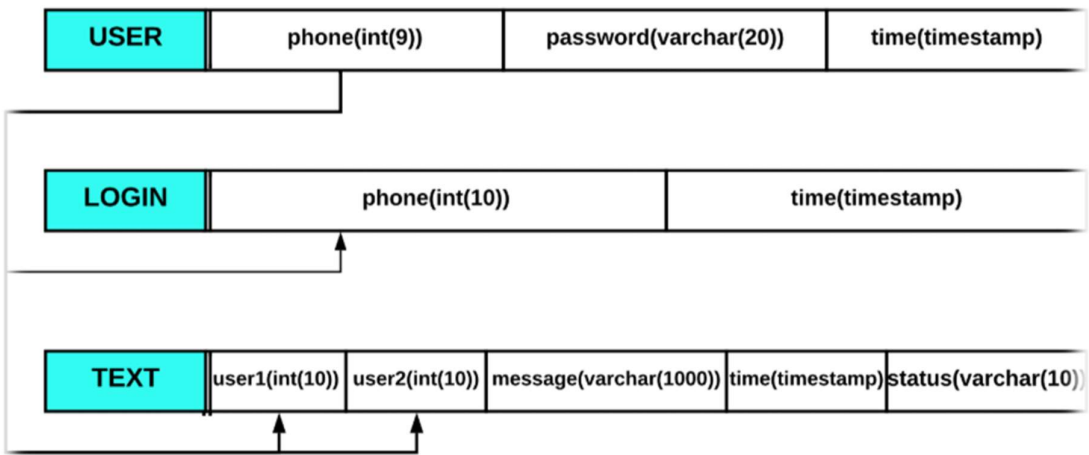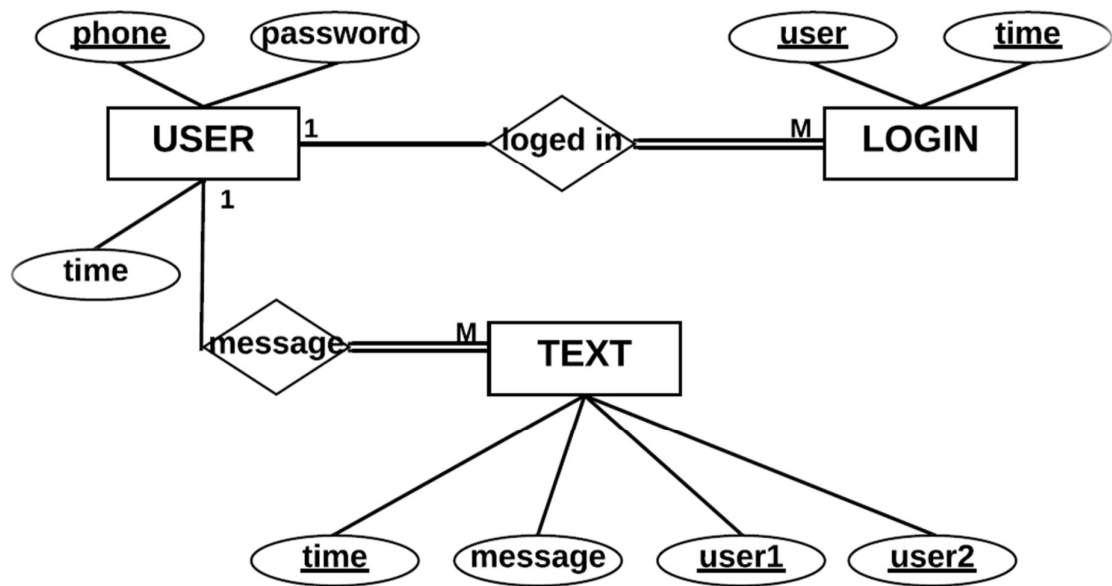- ✓ LOW POWER USAGE.
- ✓ 50 MB OF STORAGE FOR INSTALLATION.

LANGUAGE USED:

- JAVA FOR FRONT END WORK.
- MYSQL FOR BACKEND DATABASE.

UML DIAGRAM:

```
┌─────────────────────────────────┐
│            LOG IN               │
├─────────────────────────────────┤
│ - phone : int ;                 │
│ - password : String ;           │
├─────────────────────────────────┤
│ -  ValidLogin : indexx : void ; │
└─────────────────────────────────┘
```

```
┌─────────────────────────────────┐
│            SIGN UP              │
├─────────────────────────────────┤
│ - phone : int ;                 │
│ - password : String ;           │
├─────────────────────────────────┤
│ - ValidRegister : indexx : void ; │
└─────────────────────────────────┘
```

for new users

0...*

0 ... *

```
┌─────────────────────────────────┐
│           Contacts              │
├─────────────────────────────────┤
│ - ListContacts : int ;          │
├─────────────────────────────────┤
│ - fetchDetails : indexx : void ; │
│ - SendReq : indexx : void;      │
└─────────────────────────────────┘
```

```
┌─────────────────────────────────┐
│             Text                │
├─────────────────────────────────┤
│ - ListText : String ;           │
├─────────────────────────────────┤
│ - fetchText : indexx : void ;   │
│ - sendMessage : indexx : void ; │
└─────────────────────────────────┘
```

ER DIAGRAM:

USER	phone(int(9))	password(varchar(20))	time(timestamp)

LOGIN	phone(int(10))	time(timestamp)

TEXT	user1(int(10))	user2(int(10))	message(varchar(1000))	time(timestamp)	status(varchar(10))

NORMALIZATION:

TABLE NORMALIZATION SCHEME :-

1NF:

- Values of attributes must be atomic.

2NF:

- Must be 1NF
- No non-prime attribute is dependent on the proper subset of any candidate key of relation.

3NF:

- Must be 2NF
- No non-prime attribute of R is transtively dependent on any key of R

3.5NF:

- Must be 3NF
- X->A   is a non-trivial FD
  i.e, A is not a subset of X
- X is superkey of R
  i.e, every dettermmant is a candidate key

4NF:

- Must be 3.5NF
- No multiple valued dendencies.

5NF:

- Must be satisfy 4NF
- R must me satisfy join dependency

R (phone, password, time, message, login time, message-time, message-status)

Not in 1NF :-

Decomposition done.

R => R1, R2, R3

USER => R1 (phone, password, time)

Login => R2 (phone, time)

Text => R3(user1, user2, message, time, status)

R1 => FD1 :- phone -> password, time

R2 => FD2 :- phone -> time

R3 => FD3 :- user1, user2, time -> message, status

TEST RESULT OF NORMALIZATION:

- ✓ 1NF (satisfied)
- ✓ 2NF (satisfied)
- ✓ 3NF (satisfied)
- ✓ 3.5NF (satisfied)
- ✗ 4NF (not satisfied)
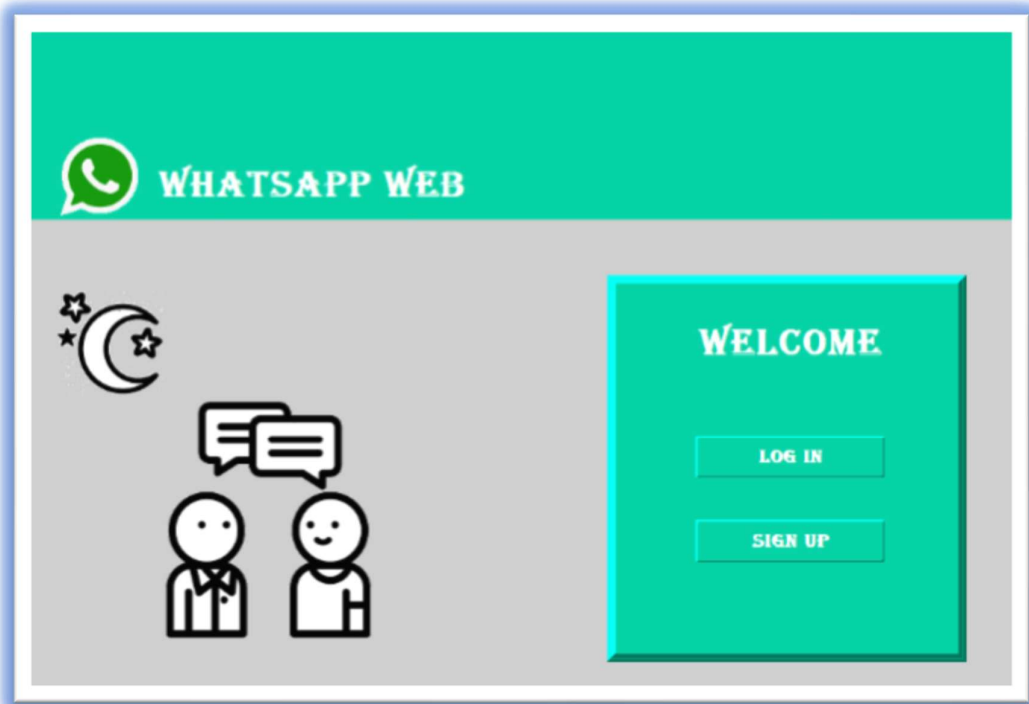 (FD2 violated :- one phone can fetch multiple login time)
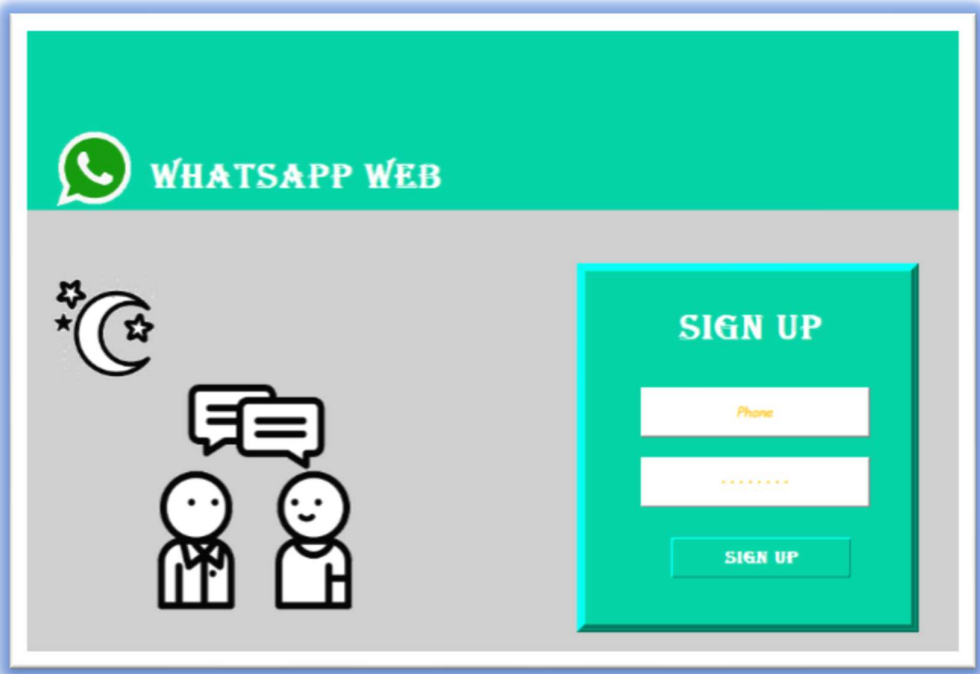- ✗ 5NF (not satisfied)
  (FD1 and FD3 violated :- because all attributes aren't unique)

VERSION: 1.0

STATUS: COMPLETED V1.0

SNAPS:

WHATSAPP WEB

LOG IN

Phone

. . . .

LOG IN

WHATSAPP WEB

SIGN UP

Phone

. . . .

SIGN UP

REFERENCES:

- *Javatpoint.com*
- *Stack-Overflow*