

THOUGHT BUBBLE DIARY

- BY THOMPSON



WHAT IS IT?

- THOUGHT BUBBLE IS A DIARY APPLICATION DEVELOPED FOR ANDROID
- THE APP MANAGES USERS AND ALLOWS THEM TO JOT DOWN QUICK IDEAS
- YOU CAN USE THIS APP AS A YOUR PERSONAL DIARY

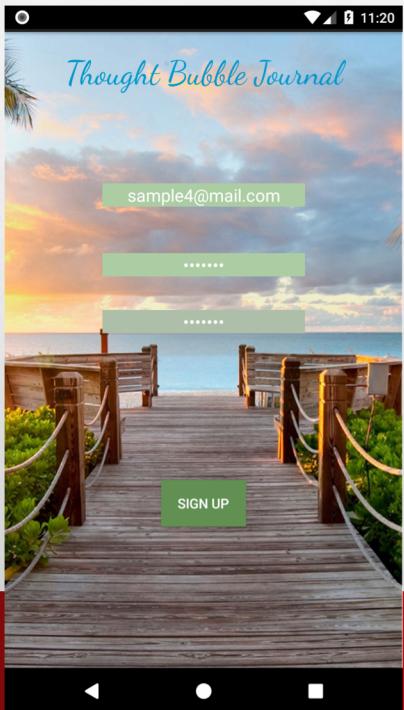
WHAT DOES IT DO?

- CREATES USER**
- AUTHENTICATES USERS**
- MAKES DIARY ENTRIES**
- SAVES ENTRIES INTO THE DATABASE ENCRYPTED**
- READS AND MANAGES DIARY ENTRIES WITH GREAT DEAL OF SECURITY**

FEATURES

- **USES SHA-1 HASHING ALGORITHM TO HASH USER PASSWORDS**
- **COMPARES HASHES AT LOGIN**
- **ENCRYPTS DIARY ENTRIES USING AES-256 ALGORITHM**

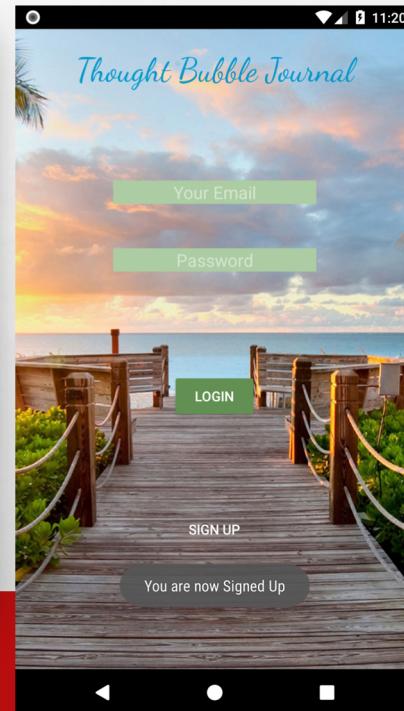
THE SIGNUP ACTIVITY



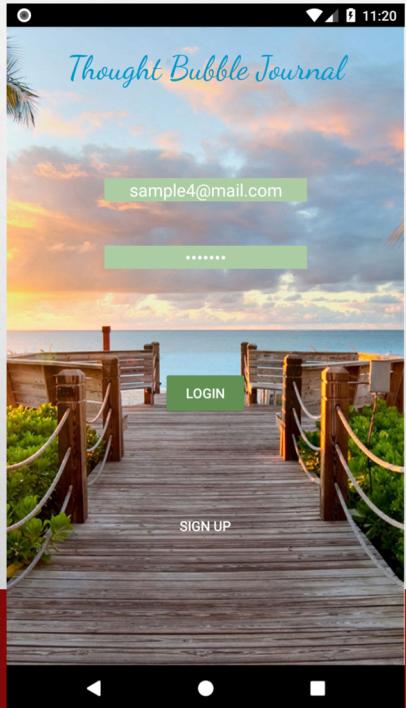
- VALIDATES EMAIL AND PASSWORD
- SAVES THE EMAIL AND SHA -1 SIGNATURE OF THE PASSWORD INTO THE DATABASE
- CHECKS FOR UNIQUE EMAIL ID CONSTRAINTS

USER SIGNS UP

```
tom — adb -s emulator-5554 shell — 92x23
[sqlite3 ThoughtBubble.db
SQLite version 3.18.2 2017-07-21 07:56:09
Enter ".help" for usage hints.
[sqlite> select *from user;
tomjben7@gmail.com|90fa18f75036f7a6833022ab246c6ee47000912f
tomjben7@gmail.org|adf1b81db8a29839b95db388609fe3c938b6f5f0
sample@mail.com|8151325dcdbae9e0ff95f9f9658432dbedfdb209
sample1@mail.com|8151325dcdbae9e0ff95f9f9658432dbedfdb209
sample2@mail.com|1ff0b5b1c089d0f9e040a9080110e0be12d42867
sample3@mail.com|4e62e3ce2345b54c54af1490a7f3ca6e0254e082
sample4@mail.com|96c567e0473ae888602f6745da6a5953df25d673
sqlite>
```

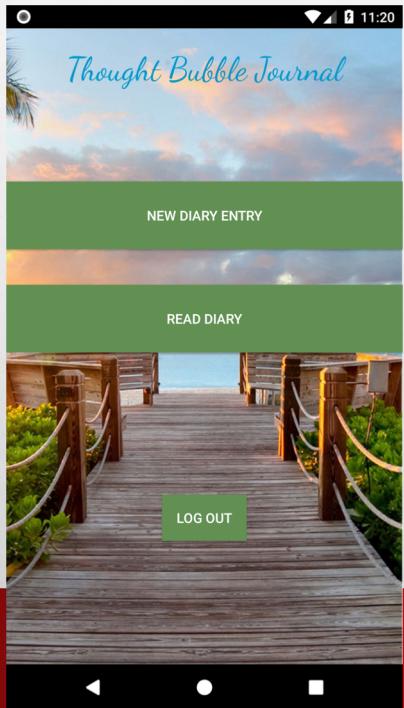


USER LOGS IN



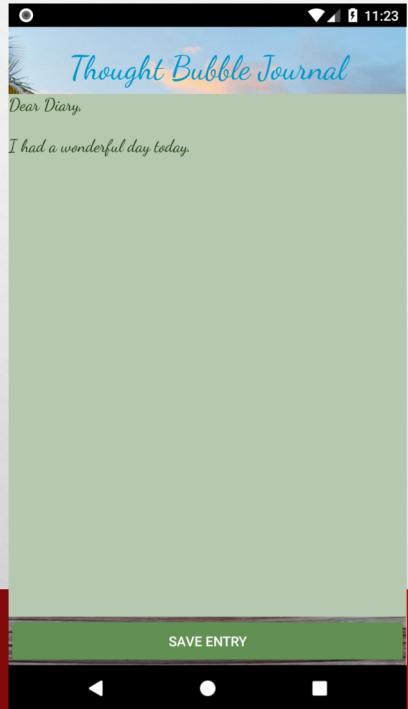
- **VALIDATES EMAIL AND PASSWORD**
- **GETS THE SHA-1 SIGNATURE OF THE
PASSWORD AND COMPARES THEM WITH
THE SIGNATURE STORED IN THE
DATABASE**
- **IF MATCHED, USER IS LET THROUGH**

THE LITTLE APP MENU



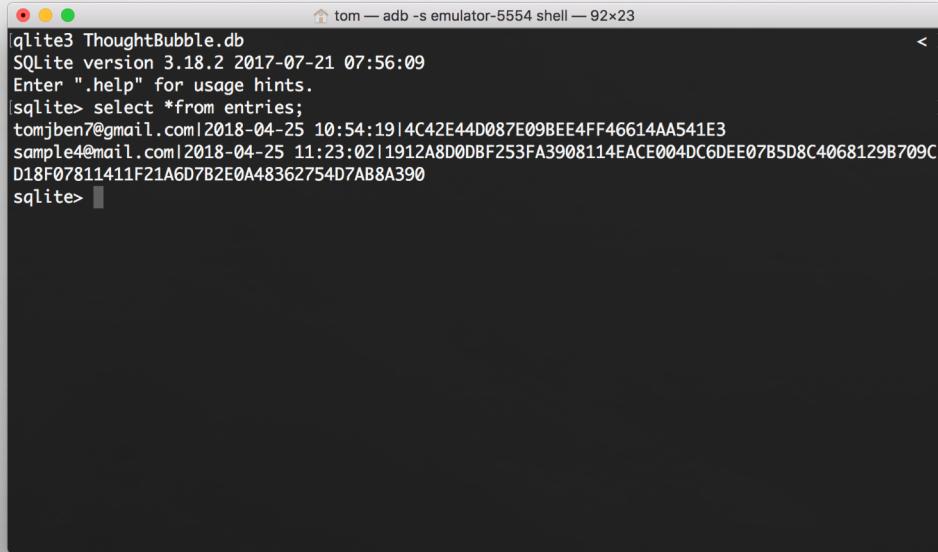
- **OPTION 1 – MAKING A NEW PAGE**
- **OPTION 2 – READ YOUR PAGES**
- **OPTION 3 – LOG OUT ACCOUNT**

MAKING A PAGE IN THE DIARY



- **CONTENTS ARE ENCRYPTED WITH AES, WHERE THE 256 BIT KEY IS GENERATED FROM THE USER'S PASSWORD SIGNATURE**
- **SAVED WITH TIMESTAMP AND EMAIL ADDRESS**

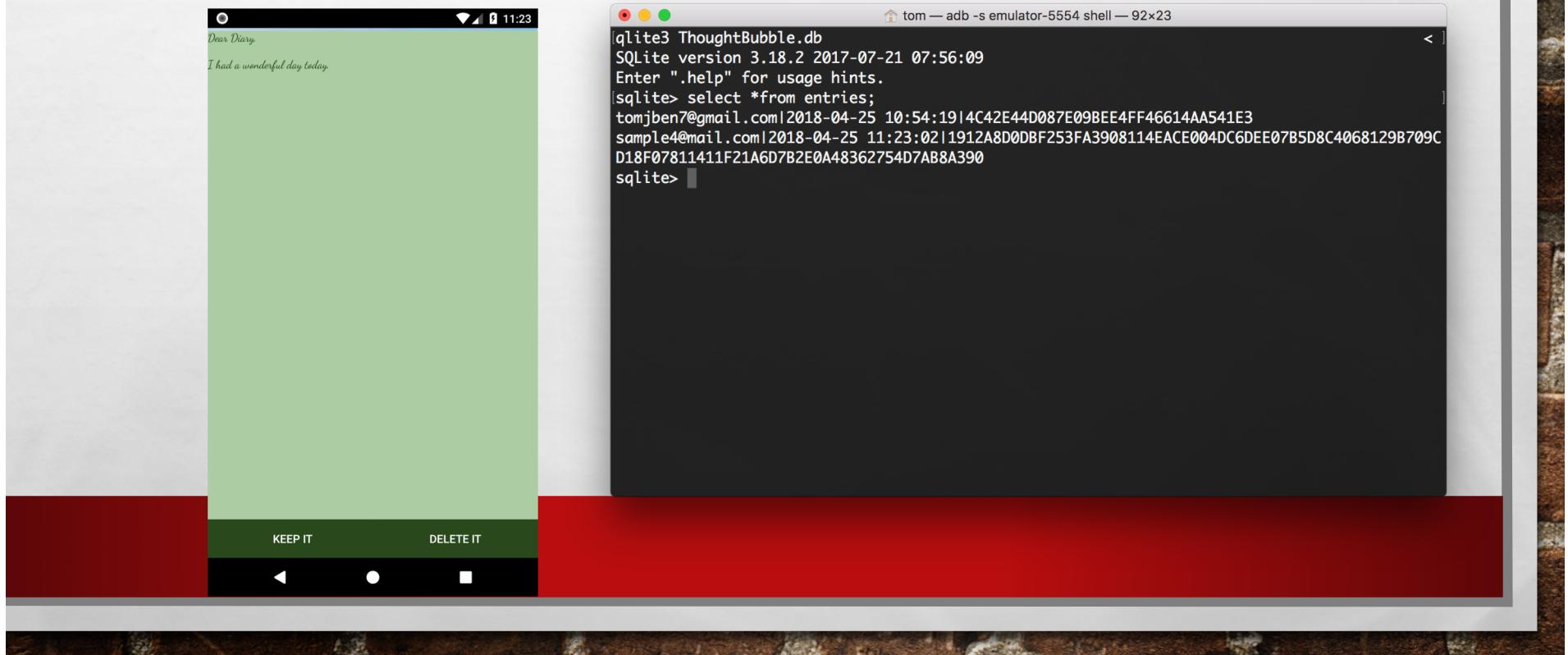
LISTING SAVED ENTRIES



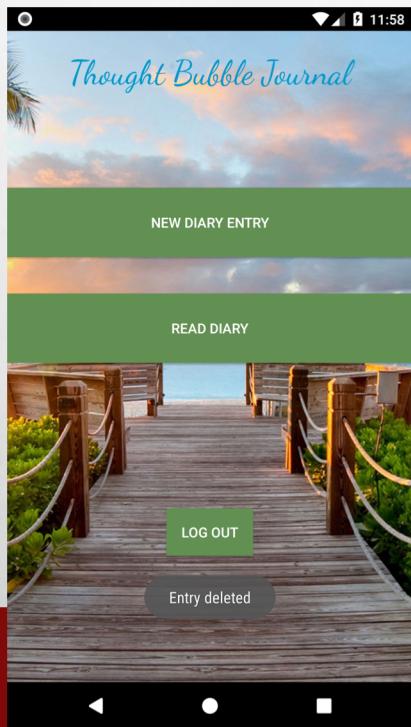
```
tom — adb -s emulator-5554 shell — 92x23
sqlite3 ThoughtBubble.db
SQLite version 3.18.2 2017-07-21 07:56:09
Enter ".help" for usage hints.
[sqlite> select *from entries;
tomjben7@gmail.com|2018-04-25 10:54:19|4C42E44D087E09BEE4FF46614AA541E3
sample4@mail.com|2018-04-25 11:23:02|1912A8D0DBF253FA3908114EACE004DC6DEE07B5D8C4068129B709C
D18F07811411F21A6D7B2E0A48362754D7AB8A390
sqlite>
```



READING AN ENTRY



DELETING AN ENTRY



```
tom — adb -s emulator-5554 shell — 92x23
[qlite3 ThoughtBubble.db
SQLite version 3.18.2 2017-07-21 07:56:09
Enter ".help" for usage hints.
sqlite> select *from entries;
tomjben@gmail.com|2018-04-25 10:54:19|4C42E44D087E09BEE4FF46614AA541E3
sample4@mail.com|2018-04-25 11:23:02|1912A8D0DBF253FA3908114EACE004DC6DEE07B5D8C4068129B709C
D18F07811411F21A6D7B2E0A48362754D7AB8A390
sqlite> select *from entries;
tomjben@gmail.com|2018-04-25 10:54:19|4C42E44D087E09BEE4FF46614AA541E3
sqlite>
```



DEMO TIME !!