

Google Cloud Speech API Based Encryption Notes

Intro

A notes application focused on Encryption to save text notes and provide useful features that enhance a sense of security



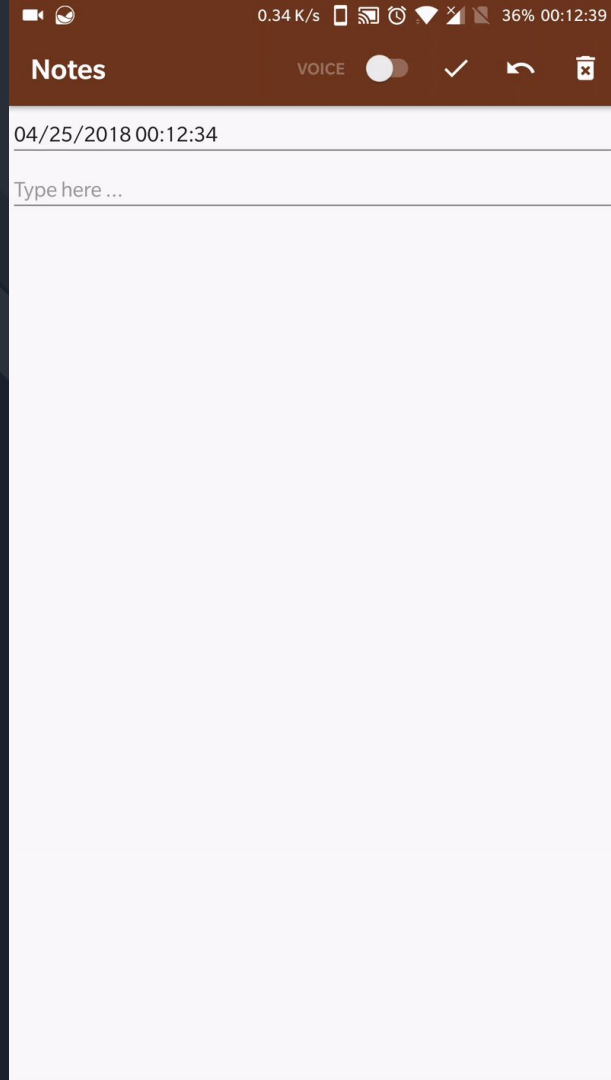
Features

- AES-256 bit Encryption
- SQLite Database
- Only Encrypted data is stored on the DB

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Features

- Google's Speech API



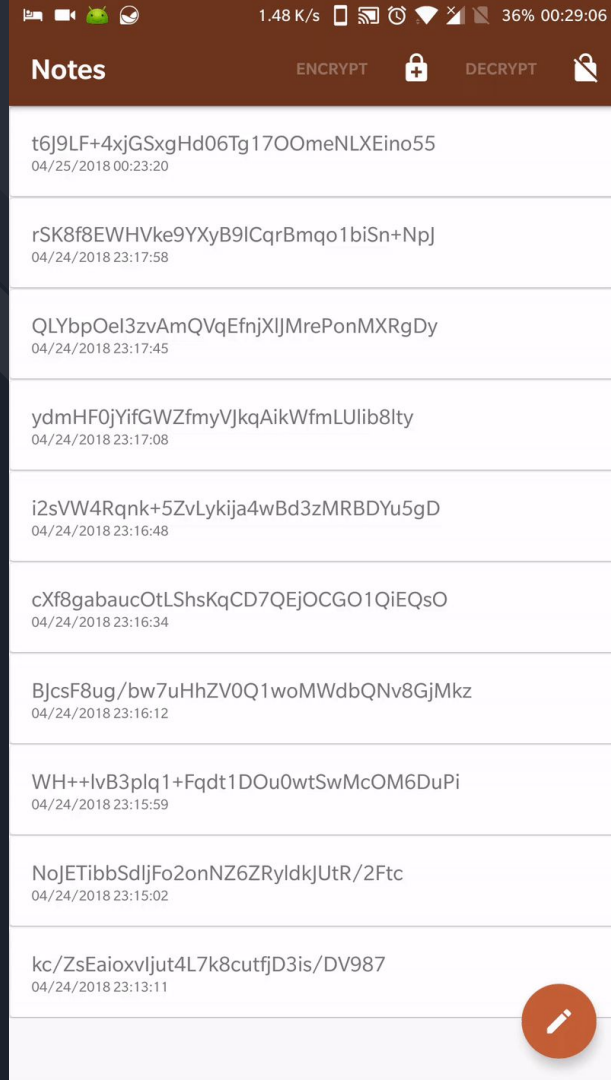
Features

- Real-time AES-256 bit Encryption visualization
- Shake Detection to hide notes from prying eyes



Features

- Fingerprint Authentication to Decrypt notes



Current Solution and Future Changes

- On initial launch user creates a password which is saved in SharedPreferences
- The same password is used to login and encrypt/decrypt the notes

Set
password

Notes

Enter New Password

Re-enter New Password

CONFIRM

Q W E R T Y U I O P
A S D F G H J K L
↑ Z X C V B N M

123 😊 @ . ↵

Login

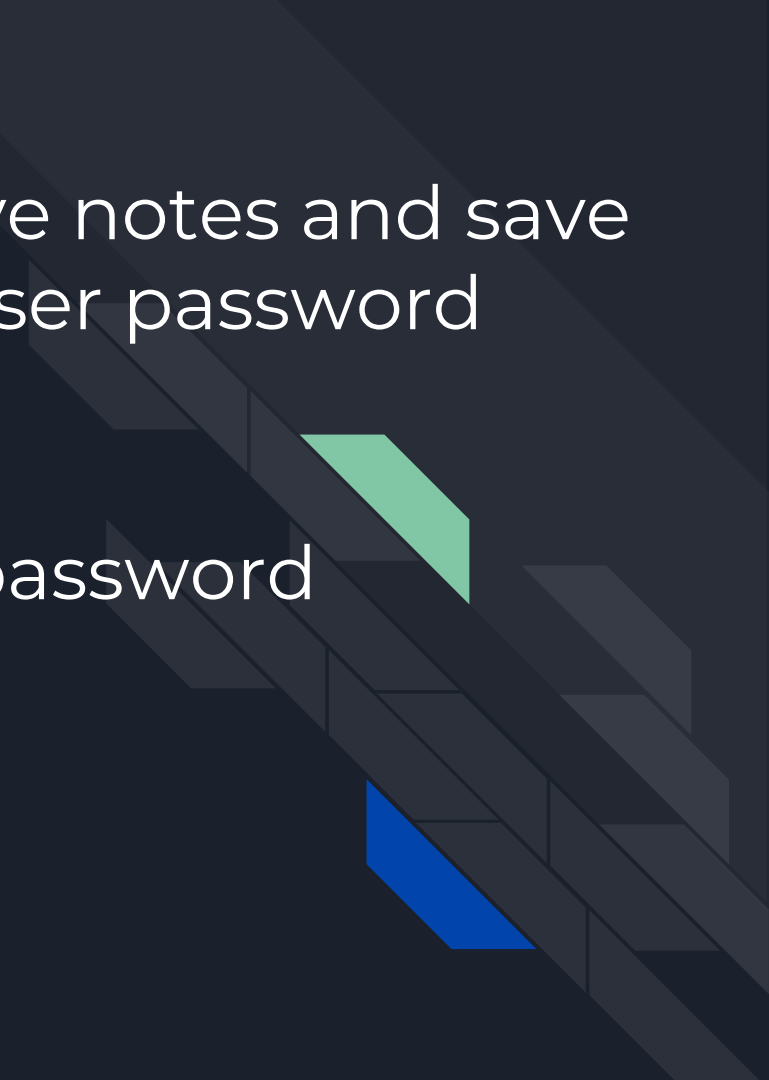
Notes

Enter Password

ENTER

Q W E R T Y U I O P
A S D F G H J K L
↑ Z X C V B N M

123 😊 @ . ✓

- Cloud based service to save notes and save only a hashed version of user password alongside the notes
 - Ability to reset forgotten password
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Current Solution and Future Changes

- Backup decryption with pincode or keyphrase when fingerprint unavailable

Since, not all versions of android support fingerprint API, nor all Android devices have fingerprint hardware

Current Solution and Future Changes

- Offline Speech Recognition for supported Android devices
- Replace Google Speech API with an Open Source alternative
Eg: Mozilla's Open Source Speech Recognition
Model: DeepSpeech



Demo & Q&A