

Why Flutter?



Why ProtoBuf

Schema file: commitment.proto

```
commitment.proto lib/protos
1 syntax = "proto3";
2
3 message CommitmentProto {
4     string requestNumber = 1;
5     string date = 2;
6     string type = 3;
7     string amount = 4;
8     bool isContinued = 5;
9     bool isApproved = 6;
10    string description = 7;
11 }
```

- 1. OS, free
- 2. Faster than JSON
- 3. Fixed Schema
- 4. Small payload size(as no keys are sent)
- 5. Cannot be decoded without schema
- 6. Backward & forward compatibility
- 7. Less boilerplate code
- 8. Binary output
- 9. Vast language support (C, Java, Dart, JS, Go, etc.)
- 10. Compiler to compile to different languages
- 11. Supported by Google

"New fields can be introduced without worries, so future-proof"

Why AES encryption?

- This robust security algorithm may be implemented in both hardware and software.
- It is resilient against hacking attempts, thanks to its higher-length key sizes (128, 192, and 256 bits).
- It is an open source solution. Since AES is royalty-free, it remains highly accessible for both the private and public sectors.
- AES is the most commonly used security protocol today, used for everything from encrypted data storage to wireless communications.

Features of AES

- Symmetric Cipher
- Fixed Block length
- Variable Key length
- Variable Number of Rounds.
- Uses Substitution-Permutation Network.
- Available in three different Version(AES-128, AES192, AES 256)
- Certified by CRYPTREC, NESSIE, NSA, AES Winner