



Backend RoadMap

learn a high and low level language (Rust and Python)

- basic (syntax)
- mid (syntax comprehension)
- adv (oop concepts)

protocols concepts

- socket (ip, port, packets)
- http protocol and server(request and response object content)
- API
- middlewares
- authorization algorithms
- MVC/MVT pattern
- websocket protocol
- realtining and push notifications
- multithreading concepts
 - events
 - topics
 - pubsub channels like zmq and redis
 - async future io object stream handlers
 - redis streams
 - spawn workers
 - arc and mutex
 - select event loop
 - jobq channels
- actors
 - mailbox
 - message passing between other actors using pubsub patterns
 - message queue using jobq channels
 - event loop handler
 - message scheduling
 - actor.run_interval()
 - tokio::time
 - tokio crontab

data storage concepts

- postgres db
- mongo db
- redis
- ORM models and schemas and serializers

cryptography concepts

- hasing algorithms like SHA (seeds and KDFs)
- public key digital signatures algorithms like (ED25519 and ECDSA)

- PGP keypairs

devops concepts

- VPS setup
- reverse proxy and load balancing (nginx)
- docker

tools

- django
- django rest framework
- Actix web
- Tokio