

Internship Assignment README

Name: **M. Nitesh Reddy**

I executed the example-helloworld smart contract from Solana Labs. Here are the outputs:

solana config set --url https://api.devnet.solana.com

```
Config File: /home/maheeth/.config/solana/cli/config.yml
RPC URL: https://api.devnet.solana.com
WebSocket URL: wss://api.devnet.solana.com/ (computed)
Keypair Path: /home/maheeth/.config/solana/id.json
Commitment: confirmed
```

solana-keygen new --force

```
Generating a new keypair

For added security, enter a BIP39 passphrase

NOTE! This passphrase improves security of the recovery seed phrase NOT the
keypair file itself, which is stored as insecure plain text

BIP39 Passphrase (empty for none):

Wrote new keypair to /home/maheeth/.config/solana/id.json
=====
pubkey: 7ppNVbKFDTmcZ9Ai2Afe1jXMwXN7Xmz53j38nbmgT6gv
=====
Save this seed phrase and your BIP39 passphrase to recover your new keypair:
divert pepper rural session roof movie manage crush gauge outdoor photo lunar
=====
```

solana airdrop 2

```
Requesting airdrop of 2 SOL

Signature: 3njbKYaJFPSfGVfVd8Ppd5mPGSCLQAQNSMtCCdHZHi4YSXLi1trXZfkEs1dmcNYvtj3LKVwCpubnBBXjvHRbZu1J

2 SOL
```

npm run build:program-rust

```
> helloworld@0.0.1 build:program-rust
> cargo build-bpf --manifest-path=./src/program-rust/Cargo.toml --bpf-out-dir=dist/program

BPF SDK: /home/maheeth/.local/share/solana/install/releases/1.9.6/solana-release/bin/sdk/bpf
cargo-build-bpf child: rustup toolchain list -v
cargo-build-bpf child: rustup toolchain link bpf /home/maheeth/.local/share/solana/install/releases/1.9.6/solana-release/bin/sdk/bpf/dependencies/bpf-tools/rust
cargo-build-bpf child: cargo +bpf build --target bpfel-unknown-unknown --release
   Compiling proc-macro2 v1.0.27
   Compiling unicode-xid v0.2.2
   Compiling syn v1.0.73
   Compiling serde_derive v1.0.126
   Compiling serde v1.0.126
```

solana program deploy dist/program/helloworld.so

```
Program Id: aYMcpup9BEaFyc562Fw7EoscB4TuoYJqPnwtbJkWRM6
```

npm install

```
added 295 packages, and audited 296 packages in 10s

29 packages are looking for funding
  run `npm fund` for details

2 high severity vulnerabilities

To address all issues, run:
  npm audit fix

Run `npm audit` for details.
```

npm run start

```
> helloworld@0.0.1 start
> ts-node src/client/main.ts

Let's say hello to a Solana account...
Connection to cluster established: https://api.devnet.solana.com { 'feature-set': 1006352700, 'solana-core': '1.8.12' }
Using account 7ppNVbKFDtMcZ9Ai2Afe1jXMWxN7Xmz53j38nbmgT6gv containing 1.15589832 SOL to pay for fees
Using program aYMcpup9BEaFyc562Fw7EoscB4TuoYJqPnwtbJKwRM6
Creating account FajKGvfG1T3TpYn5csFsXWZcQ5shs9qgbdvWxmQyb6 to say hello to
Saying hello to FajKGvfG1T3TpYn5csFsXWZcQ5shs9qgbdvWxmQyb6
FajKGvfG1T3TpYn5csFsXWZcQ5shs9qgbdvWxmQyb6 has been greeted 1 time(s)
Success
```