



Solana Notes in Rust.

Core functionality only.

Team 10.
Vlad Tagunkov



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Create and Delete Note Function.



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```
declare_id!("62wpCWKSX87fLgkmeesnKspYctLnSvAzcfSjUgt6wtXe");
```

```
#[program]
```

```
pub mod notes {
```

```
    use super::*;
```

```
    pub fn create_note(ctx: Context<CreateNote>, content: String) -> Result<()> {
```

```
        let note: &mut Account<'_, Note> = &mut ctx.accounts.note;
```

```
        let user: &Signer<'_> = &ctx.accounts.user;
```

```
        note.content = content;
```

```
        note.user = user.key();
```

```
        Ok(())
```

```
    }
```

```
    pub fn delete_note(_ctx: Context<DeleteNote>) -> Result<()> {
```

```
        Ok(())
```

```
    }
```

```
}
```

Create Note and Delete.

```
#[derive(Accounts)]
5 implementations
pub struct CreateNote<'info> {
    #[account{
        init,
        payer = user,
        space = 2000
    }]
    pub note: Account<'info, Note>,

    #[account(mut)]
    pub user: Signer<'info>,

    pub system_program: Program<'info, System>,
}
```

```
#[derive(Accounts)]
5 implementations
pub struct DeleteNote<'info> {
    #[account{
        mut,
        has_one = user,
        close = user
    }]
    pub note: Account<'info, Note>,

    #[account(mut)]
    pub user: Signer<'info>,
}
```

Test Create Note.

```
it("can create a note!", async () => {
  await program.rpe.createNote("Hello, Encode Club Solana Bootcamp!", {
    accounts: {
      note: note.publicKey,
      user: provider.wallet.publicKey,
      systemProgram: anchor.web3.SystemProgram.programId,
    },
    signers: [note],
  });
  let newNote = await program.account.note.fetch(note.publicKey);
  assert.strictEqual(newNote.content, "Hello, Encode Club Solana Bootcamp!");
  assert.strictEqual(
    newNote.user.toBase58(),
    provider.wallet.publicKey.toBase58()
  );
});
```

Test Delete Note.

```
it("can delete a note!", async () => {  
  await program.rpc.deleteNote({  
    accounts: {  
      note: note.publicKey,  
      user: provider.wallet.publicKey,  
    },  
  });  
  let delNote = await program.account.note.fetchNullable(note.publicKey);  
  assert.strictEqual(delNote, null);  
});
```

Test Results.



```
)
Running unittests src/lib.rs (/Users/vladtagunkov/Vlad_Projects/Encode_Club/bootcamp_SOLANA/Homeworks/final_project/notes/target/debug/deps/notes-2e1d52f7243d5922)
(base) vladtagunkov@Vlads-MacBook-Pro notes % anchor test
Finished release [optimized] target(s) in 0.25s
Finished `test` profile [unoptimized + debuginfo] target(s) in 0.25s
Running unittests src/lib.rs (/Users/vladtagunkov/Vlad_Projects/Encode_Club/bootcamp_SOLANA/Homeworks/final_project/notes/target/debug/deps/notes-2e1d52f7243d5922)
)

Found a 'test' script in the Anchor.toml. Running it as a test suite!

Running test suite: "/Users/vladtagunkov/Vlad_Projects/Encode_Club/bootcamp_SOLANA/Homeworks/final_project/notes/Anchor.toml"

yarn run v1.22.22
$ /Users/vladtagunkov/Vlad_Projects/Encode_Club/bootcamp_SOLANA/Homeworks/final_project/notes/node_modules/.bin/ts-mocha -p ./tsconfig.json -t 1000000 'tests/**/*.ts'

notes
  ✓ can create a note! (333ms)
  ✓ can delete a note! (461ms)

2 passing (798ms)

🌟 Done in 2.62s.
(base) vladtagunkov@Vlads-MacBook-Pro notes %
```




Thank you.

