

Actions:

Command Line Argument Parse

File Create

File Open

File Write

File Read

String Encryption

Console Input

Console Output

Data Parse

Data Storage

Data Lookup (email)

Data Lookup (email and password)

Data Add (email and password)

Data Remove

Custom Data Types:

Accounts (list of type Account)

> Use a Hash Table to store values

main.rs

```
if args == 2
    lib::run(args[1])
else
    print error
```

lib.rs

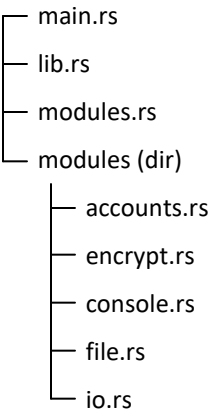
```
data = read data from file

if error:
    response = receive accept("create new file?")
    if response != "y"
        exit
else:
    accounts = load data(data)
    if error:
        print error
        exit

email = receive email
if error:
    exit

if email in list:
    receive password
    encrypt password
    look update
    if data in list:
        print success
    else:
        print error
else:
    response = receive accept("create new account?")
    if response == "y"
        loop:
            pw1 = receive password
            pw2 = receive password

            if pw1 == pw1
                break
            else
                print error
    pw = encrypt(pw1)
    add email and pw to list
    save data to file
    if success:
        print success
    else
        print error
```



| Lib |
|---------|
| |
| + run() |

| Accounts |
|--|
| - list: HashMap |
| + new(data: &str) → Result<Accounts, &str> + add(email: &str, password: &str) → bool + remove(email: &str, password: &str) → bool + check(email: &str, password: &str) → bool + check_email(email: &str) → bool + get_password(email: &str) → Result<String, &str> + update(email: &str, old: &str, new: &str) → bool + as_string() → Option<String> - parse() → Option<HashMap> |

| Encrypt |
|--|
| |
| + encrypt(data: &str) → String + decrypt(data: &str) → String |

| Console |
|--|
| |
| + input() → Result<String, &str> + output(data: &str) |

| io |
|--|
| |
| + load_data(filename: &str) → Option<String> + save_data(filename: &str, data: &str) → bool + receive_email() → Option<String> + receive_password() → Option<String> + receive_accept(prompt: &str) → Option<String> - validate_email(email: &str) → bool |

| File |
|--|
| |
| + read(filename: &str) → Result<String, &str> + write(filename: &str, data: &str) → Result<_, &str> |