

# Jacob Horgan - Online Shares Trading Python Project

## Description:

This project will simulate a user's investment account. Users will be able to create an account, log in and deposit money. The user should be able to clearly see their profile information. They will then have the option of investing in different shares which will be fluctuating in value – these will be easily viewable for the user on screen. The user will see either a return or a loss on their investments and will have the option to sell shares and withdraw money as well.

## Features *(ranked top to bottom priority)*

- Database of users
- Log in/out
- Cash account and investment account values
- Display user information (cash and investments)
- Deposit money
- Withdraw money *(can't go below 0)*
- Multiple shares with random fluctuating values *(can't go below 0)*
- Buy shares
- Sell shares

## Databases

### Users

- Name
- Password
- Cash amount
- Investment amount

## Validation Strategy

- Check username correct and give error message if incorrect
- Check password correct and give error message if incorrect
- Limit user to £500 max deposit value
- Allow user to withdraw money
- User cannot withdraw money past £0
- Update shares randomly every second
- Allow users to buy shares but not more than what their cash amount is
- Allow users to sell shares but not more than their share value
- Keep track of users cash amount, subtract and add with any changes
- Keep track of users investing account(s) each one will be different if they invest in multiple

## Navigation

### Start up

1. Log in
2. Register

### Register

1. Enter
2. Back

### Log in

1. Enter
2. Back

### Main

1. Deposit
2. Withdraw
3. Buy/sell shares
4. View shares
5. View profile
6. Set buy/sell orders

### Deposit

1. Enter amount and deposit (*Ask for confirmation*)
2. Back

### Withdraw

1. Enter amount and withdraw (*Ask for confirmation*)
2. Back

### Buy/sell shares

1. Buy shares
2. Sell shares
3. View portfolio
4. Back

### View shares

1. Share 1
2. Share 2
3. Share 3
4. Back

### View profile

1. Update name
2. Update password
3. Logout
4. Back