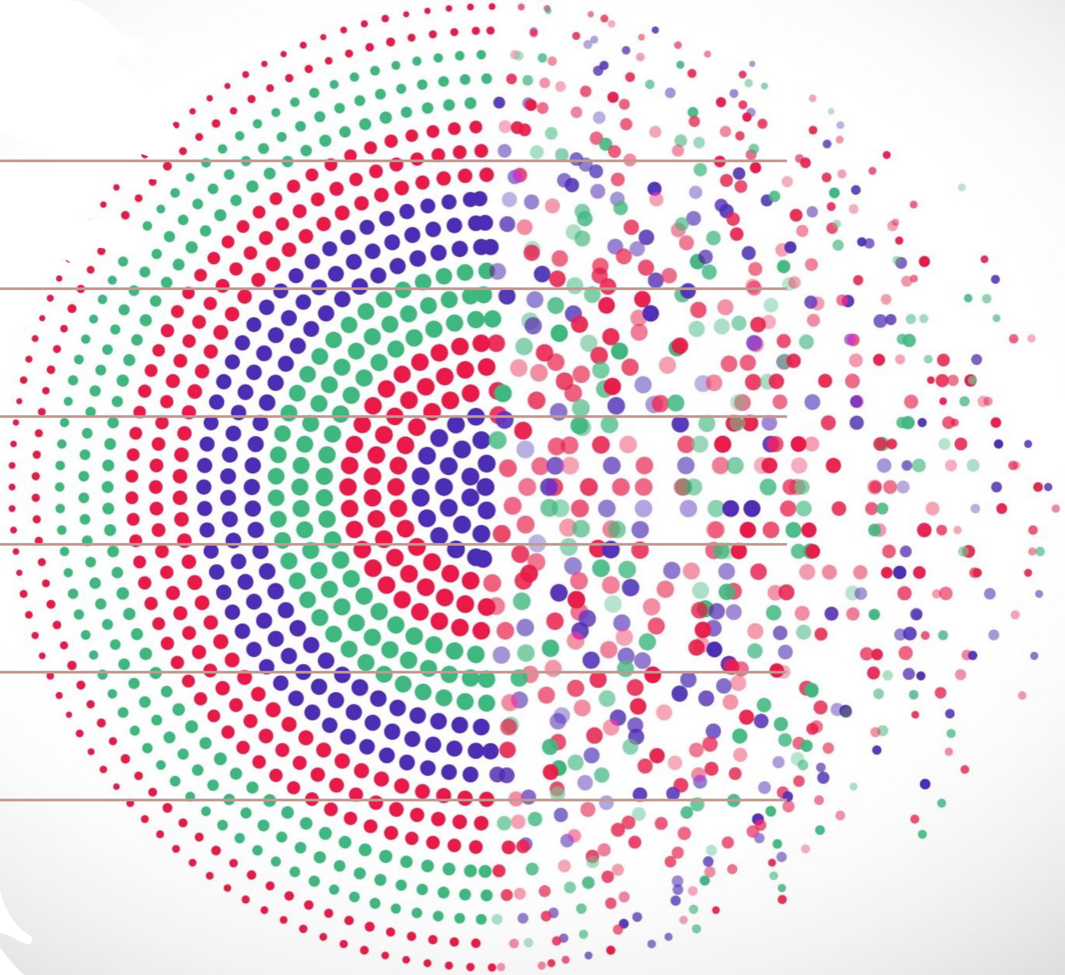
Bank Smart Terminal App

A simple and fun bank app

Duong Pham

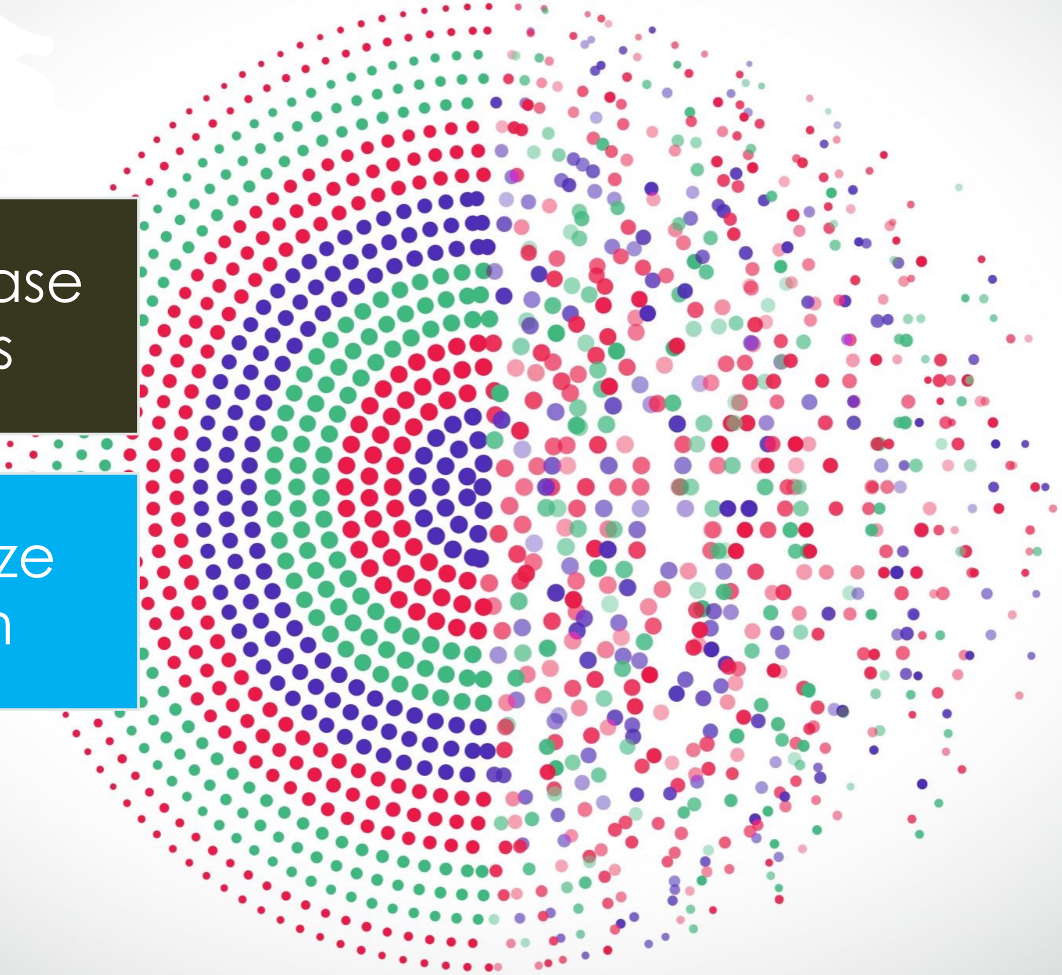
Core Functions

- Login
- Select Account
- Deposit
- Withdraw
- Transfer
- Recommended Places



Technical Overview

- Account Class
- User Class
- Database Class
- TTY::Prompt Gem
- Google Places Gem
- Colorize Gem



Account Class

id

name

balance

userId

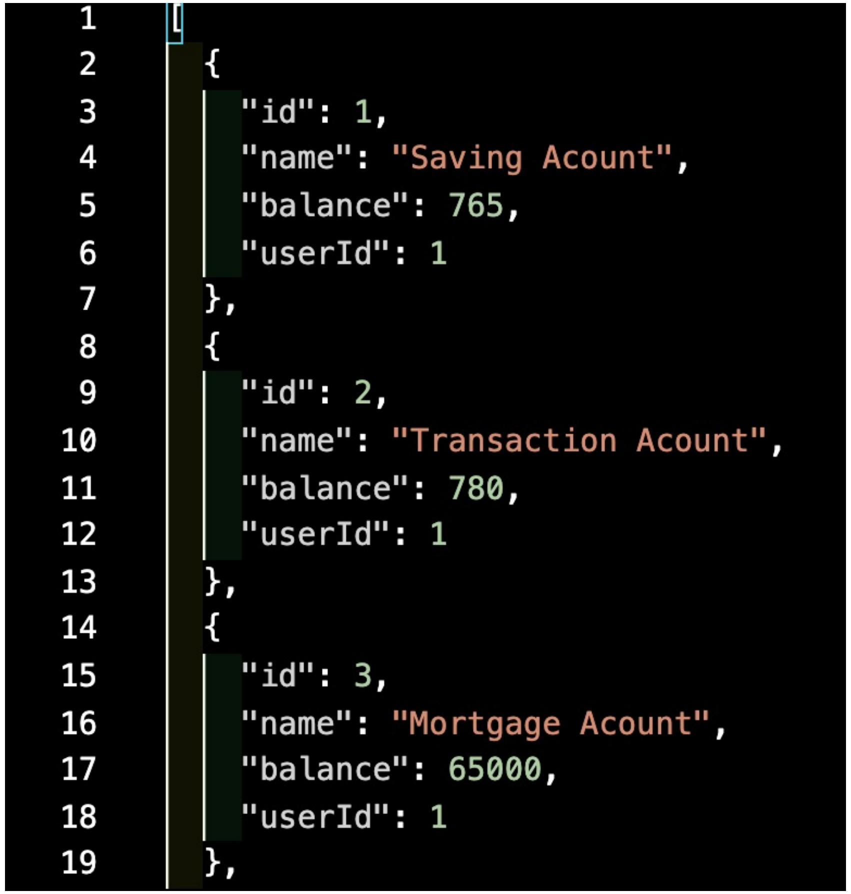
ATTRIBUTES

getId getName

getBalance getUserId

deposit withdraw

FUNCTIONS



```
[
  {
    "id": 1,
    "name": "Saving Acount",
    "balance": 765,
    "userId": 1
  },
  {
    "id": 2,
    "name": "Transaction Acount",
    "balance": 780,
    "userId": 1
  },
  {
    "id": 3,
    "name": "Mortgage Acount",
    "balance": 65000,
    "userId": 1
  },
```

JSON DATA

User Class

id

name

username

ATTRIBUTES

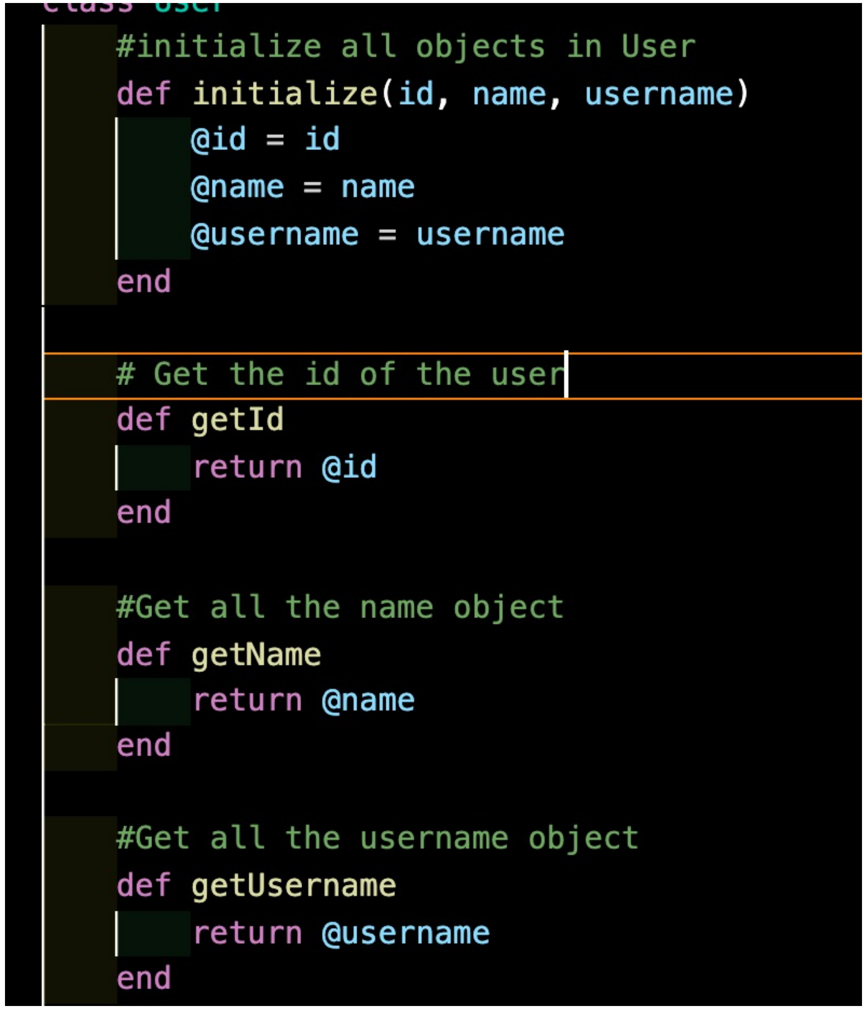
initialize

getId

getName

getUsername

FUNCTIONS



```
class User
  #initialize all objects in User
  def initialize(id, name, username)
    @id = id
    @name = name
    @username = username
  end

  # Get the id of the user
  def getId
    return @id
  end

  #Get all the name object
  def getName
    return @name
  end

  #Get all the username object
  def getUsername
    return @username
  end
```

User class

Database Class

@accounts

@users

ATTRIBUTES

initialize

getAccounts

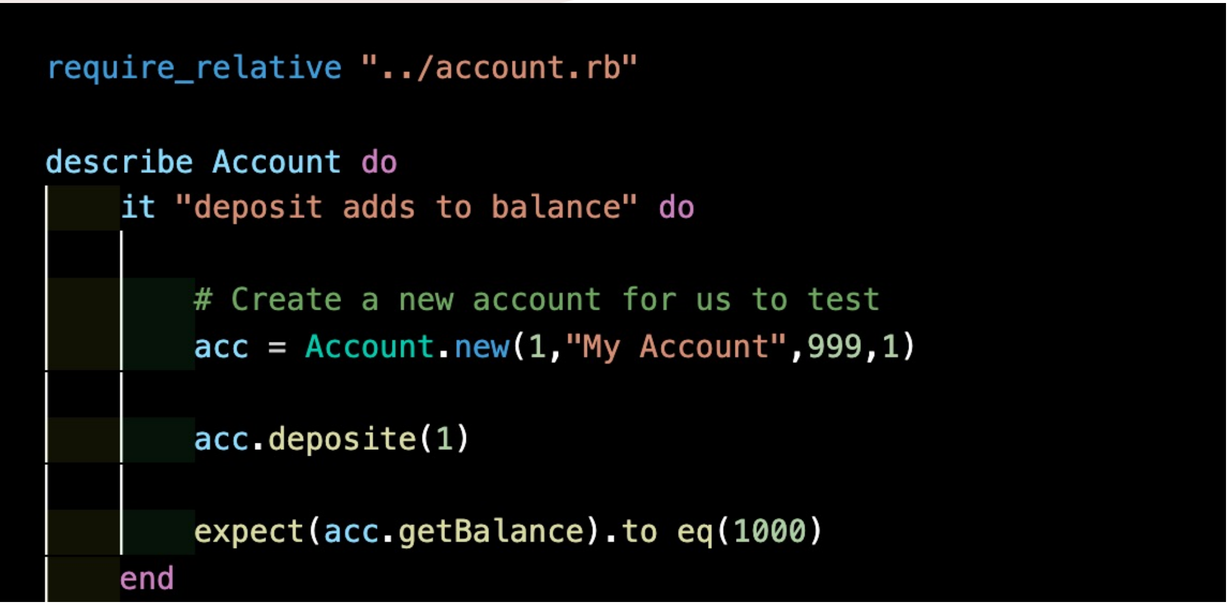
getUsers

getAccountsByUserId

getUserByUsername

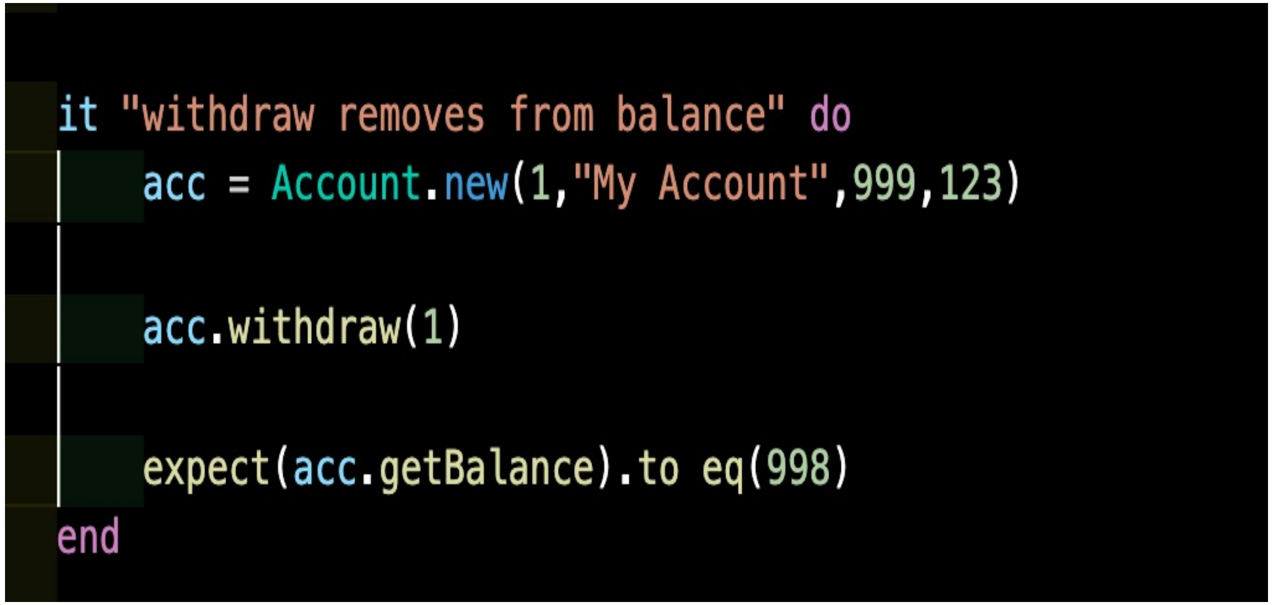
FUNCTIONS

TDD – Test Driven Development



```
require_relative "../account.rb"

describe Account do
    it "deposit adds to balance" do

        # Create a new account for us to test
        acc = Account.new(1,"My Account",999,1)

        acc.deposite(1)

        expect(acc.getBalance).to eq(1000)
    end
```

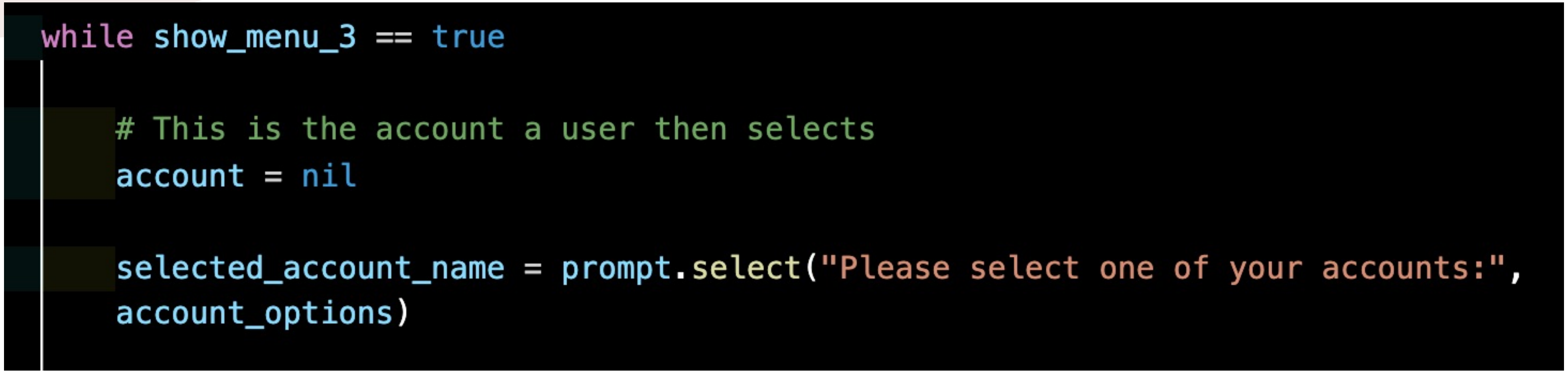
Test 1



```
it "withdraw removes from balance" do
    acc = Account.new(1,"My Account",999,123)

    acc.withdraw(1)

    expect(acc.getBalance).to eq(998)
end
```

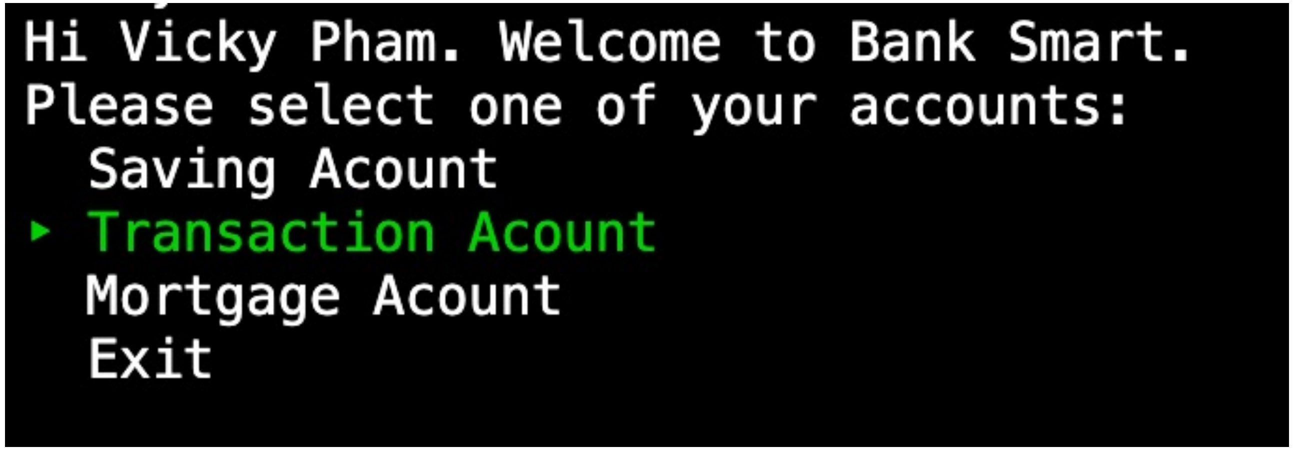
Test 2

TTY::Prompt Gem



```
while show_menu_3 == true

    # This is the account a user then selects
    account = nil

    selected_account_name = prompt.select("Please select one of your accounts:",
    account_options)
```

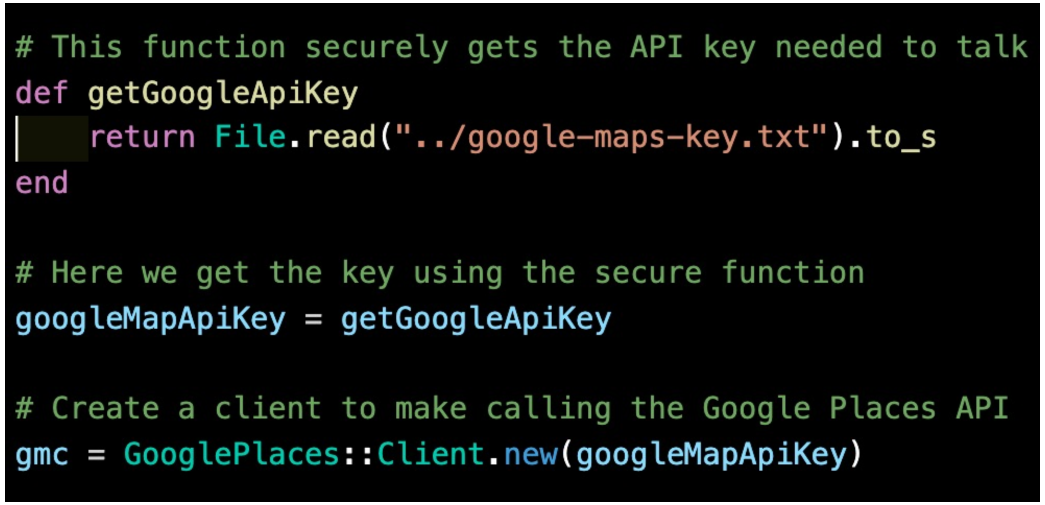
CODE



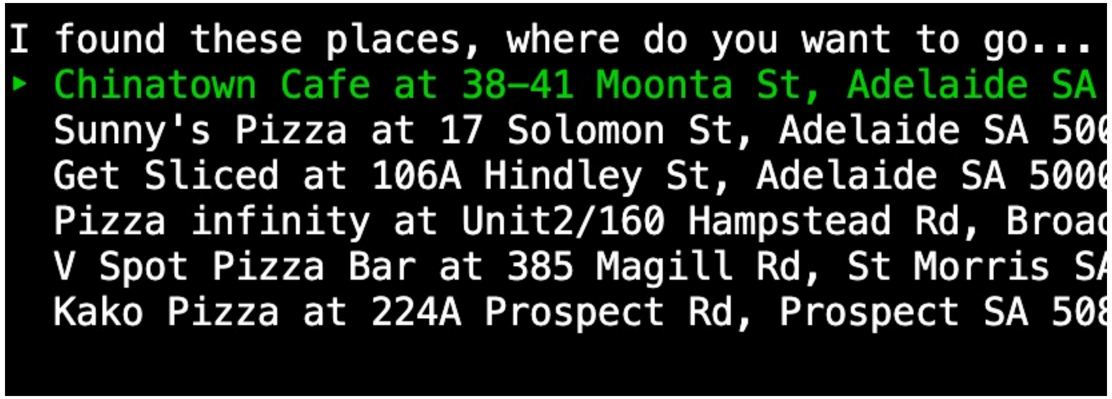
```
Hi Vicky Pham. Welcome to Bank Smart.
Please select one of your accounts:
  Saving Acount
▸ Transaction Acount
  Mortgage Acount
  Exit
```

RESULT

Google Places Gem



```
# This function securely gets the API key needed to talk
def getGoogleApiKey
    return File.read("../google-maps-key.txt").to_s
end

# Here we get the key using the secure function
googleMapApiKey = getGoogleApiKey

# Create a client to make calling the Google Places API
gmc = GooglePlaces::Client.new(googleMapApiKey)
```

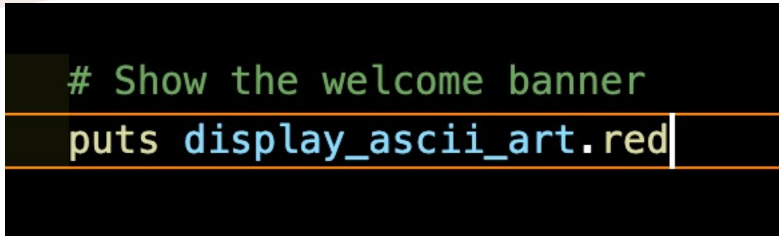


```
I found these places, where do you want to go...
▸ Chinatown Cafe at 38–41 Moonta St, Adelaide SA
  Sunny's Pizza at 17 Solomon St, Adelaide SA 50
  Get Sliced at 106A Hindley St, Adelaide SA 500
  Pizza infinity at Unit2/160 Hampstead Rd, Broa
  V Spot Pizza Bar at 385 Magill Rd, St Morris S
  Kako Pizza at 224A Prospect Rd, Prospect SA 50
```

CODE

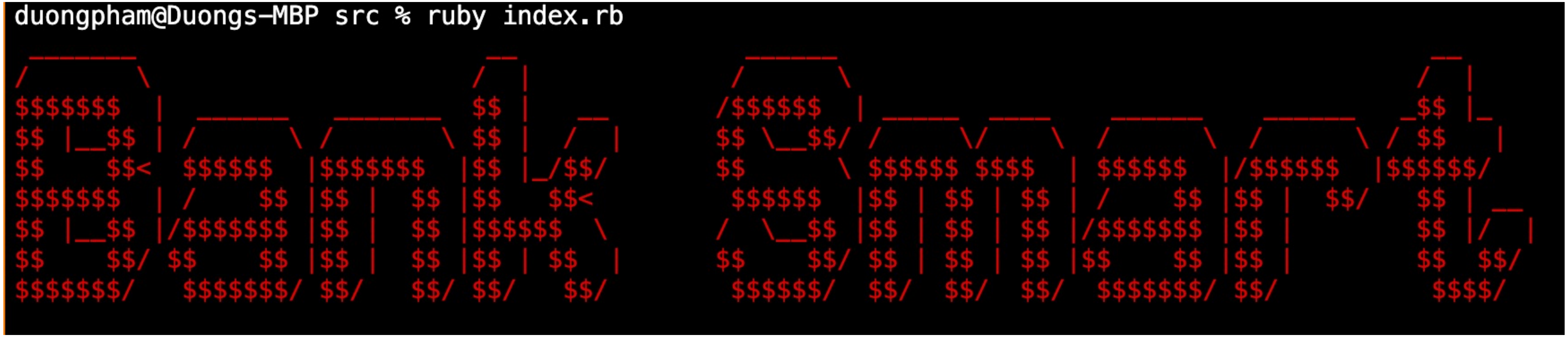
RESULT

Colorize Gem



```
# Show the welcome banner
puts display_ascii_art.red
```

CODE



```
duongpham@Duongs-MBP src % ruby index.rb
 _______                       __               ______                                       __
/       \                     /  |             /      \                                     /  |
$$$$$$$  |  ______   _______  $$ |   __       /$$$$$$  | _____  ____    ______    ______   _$$ |_
$$ |__$$ | /      \ /       \ $$ |  /  |      $$ \__$$/ /     \/    \  /      \  /      \ / $$   |
$$    $$<  $$$$$$  |$$$$$$$  |$$ |_/$$/       $$      \ $$$$$$ $$$$  | $$$$$$  |/$$$$$$  |$$$$$$/
$$$$$$$  | /    $$ |$$ |  $$ |$$   $$<         $$$$$$  |$$ | $$ | $$ | /    $$ |$$ |  $$/   $$ | __
$$ |__$$ |/$$$$$$$ |$$ |  $$ |$$$$$$  \       /  \__$$ |$$ | $$ | $$ |/$$$$$$$ |$$ |        $$ |/  |
$$    $$/ $$    $$ |$$ |  $$ |$$ | $$  |      $$    $$/ $$ | $$ | $$ |$$    $$ |$$ |        $$  $$/
$$$$$$$/   $$$$$$$/ $$/   $$/ $$/   $$/        $$$$$$/  $$/  $$/  $$/  $$$$$$$/ $$/          $$$$/
```

RESULT

Challenges

- Not sure where to start!... Lots of data and classes
- Unit testing is hard when you don’t know what you want
- Error handling
- Multiple Menus and looping
- Deciding on a color!
- Meeting the deadline

Ethical Issues

- Money Laundering check
- Responsible lending

Favorite Part!

- Coding and make app to work
- Use Gem to make things sparkly
- Use loops to make menu come back each time user exit
- Learn to use Google places gem and connect to a real API to find places.

Thank you !

Question?