MBIT
MADHUBEN & BHANUBHAI PATEL INSTITUTE OF TECHNOLOGY

Swayam Infotech

swiftPocket – An iOS App

Name: Mirva Dinesh Dudhagara

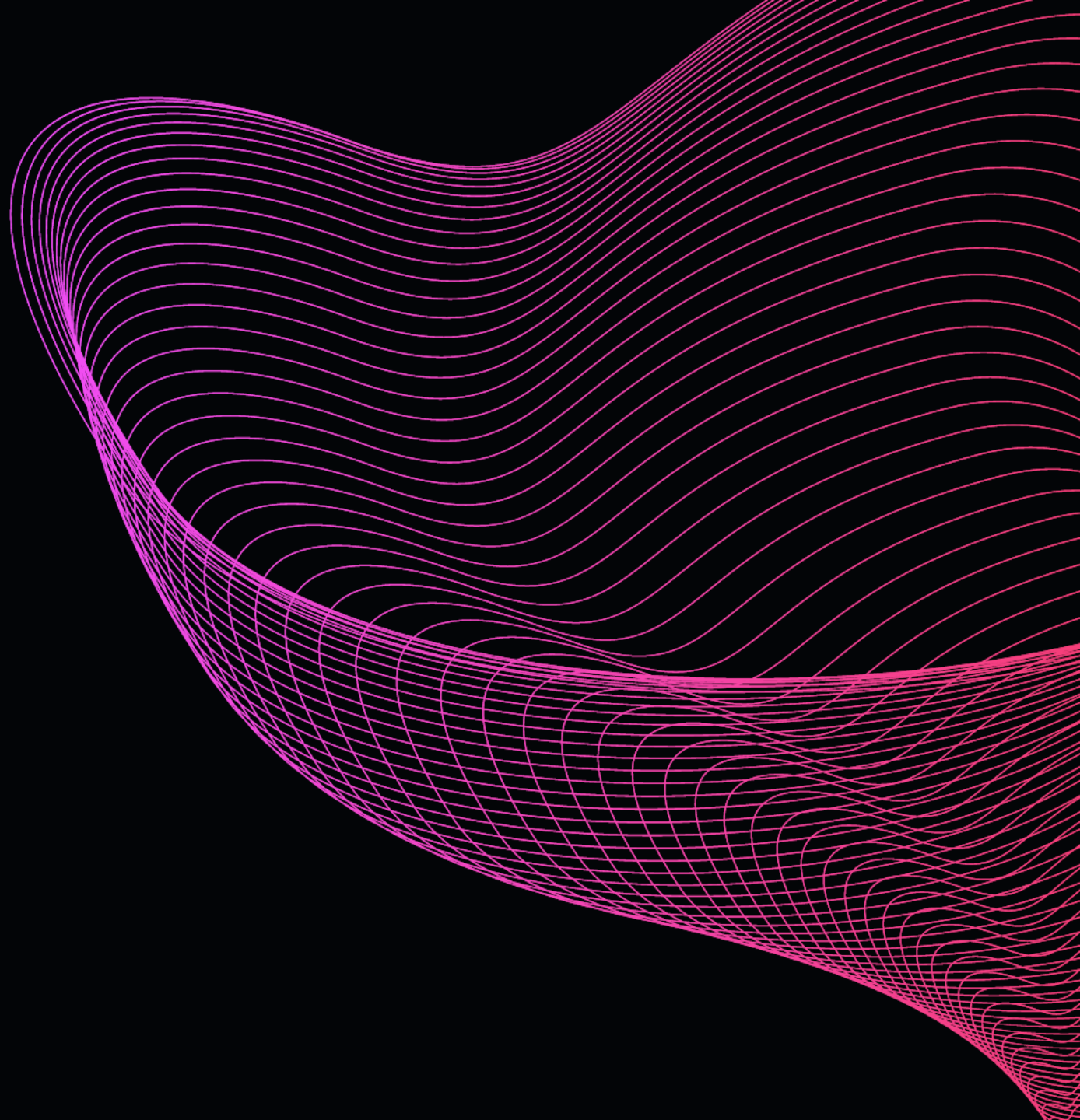
Enrolment No.: 190630107024

Internal Guide: Dr. Ashwini Kumar Jha

Industry Mentor: Mr. Rohit Tank

OUTLINE

1. About Swayam Infotech
2. My role
3. Tools and Technology
4. Problem statement
5. UI/UX
6. MVC Files
7. Journey Map
8. App Flow
9. Screenshots & Videos
10. Things I learned
11. References



ABOUT
SWAYAM INFOTECH

LOCATION | DOMAINS | SELECTION

MY ROLE

iOS App Development

Learn Swift

Learn XCode

MY RESPONSIBILITIES

Design UI/UX

Create a flow

Create apps

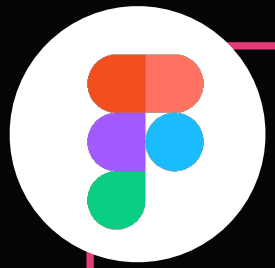
TOOLS & TECHNOLOGY

XCODE

- Coding
- Simulating
- Running app

SWIFT

- Basics
- Arrays
- Methods



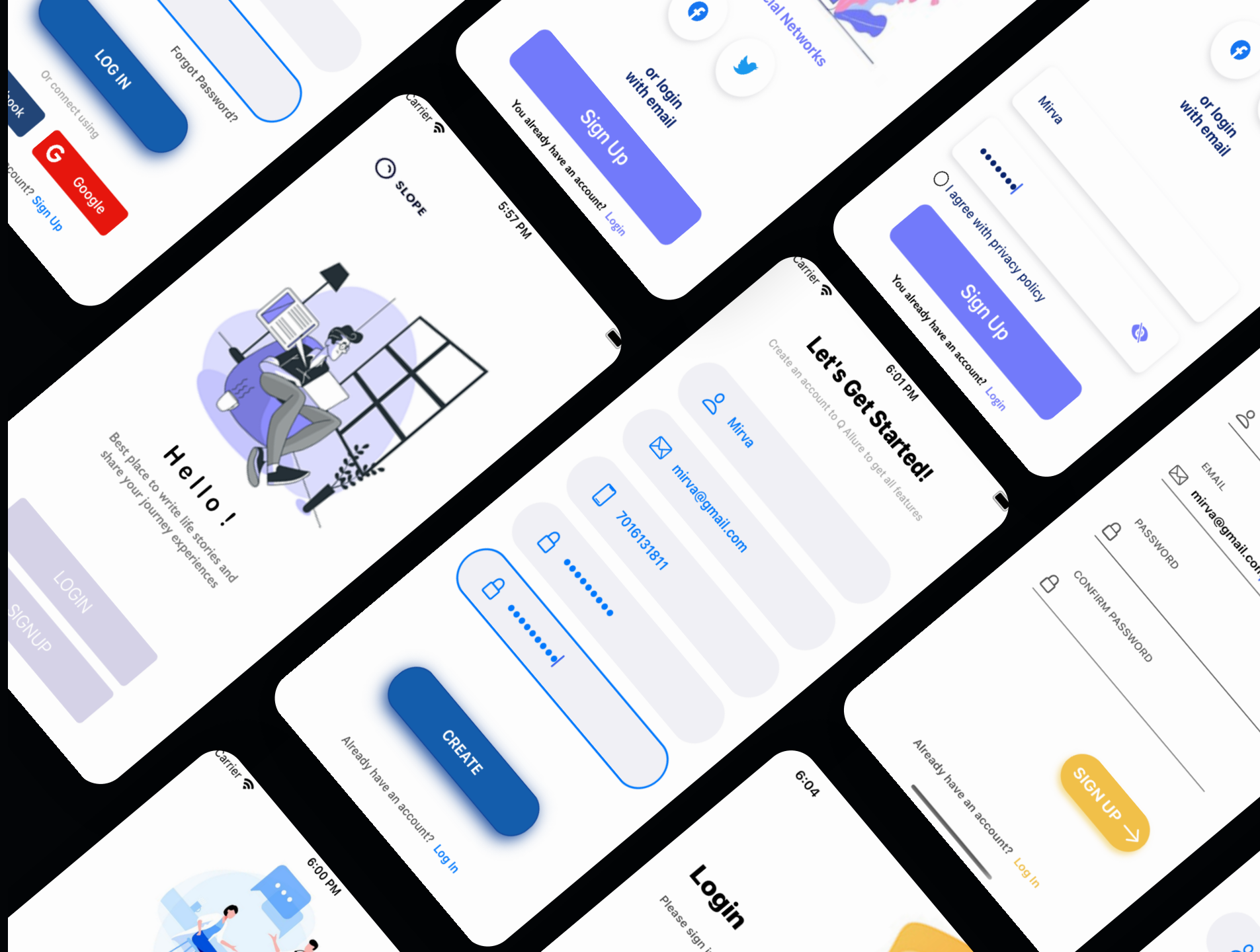
FIGMA

- UI/UX
- Wireframes
- Flow

COCOA TOUCH

- Declare classes
- Framework

Practice Pages



PROBLEM STATEMENT

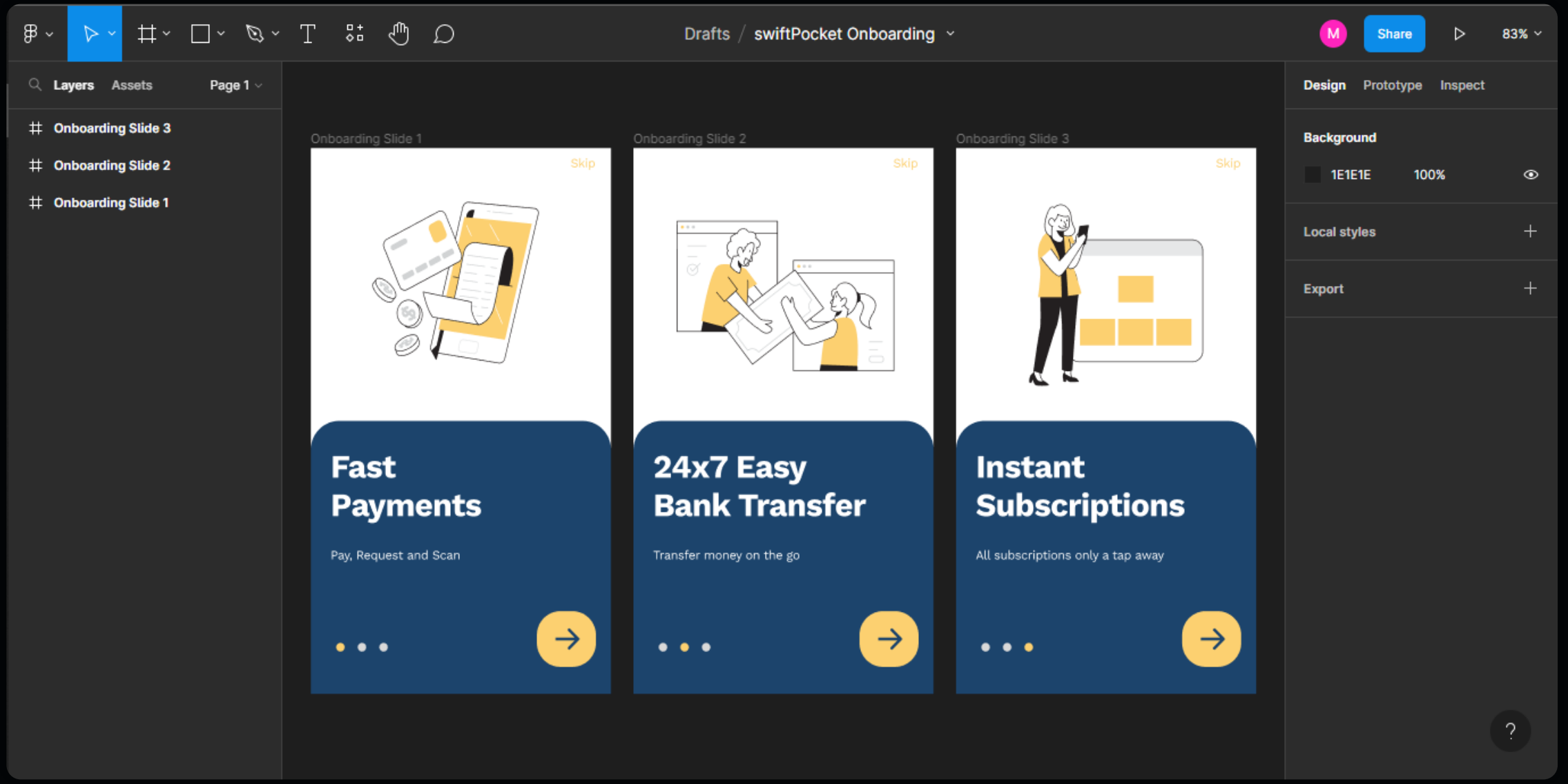
UPI payment app is a revolutionary digital payment system that has made transactions easy and convenient. It was launched by the National Payments Corporation of India (NPCI) in 2016 and has since become one of the most popular payment apps in India.

swiftPocket

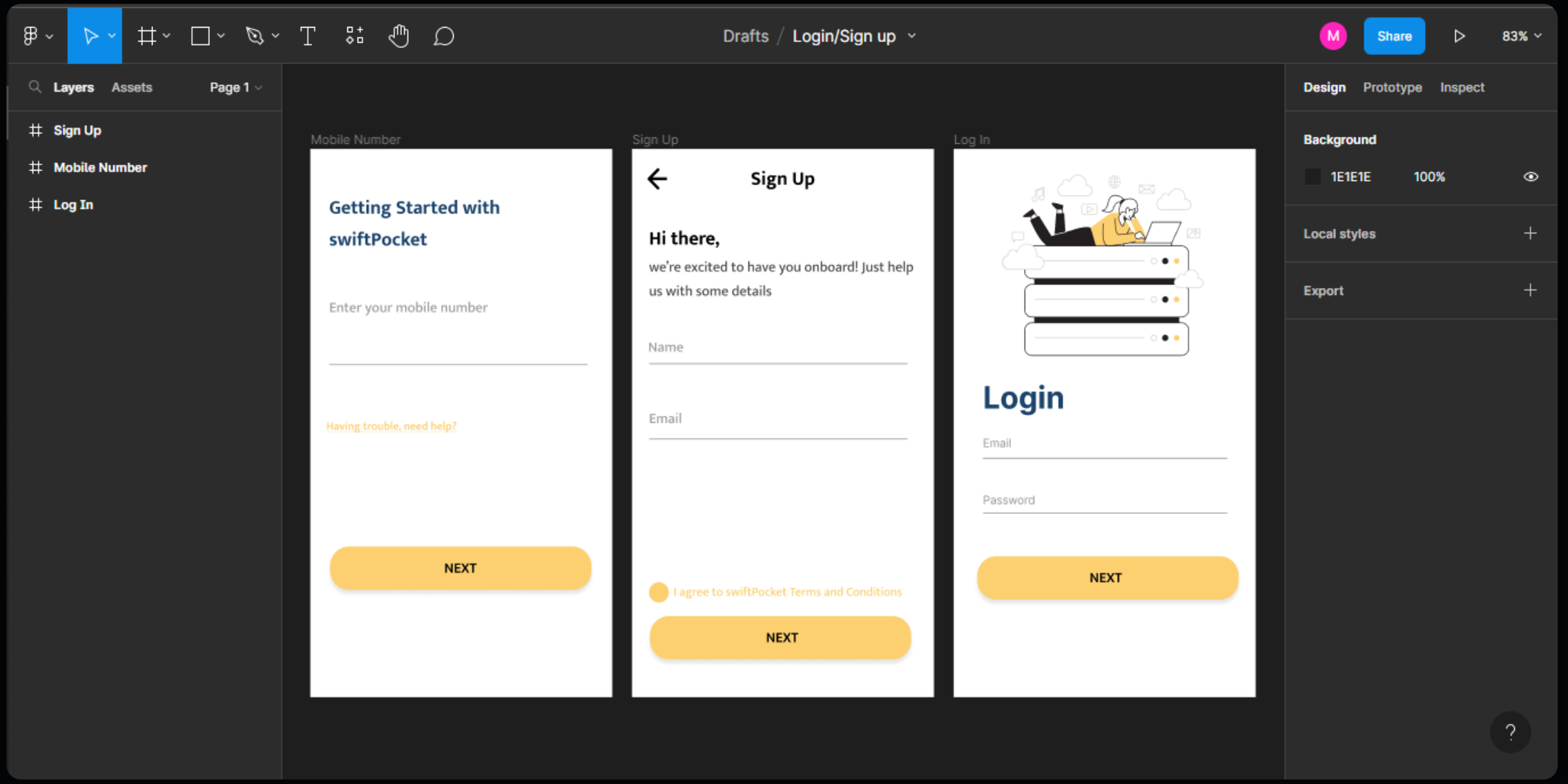
The UPI payment app comes loaded with many features that make it a preferred choice for users. One of its most significant features is the ability to link multiple bank accounts to a single app, making it easy to manage finances.

The app also allows users to send money directly to other UPI IDs or bank accounts, pay bills, recharge mobiles, and even shop online.

UI/UX


Drafts / swiftPocket Onboarding
Share
83%
Layers
Assets
Page 1
Onboarding Slide 3
Onboarding Slide 2
Onboarding Slide 1
Design
Prototype
Inspect
Background
1E1E1E
100%
Local styles
Export
Onboarding Slide 1
Skip
Fast Payments
Pay, Request and Scan
Onboarding Slide 2
Skip
24x7 Easy Bank Transfer
Transfer money on the go
Onboarding Slide 3
Skip
Instant Subscriptions
All subscriptions only a tap away

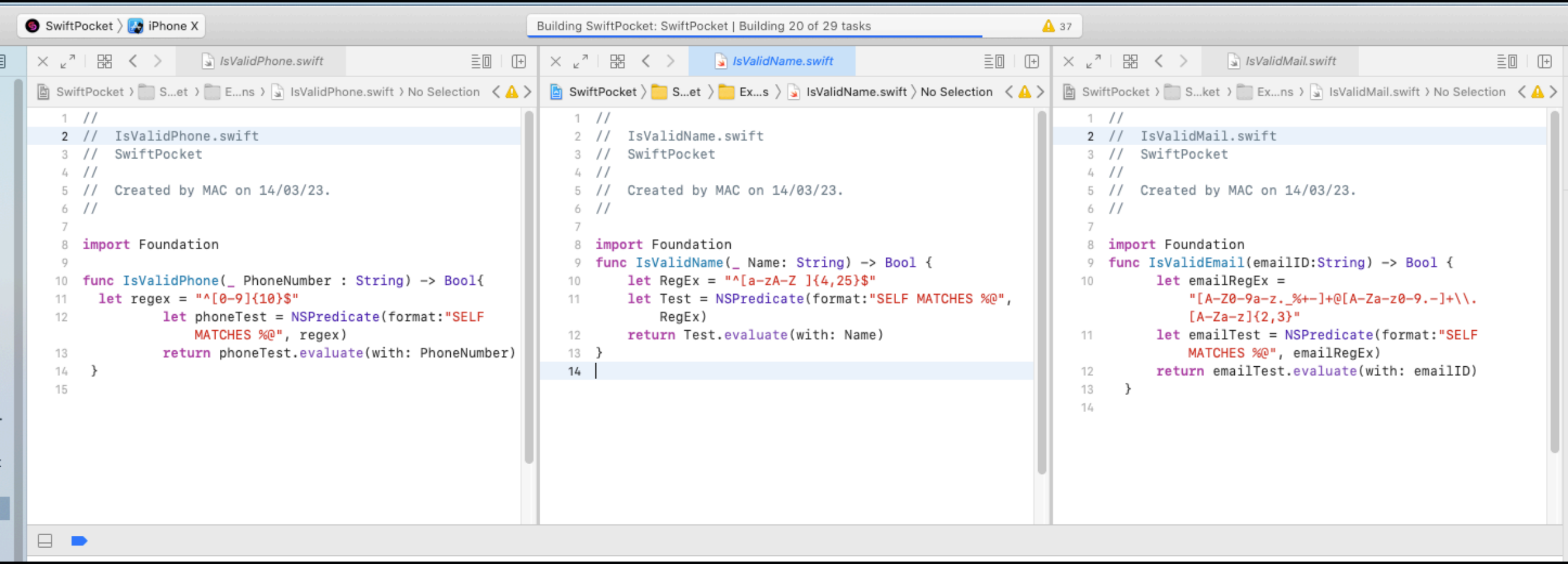
UI/UX


Drafts / Login/Sign up
Share
83%
Layers
Assets
Page 1
Sign Up
Mobile Number
Log In
Design
Prototype
Inspect
Background
1E1E1E
100%
Local styles
Export
Mobile Number
Getting Started with swiftPocket
Enter your mobile number
Having trouble, need help?
NEXT
Sign Up
Sign Up
Hi there,
we're excited to have you onboard! Just help us with some details
Name
Email
I agree to swiftPocket Terms and Conditions
NEXT
Log In
Login
Email
Password
NEXT

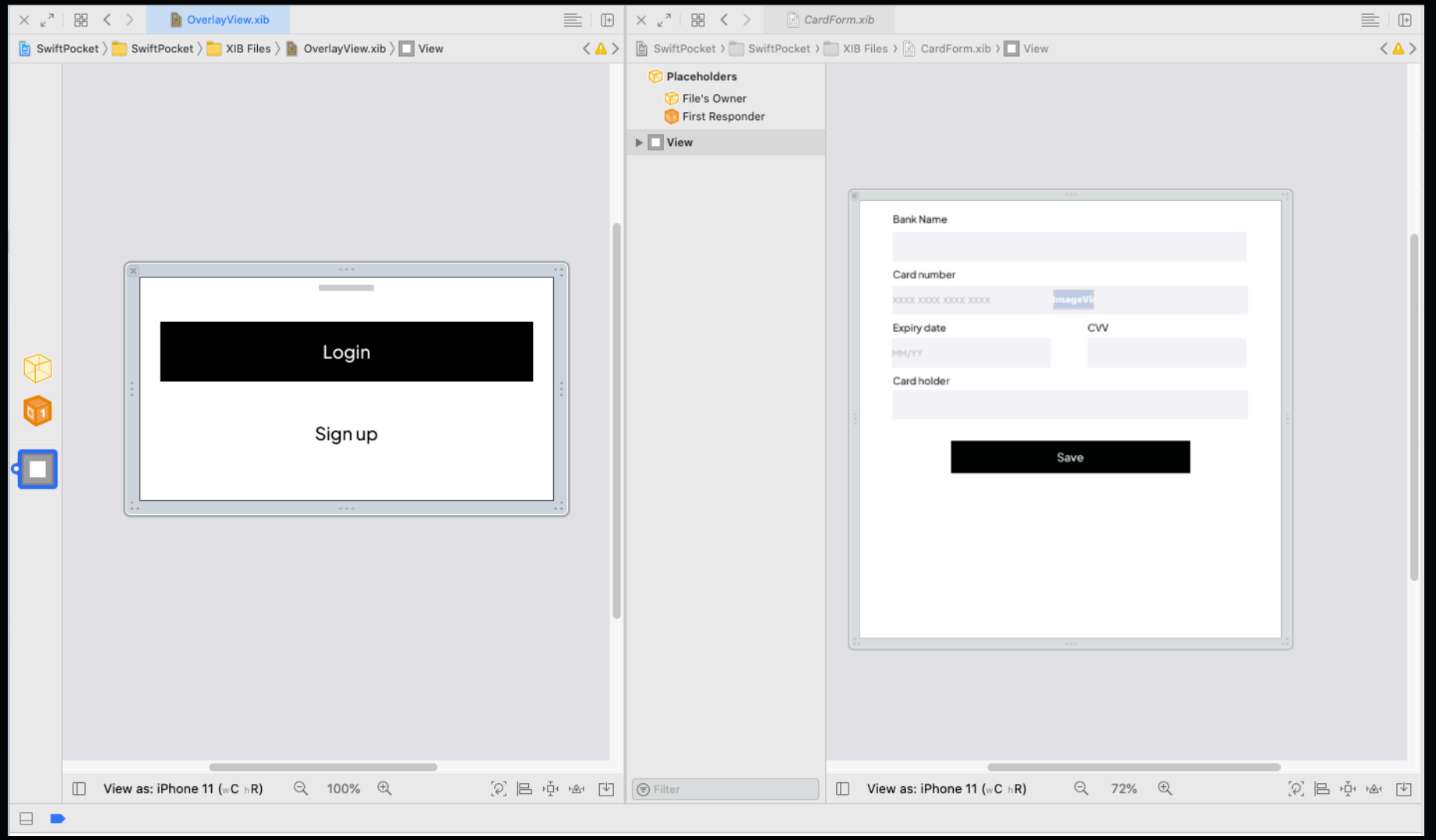

Models
Constant.swift
PresentationController.swift
OnboardingSlide.swift
Demo.swift
yourCard.swift
Bills.swift
Contacts.swift
Apps.swift
CardSettings.swift
EnumTransactions.swift
MobileOperators.swift
CableOperator.swift
ElectricityProviders.swift
GasCylinder.swift
Fastag.swift
Broadband.swift
SearchContacts.swift
Filter.swift
MembershipDetails.swift
CardDetailsForTable.swift
Views
OverlayView.swift
BlurView.swift
ACTabScrollView.swift
ACTabScrollView+Protocol.swift
Rate.swift
ContentView.swift
CardForm.swift
View Controllers
OnboardingViewController.swift
LoginViewController.swift
SignupViewController.swift
SetPasswordViewController.swift
SetupAccountViewController.swift
AddMobileViewController.swift
SetUPIViewController.swift
ConfirmUPIViewController.swift
AddCardViewController.swift
HomePageViewController.swift
ProfileViewController.swift
EditProfileViewController.swift
CardSettingsViewController.swift
AllTransactionsViewController.swift
RecepitViewController.swift

MVC FILES

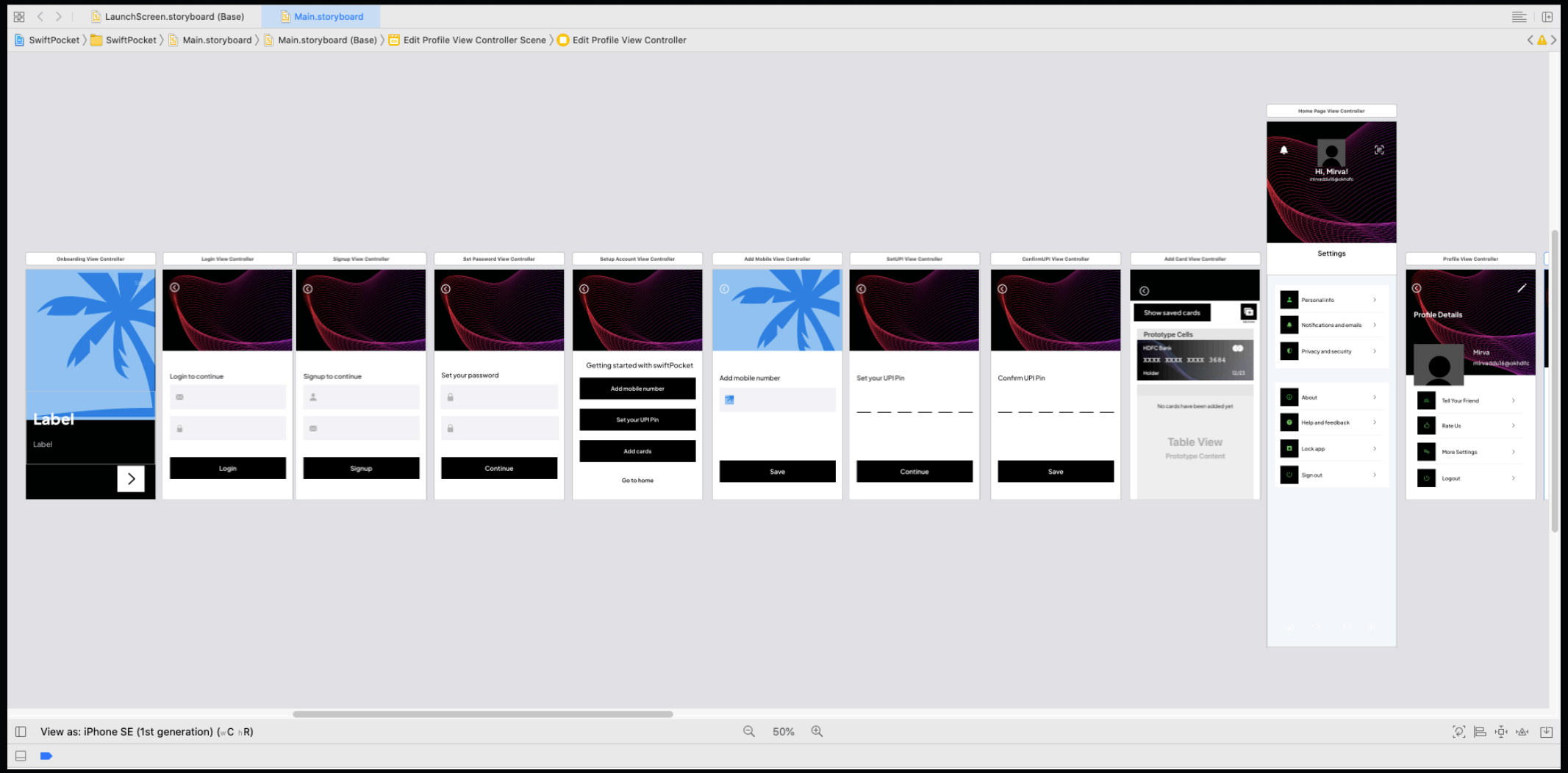
MODELS


SwiftPocket 〉 iPhone X
Building SwiftPocket: SwiftPocket | Building 20 of 29 tasks
37
IsValidPhone.swift
SwiftPocket 〉 S...et 〉 E...ns 〉 IsValidPhone.swift 〉 No Selection
//
// IsValidPhone.swift
// SwiftPocket
//
// Created by MAC on 14/03/23.
//
import Foundation
func IsValidPhone(_ PhoneNumber : String) -> Bool{
let regex = "^[0-9]{10}$"
let phoneTest = NSPredicate(format:"SELF MATCHES %@", regex)
return phoneTest.evaluate(with: PhoneNumber)
}
IsValidName.swift
SwiftPocket 〉 S...et 〉 Ex...s 〉 IsValidName.swift 〉 No Selection
//
// IsValidName.swift
// SwiftPocket
//
// Created by MAC on 14/03/23.
//
import Foundation
func IsValidName(_ Name: String) -> Bool {
let RegEx = "^[a-zA-Z]{4,25}$"
let Test = NSPredicate(format:"SELF MATCHES %@", RegEx)
return Test.evaluate(with: Name)
}
IsValidMail.swift
SwiftPocket 〉 S...ket 〉 Ex...ns 〉 IsValidMail.swift 〉 No Selection
//
// IsValidMail.swift
// SwiftPocket
//
// Created by MAC on 14/03/23.
//
import Foundation
func IsValidEmail(emailID:String) -> Bool {
let emailRegEx = "[A-Z0-9a-z._%+-]+@[A-Za-z0-9.-]+\\.[A-Za-z]{2,3}"
let emailTest = NSPredicate(format:"SELF MATCHES %@", emailRegEx)
return emailTest.evaluate(with: emailID)
}

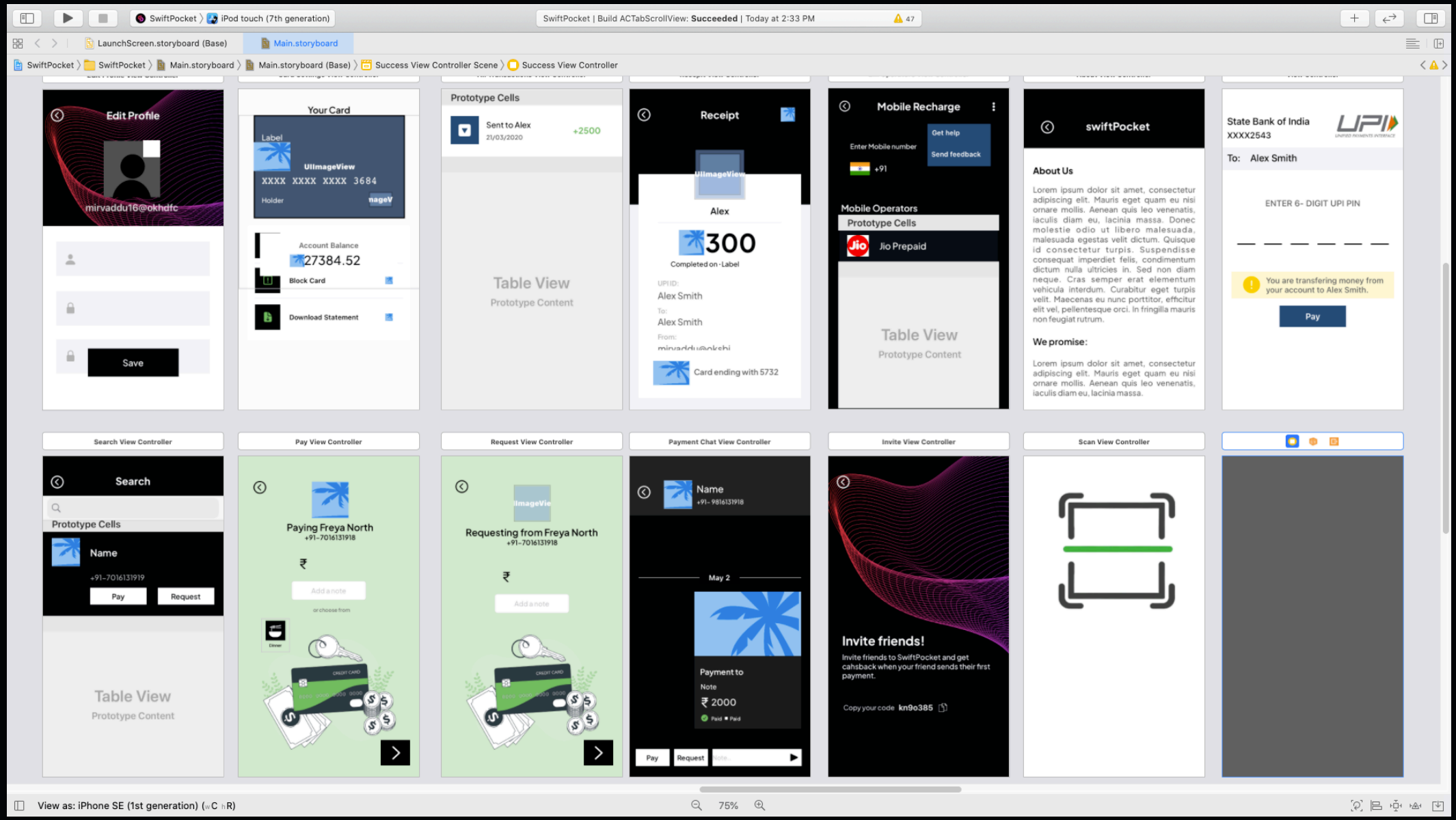
VIEWS


OverlayView.xib
SwiftPocket
SwiftPocket
XIB Files
OverlayView.xib
View
Login
Sign up
View as: iPhone 11
100%
CardForm.xib
SwiftPocket
SwiftPocket
XIB Files
CardForm.xib
View
Placeholders
File's Owner
First Responder
View
Bank Name
Card number
Expiry date
CVV
MM/YY
Card holder
Save
Filter
View as: iPhone 11
72%

VIEW CONTROLLER



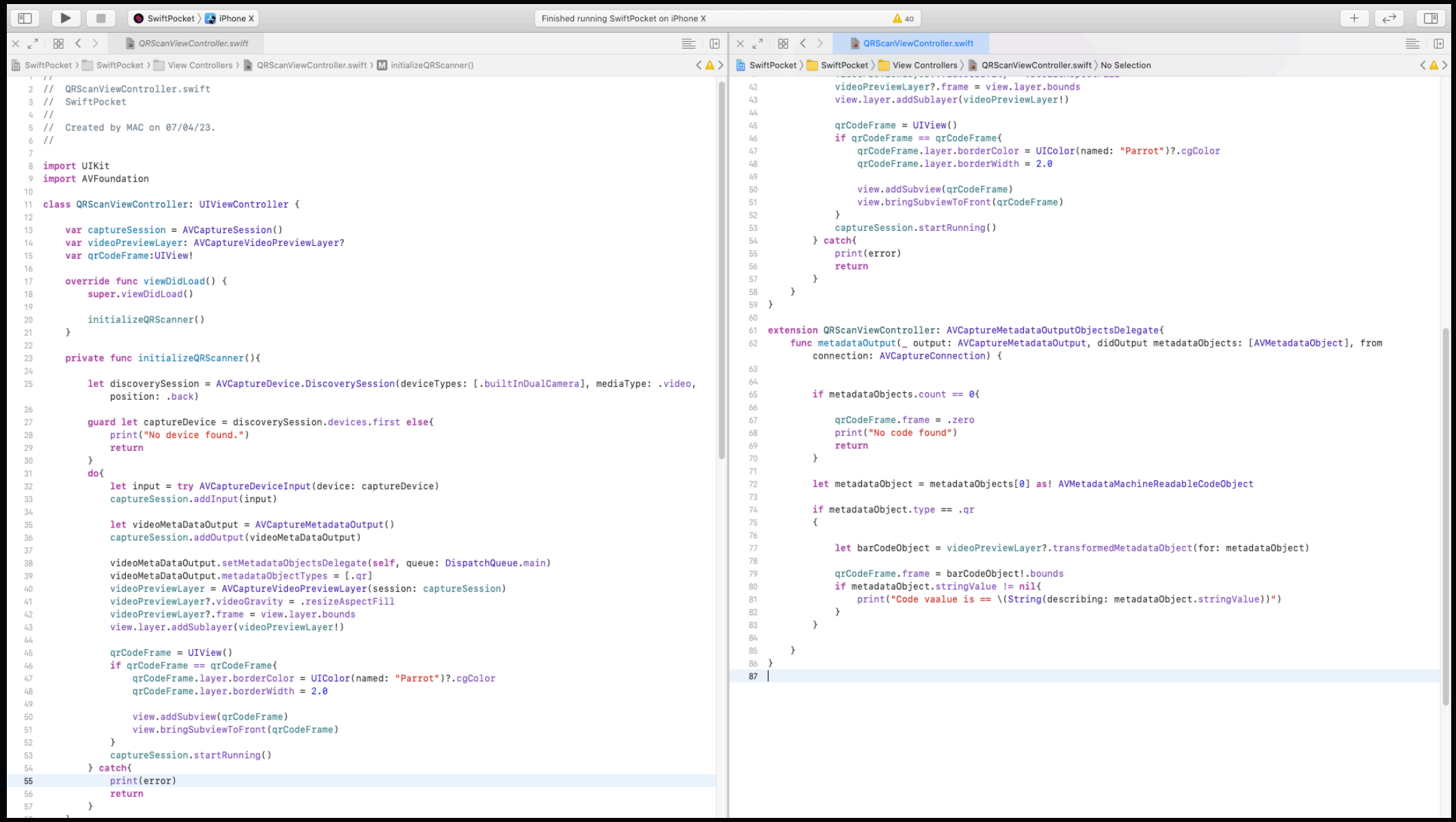
VIEW CONTROLLER



ASSETS

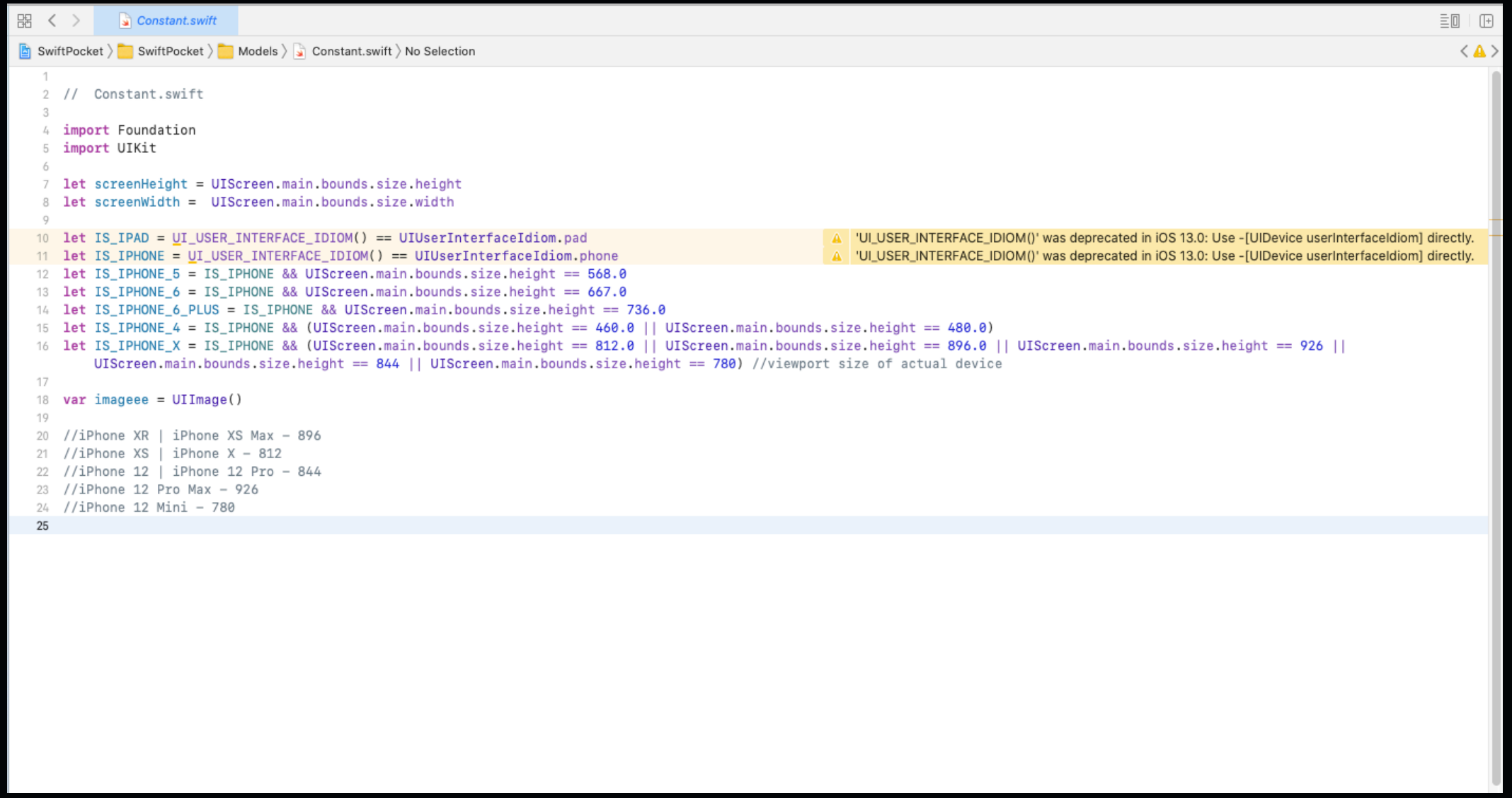

SwiftPocket
SwiftPocket
Assets.xcassets
ColorSet
AccentColor
AppIcon
Avatar
Broadband
Cable Operators
ColorSet
Contacts
Demo
Electricity
Fastag
Flat Illustrations
Gas
Icons
Lines
Logos
Mobile Operators
PayChat
Random
Filter
Candy
Color
Universal
Dark
Color
Universal
Fury
Color
Universal
Hot
Color
Universal
Navy
Color
Show Slicing

SCAN QR CODE

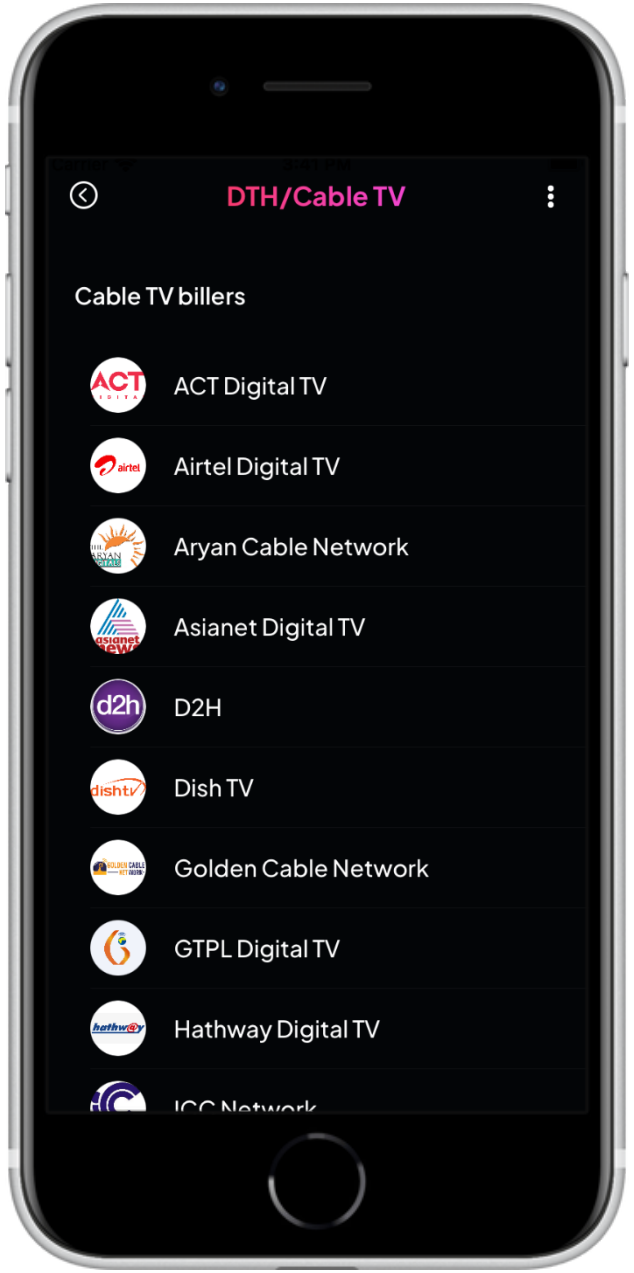


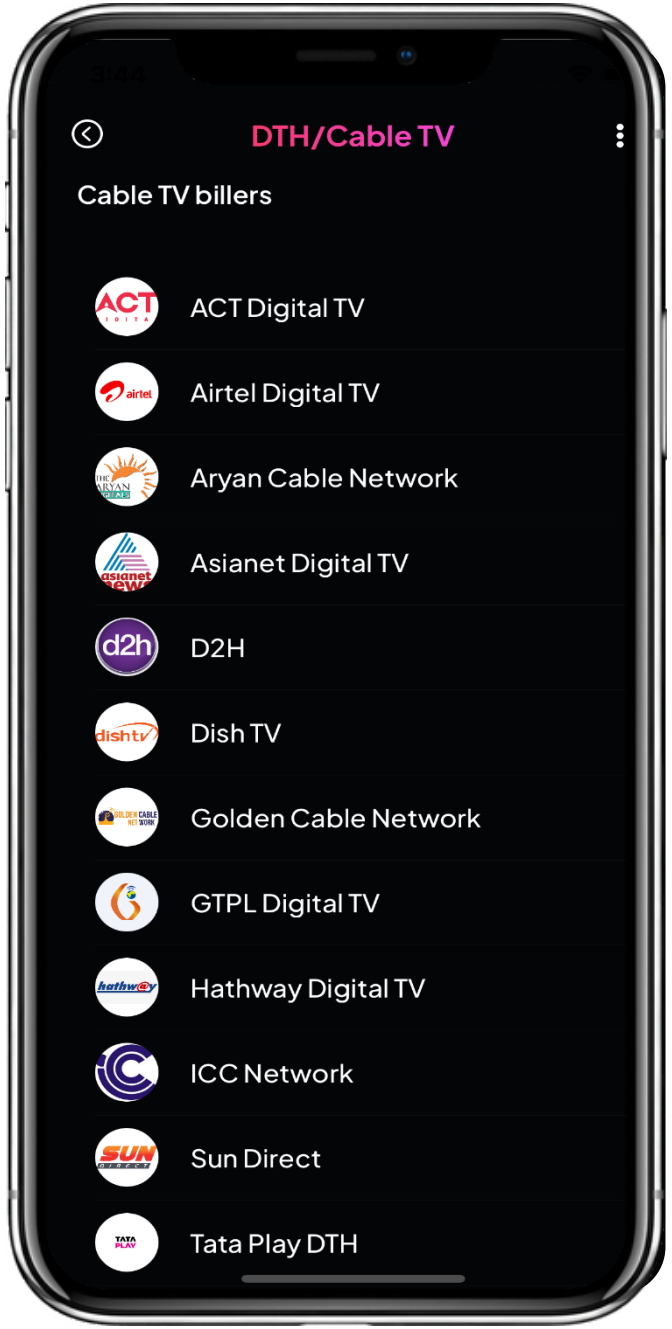

```swift
//
//  QRScanViewController.swift
//  SwiftPocket
//
//  Created by MAC on 07/04/23.
//

import UIKit
import AVFoundation

class QRScanViewController: UIViewController {

    var captureSession = AVCaptureSession()
    var videoPreviewLayer: AVCaptureVideoPreviewLayer?
    var qrCodeFrame:UIView!

    override func viewDidLoad() {
        super.viewDidLoad()

        initializeQRScanner()
    }

    private func initializeQRScanner(){

        let discoverySession = AVCaptureDevice.DiscoverySession(deviceTypes: [.builtInDualCamera], mediaType: .video,
            position: .back)

        guard let captureDevice = discoverySession.devices.first else{
            print("No device found.")
            return
        }
        do{
            let input = try AVCaptureDeviceInput(device: captureDevice)
            captureSession.addInput(input)

            let videoMetaDataOutput = AVCaptureMetadataOutput()
            captureSession.addOutput(videoMetaDataOutput)

            videoMetaDataOutput.setMetadataObjectsDelegate(self, queue: DispatchQueue.main)
            videoMetaDataOutput.metadataObjectTypes = [.qr]
            videoPreviewLayer = AVCaptureVideoPreviewLayer(session: captureSession)
            videoPreviewLayer?.videoGravity = .resizeAspectFill
            videoPreviewLayer?.frame = view.layer.bounds
            view.layer.addSublayer(videoPreviewLayer!)

            qrCodeFrame = UIView()
            if qrCodeFrame == qrCodeFrame{
                qrCodeFrame.layer.borderColor = UIColor(named: "Parrot")?.cgColor
                qrCodeFrame.layer.borderWidth = 2.0

                view.addSubview(qrCodeFrame)
                view.bringSubviewToFront(qrCodeFrame)
            }
            captureSession.startRunning()
        } catch{
            print(error)
            return
        }
    }
}

extension QRScanViewController: AVCaptureMetadataOutputObjectsDelegate{
    func metadataOutput(_ output: AVCaptureMetadataOutput, didOutput metadataObjects: [AVMetadataObject], from
        connection: AVCaptureConnection) {


        if metadataObjects.count == 0{

            qrCodeFrame.frame = .zero
            print("No code found")
            return
        }

        let metadataObject = metadataObjects[0] as! AVMetadataMachineReadableCodeObject

        if metadataObject.type == .qr
        {

            let barCodeObject = videoPreviewLayer?.transformedMetadataObject(for: metadataObject)

            qrCodeFrame.frame = barCodeObject!.bounds
            if metadataObject.stringValue != nil{
                print("Code vaalue is == \(String(describing: metadataObject.stringValue))")
            }
        }

    }
}
```

CONSTANTS


Constant.swift
SwiftPocket 〉 SwiftPocket 〉 Models 〉 Constant.swift 〉 No Selection
1
2 // Constant.swift
3
4 import Foundation
5 import UIKit
6
7 let screenHeight = UIScreen.main.bounds.size.height
8 let screenWidth = UIScreen.main.bounds.size.width
9
10 let IS_IPAD = UI_USER_INTERFACE_IDIOM() == UIUserInterfaceIdiom.pad
'UI_USER_INTERFACE_IDIOM()' was deprecated in iOS 13.0: Use -[UIDevice userInterfaceIdiom] directly.
11 let IS_IPHONE = UI_USER_INTERFACE_IDIOM() == UIUserInterfaceIdiom.phone
'UI_USER_INTERFACE_IDIOM()' was deprecated in iOS 13.0: Use -[UIDevice userInterfaceIdiom] directly.
12 let IS_IPHONE_5 = IS_IPHONE && UIScreen.main.bounds.size.height == 568.0
13 let IS_IPHONE_6 = IS_IPHONE && UIScreen.main.bounds.size.height == 667.0
14 let IS_IPHONE_6_PLUS = IS_IPHONE && UIScreen.main.bounds.size.height == 736.0
15 let IS_IPHONE_4 = IS_IPHONE && (UIScreen.main.bounds.size.height == 460.0 || UIScreen.main.bounds.size.height == 480.0)
16 let IS_IPHONE_X = IS_IPHONE && (UIScreen.main.bounds.size.height == 812.0 || UIScreen.main.bounds.size.height == 896.0 || UIScreen.main.bounds.size.height == 926 ||
UIScreen.main.bounds.size.height == 844 || UIScreen.main.bounds.size.height == 780) //viewport size of actual device
17
18 var imageee = UIImage()
19
20 //iPhone XR | iPhone XS Max - 896
21 //iPhone XS | iPhone X - 812
22 //iPhone 12 | iPhone 12 Pro - 844
23 //iPhone 12 Pro Max - 926
24 //iPhone 12 Mini - 780
25

CONSTANTS

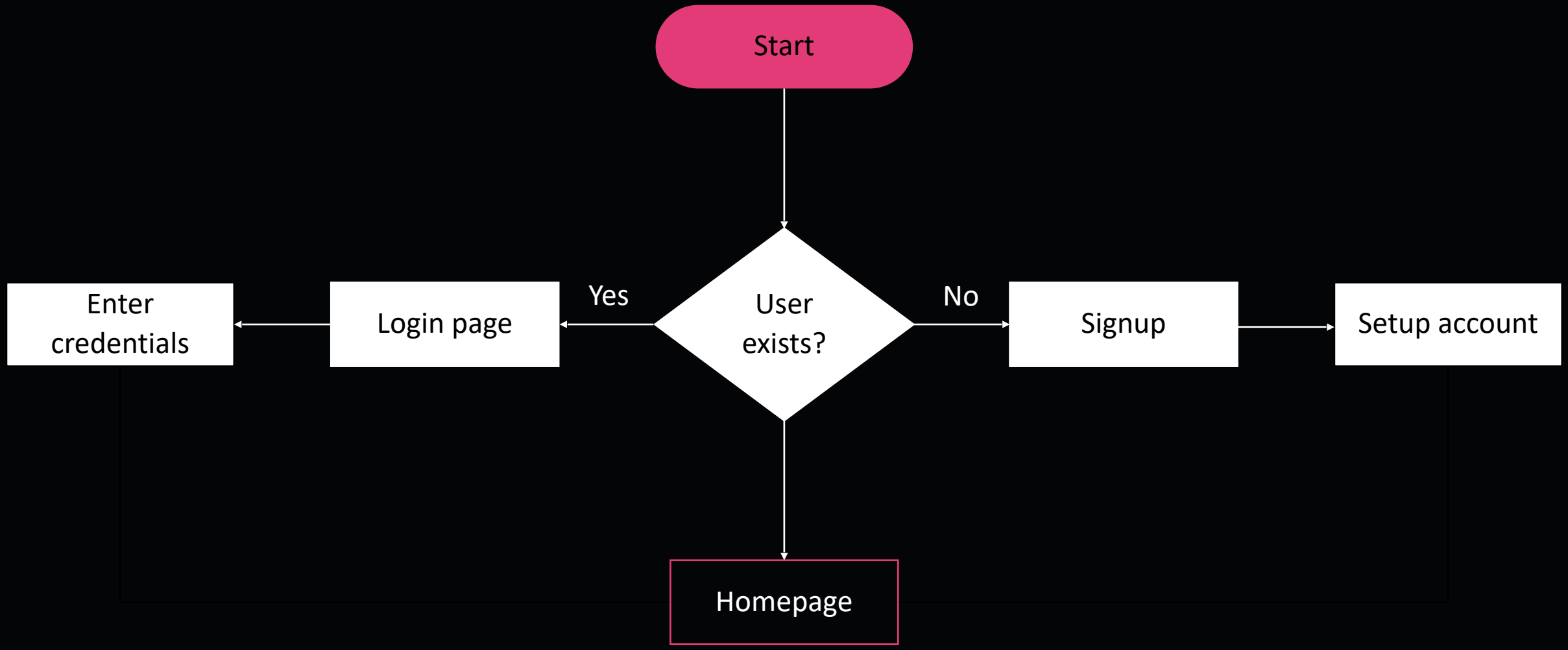

DTH/Cable TV
Cable TV billers
ACT Digital TV
Airtel Digital TV
Aryan Cable Network
Asianet Digital TV
D2H
Dish TV
Golden Cable Network
GTPL Digital TV
Hathway Digital TV


DTH/Cable TV
Cable TV billers
ACT Digital TV
Airtel Digital TV
Aryan Cable Network
Asianet Digital TV
D2H
Dish TV
Golden Cable Network
GTPL Digital TV
Hathway Digital TV
ICC Network
Sun Direct
Tata Play DTH

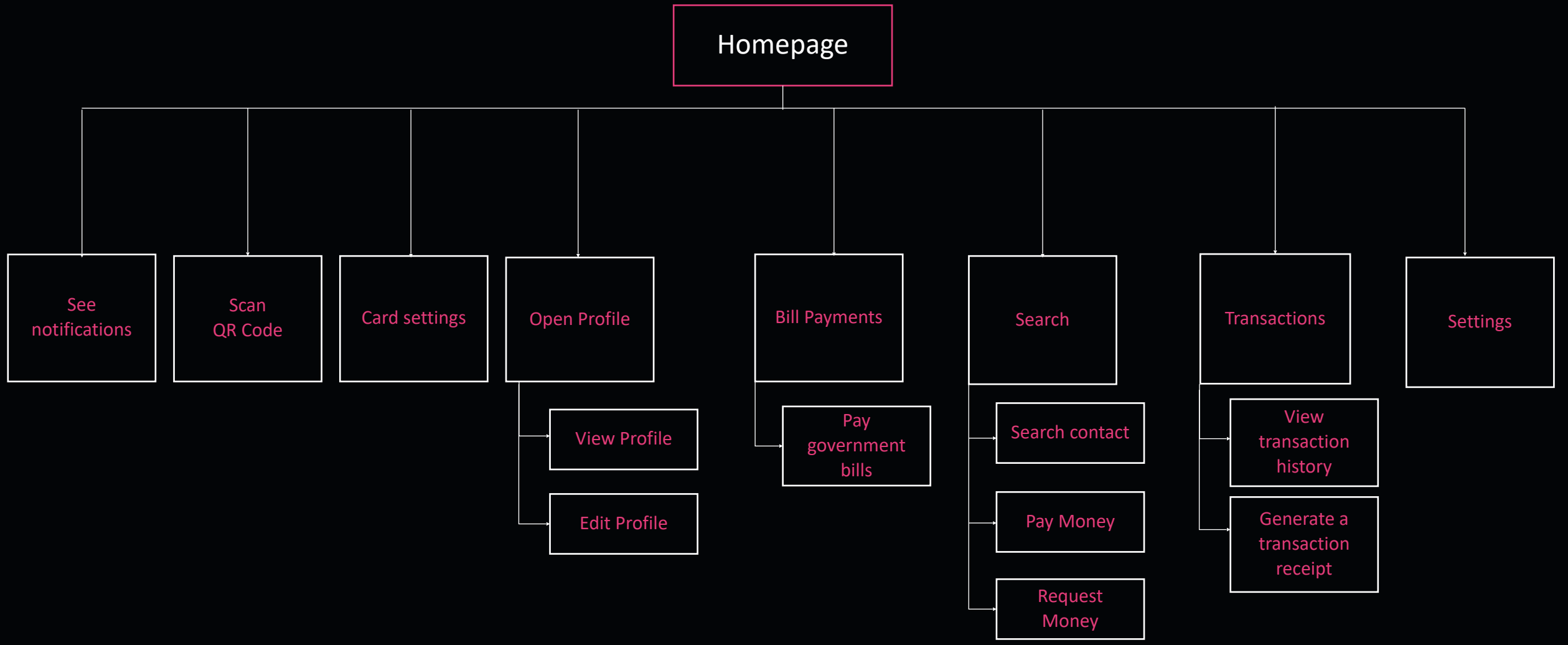
JOURNEY MAP

ACTION	Open the app	Look for contacts, services and more	Pay or Request money	Get all transaction history
TASK LIST	1. Get onboard 2. Login/Sign up 3. Go to homepage	1. Scroll homepage 2. Card settings, pay contacts 3. Bills and more	1. Pay a contact 2. Pay for a subscription and more 3. Request a friend	1. See transaction history 2. Generate Receipt

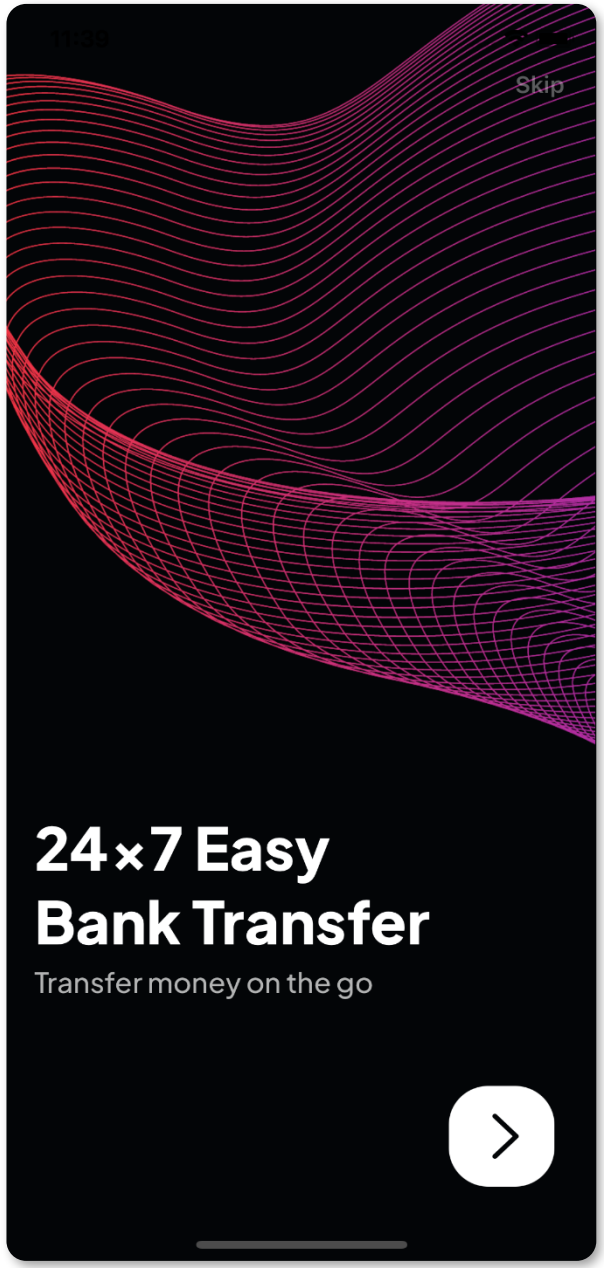
APP FLOW

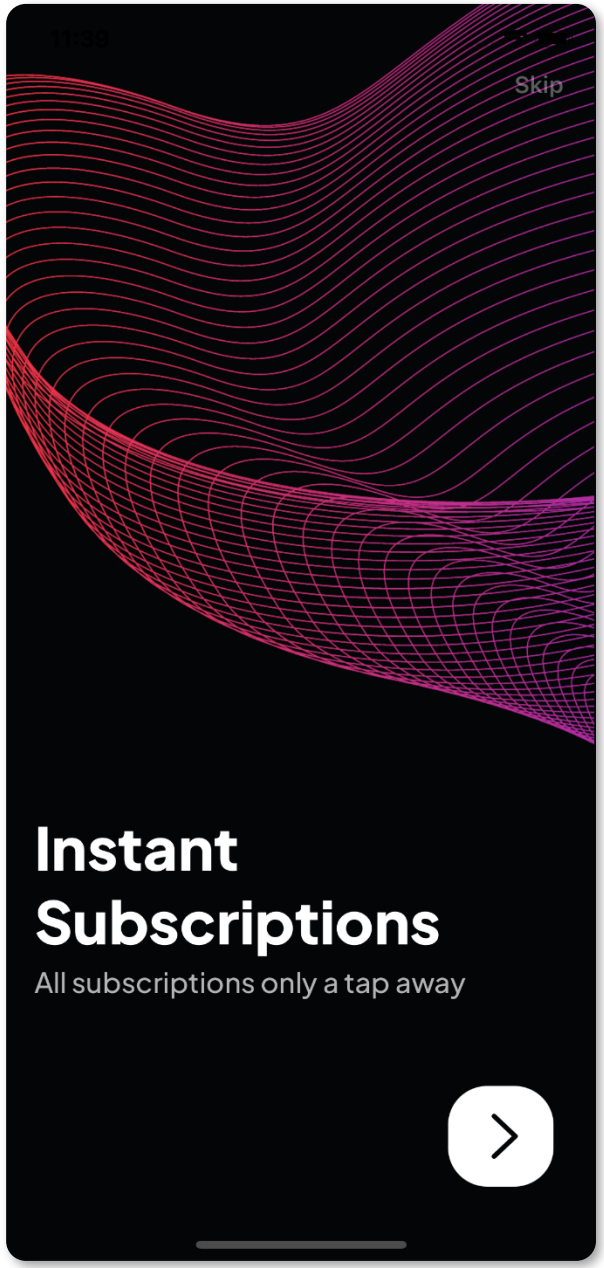

Start
User exists?
Yes
No
Login page
Enter credentials
Signup
Setup account
Homepage

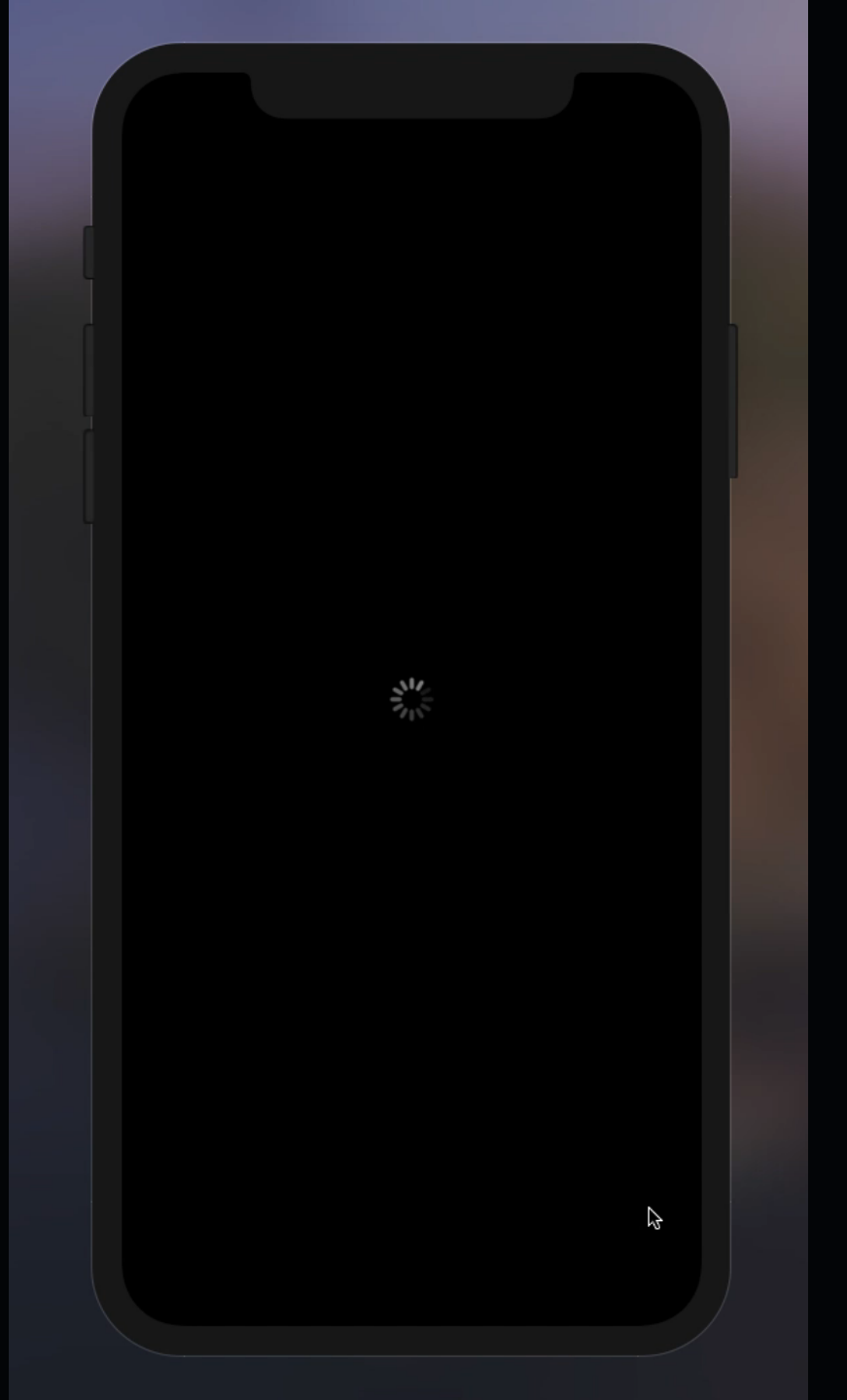
APP FLOW


Homepage
See notifications
Scan QR Code
Card settings
Open Profile
Bill Payments
Search
Transactions
Settings
View Profile
Edit Profile
Pay government bills
Search contact
Pay Money
Request Money
View transaction history
Generate a transaction receipt

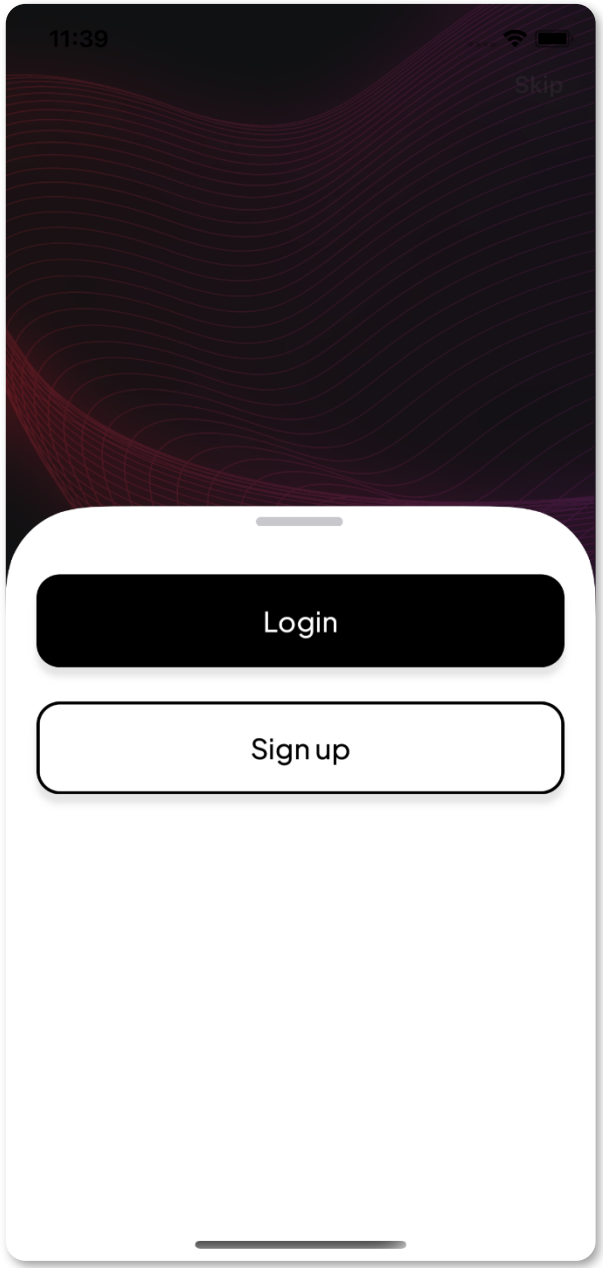
ONBOARDING SLIDES

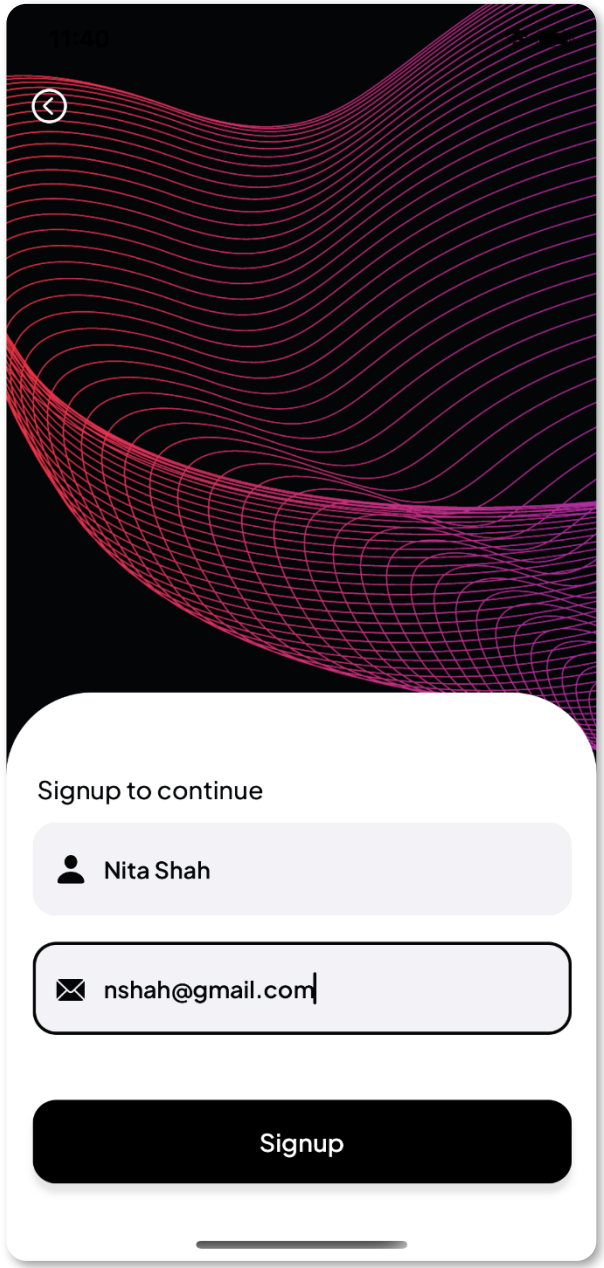


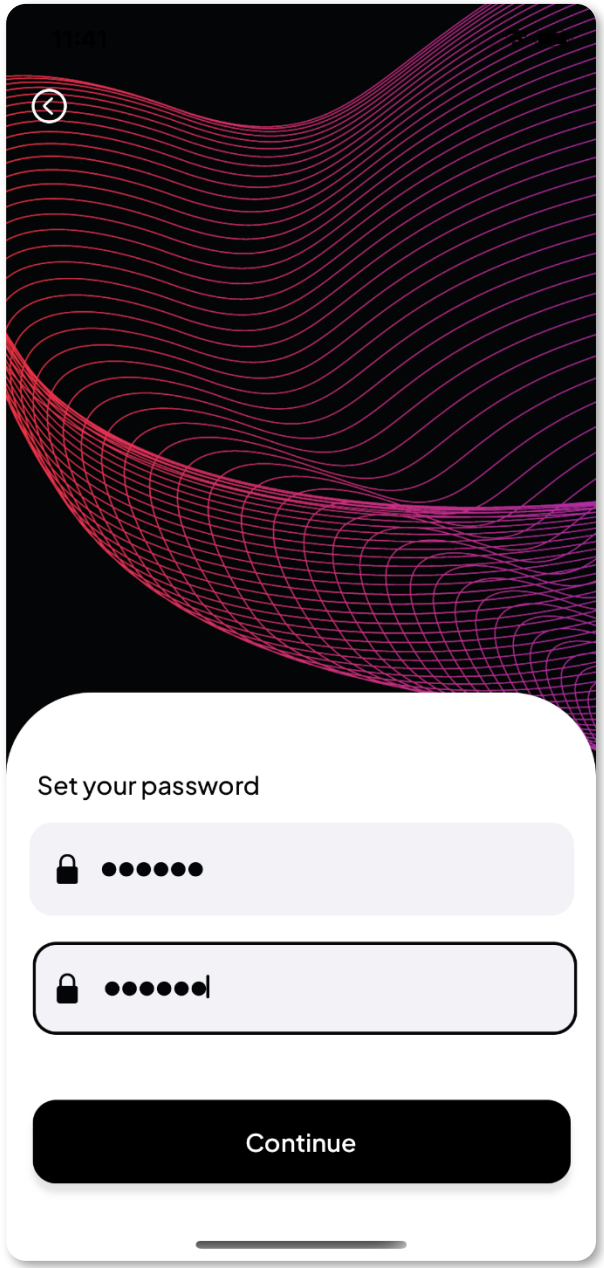


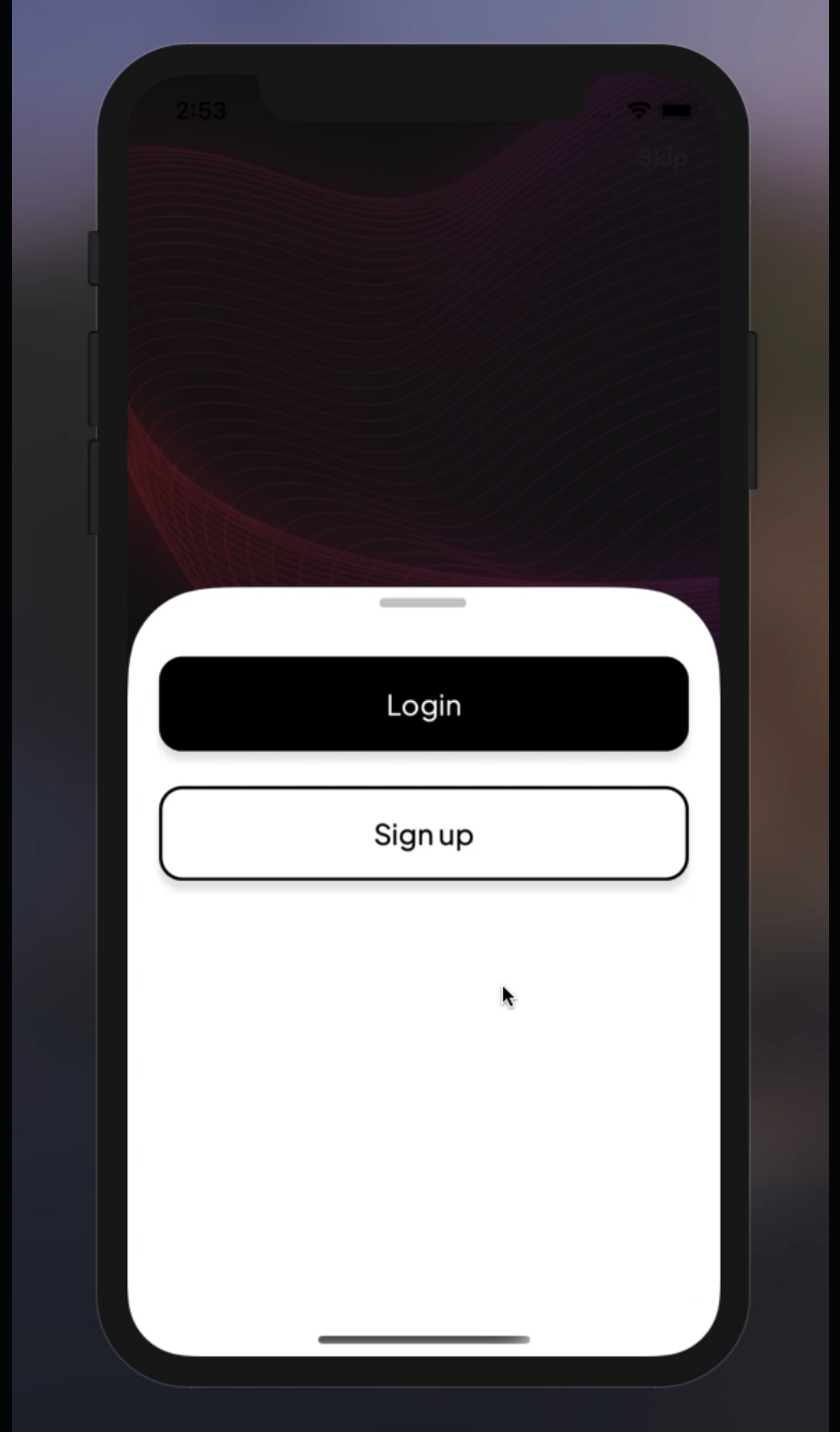


SIGN UP

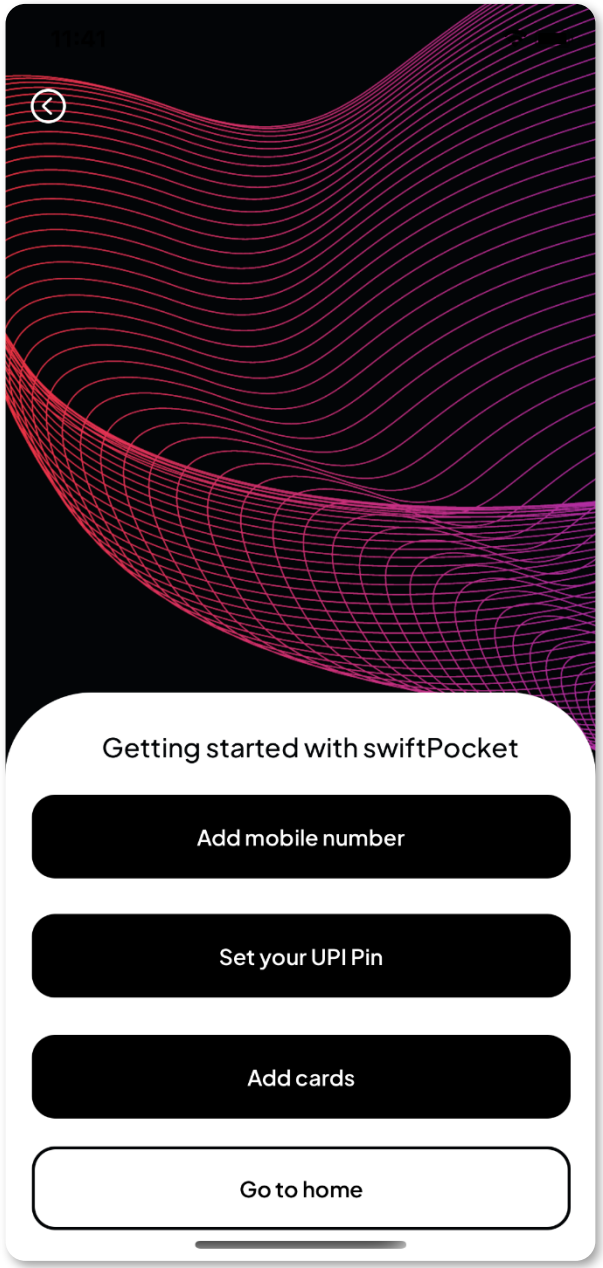

11:39
Skip
Login
Sign up

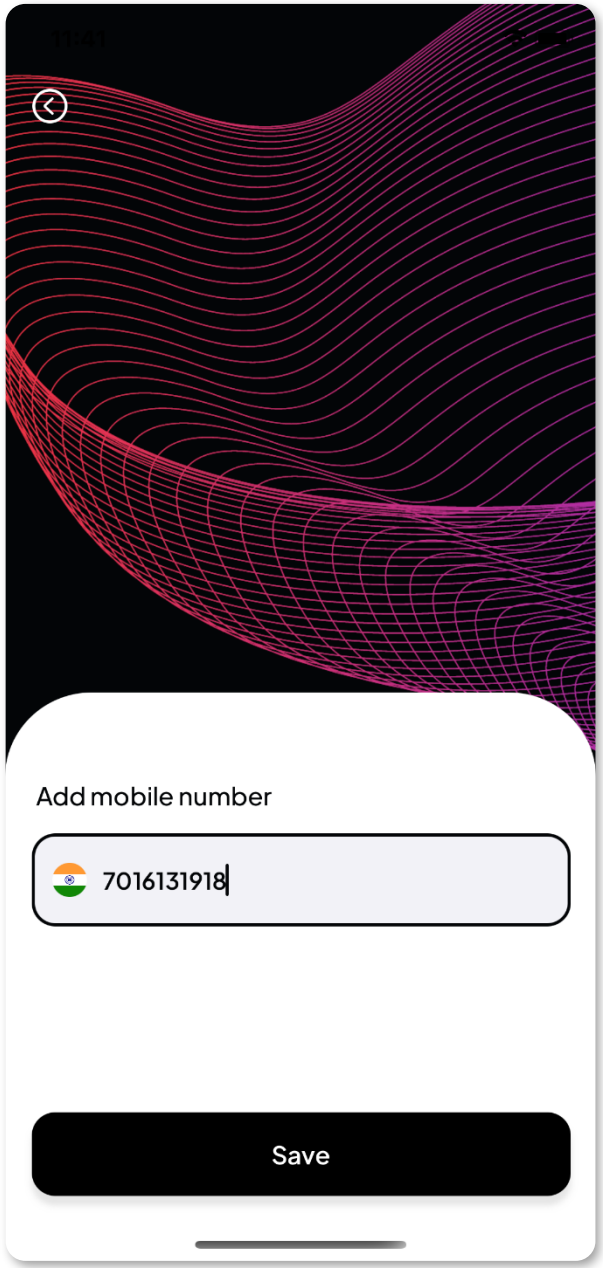

11:40
Signup to continue
Nita Shah
nshah@gmail.com
Signup


11:41
Set your password
Continue

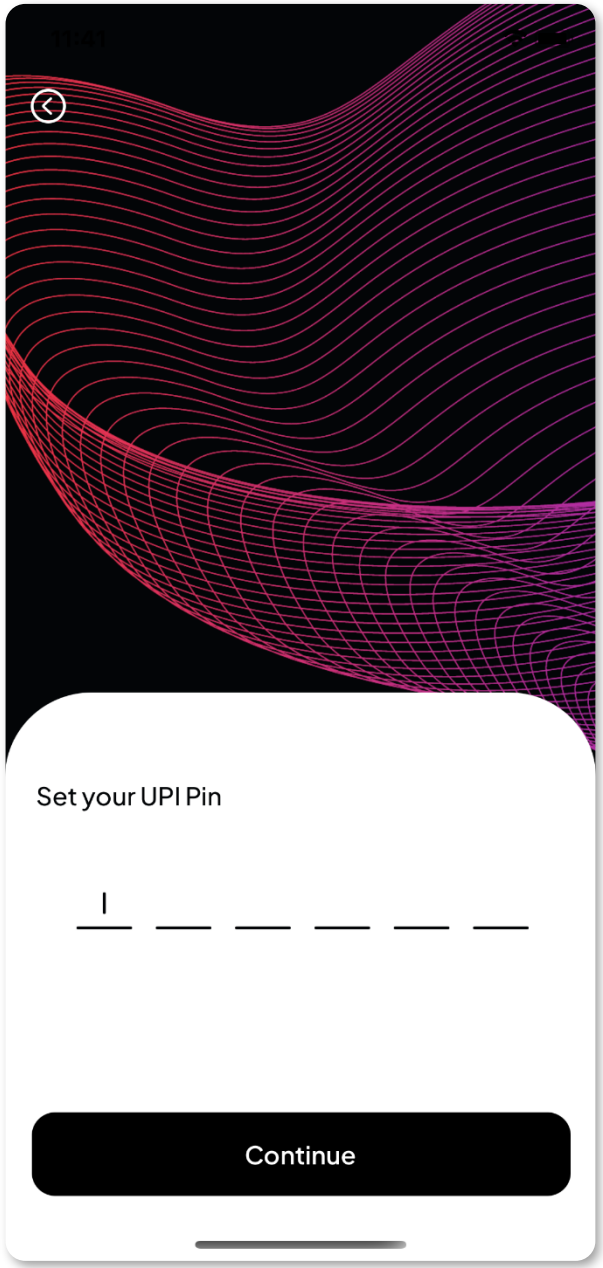

2:53
Skip
Login
Sign up

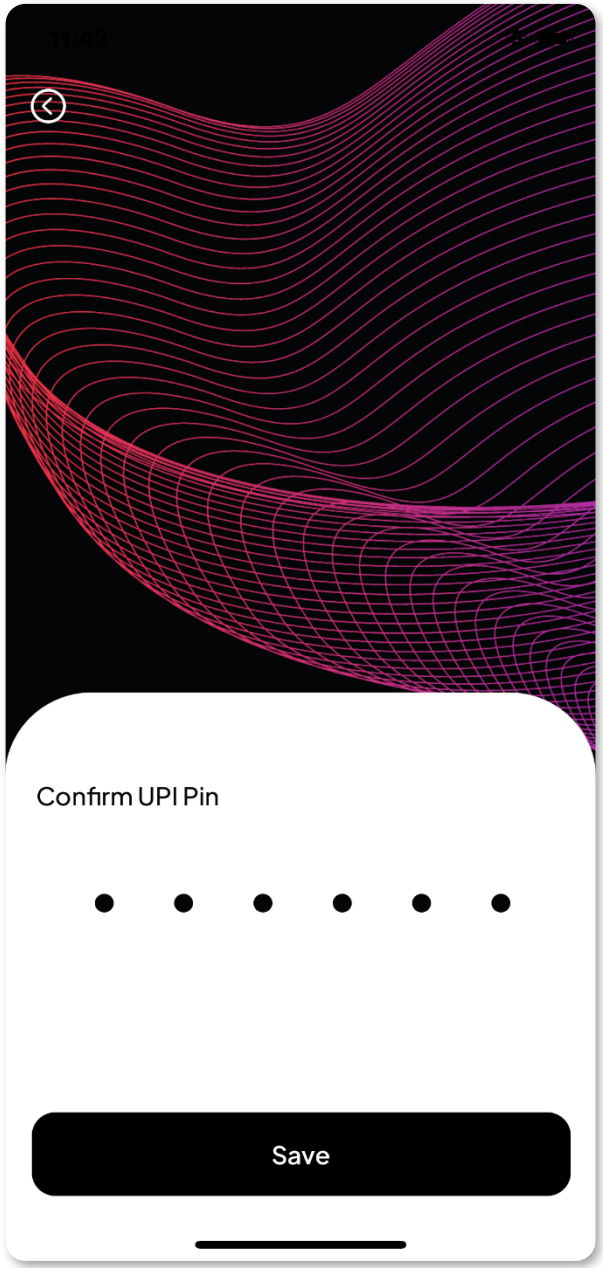
ACCOUNT SETUP- ADD MOBILE NUMBER



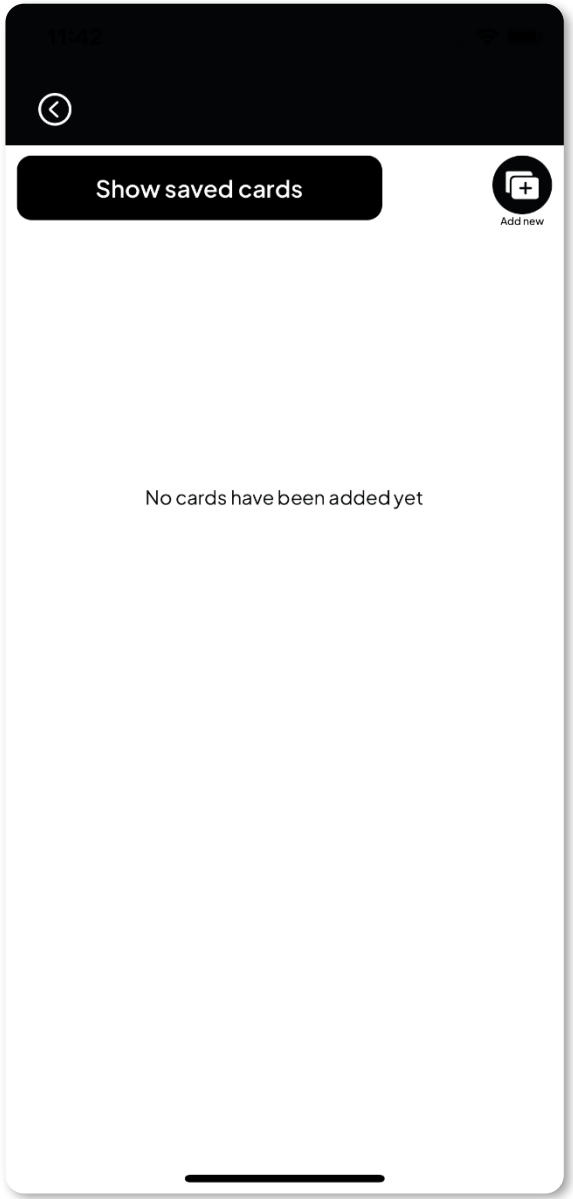


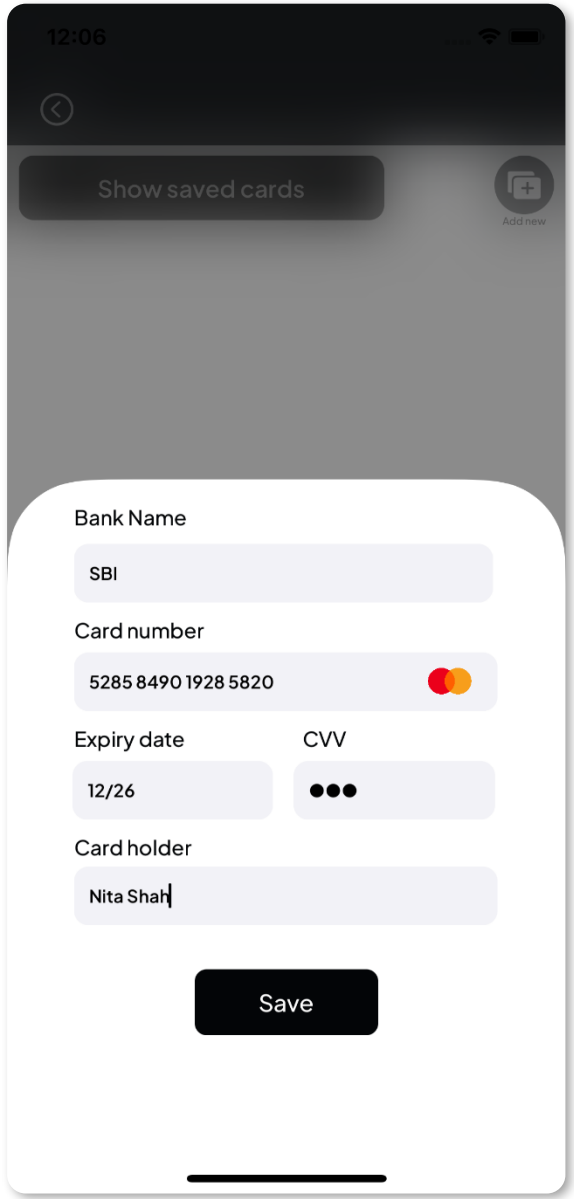
ACCOUNT SETUP- SET UPI

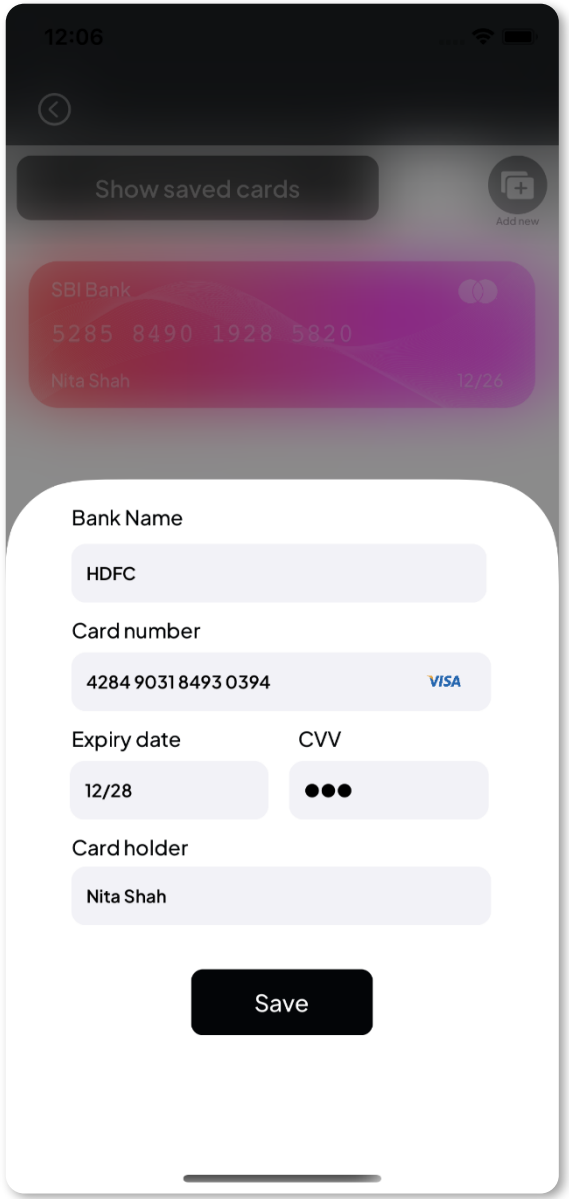


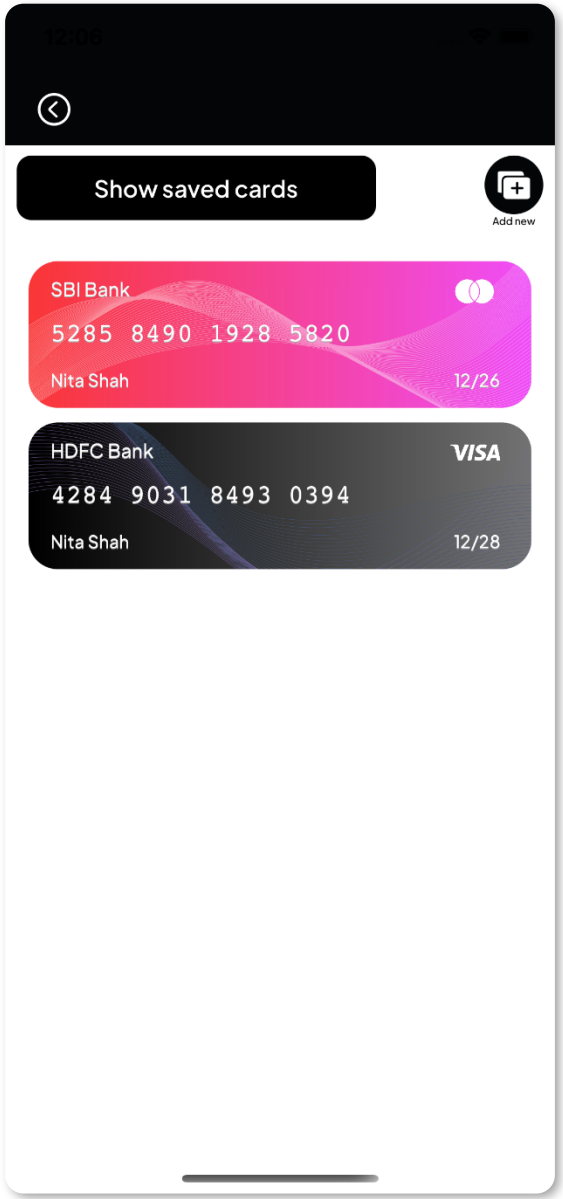


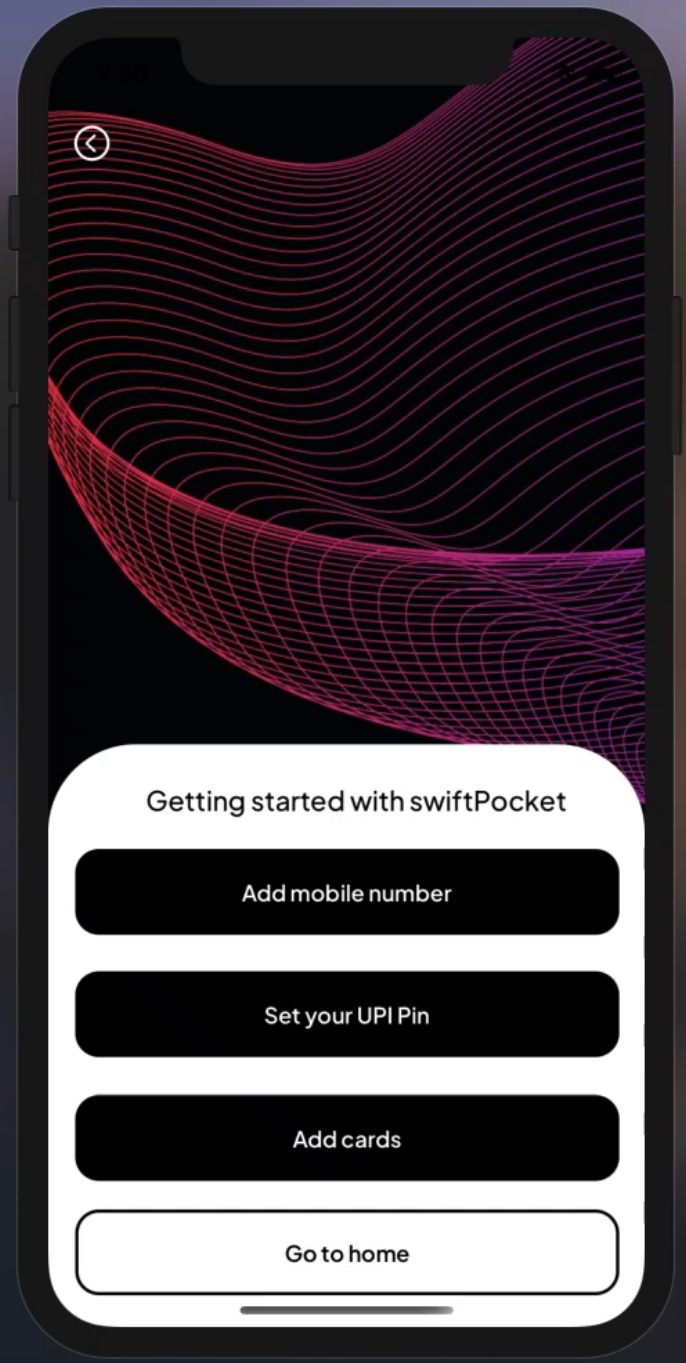
ACCOUNT SETUP- ADD CARDS

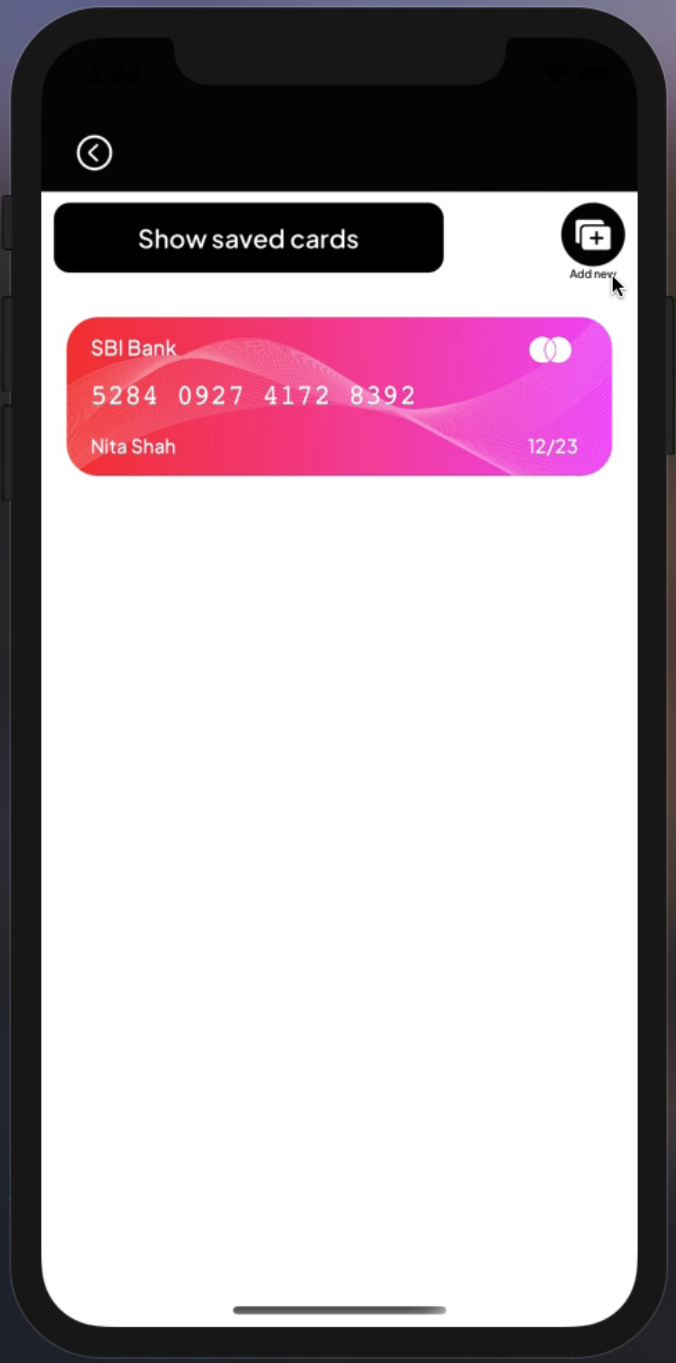


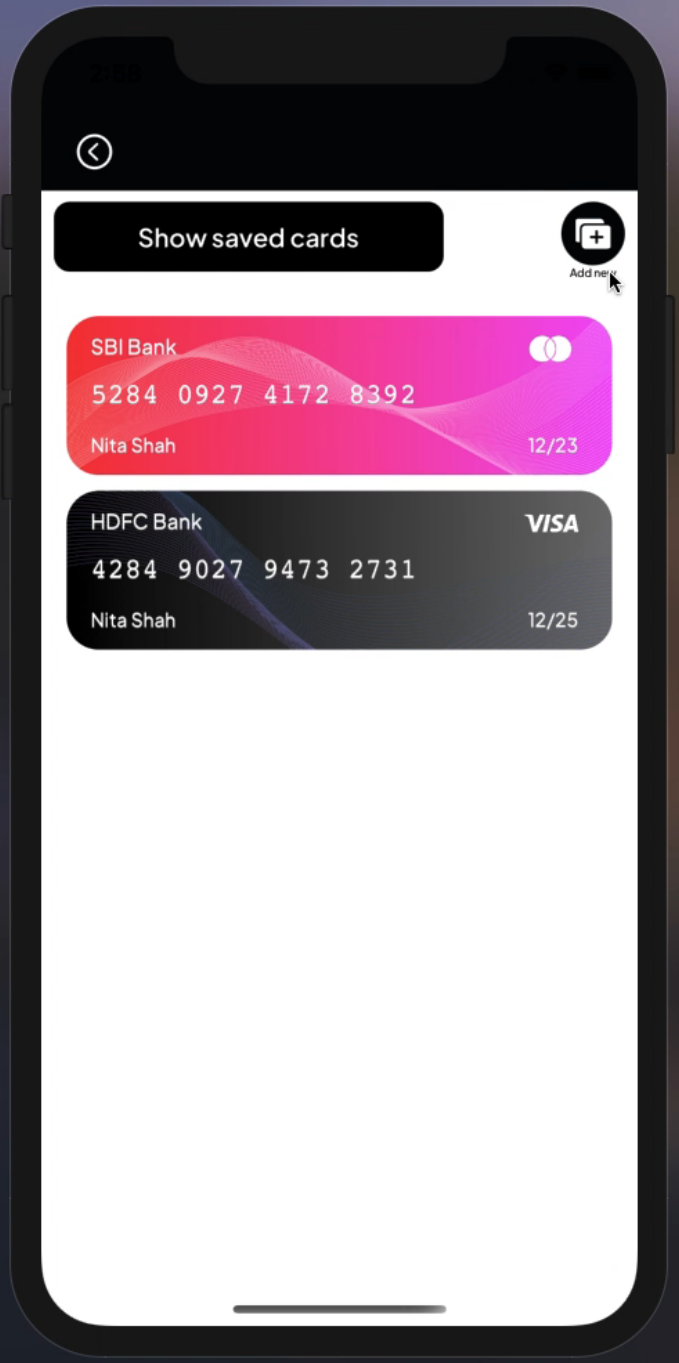




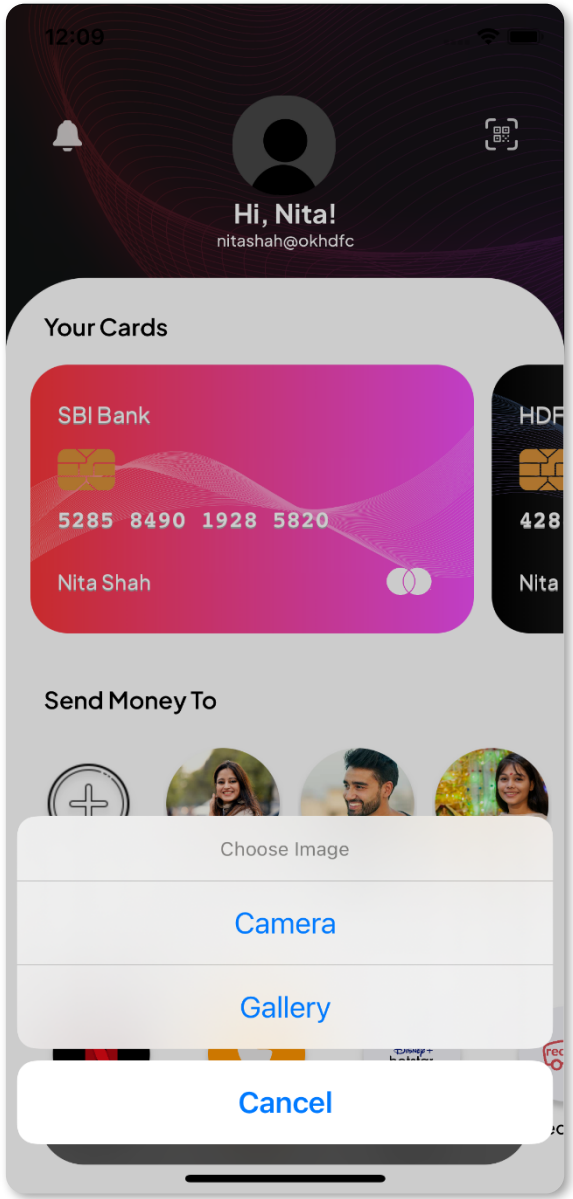


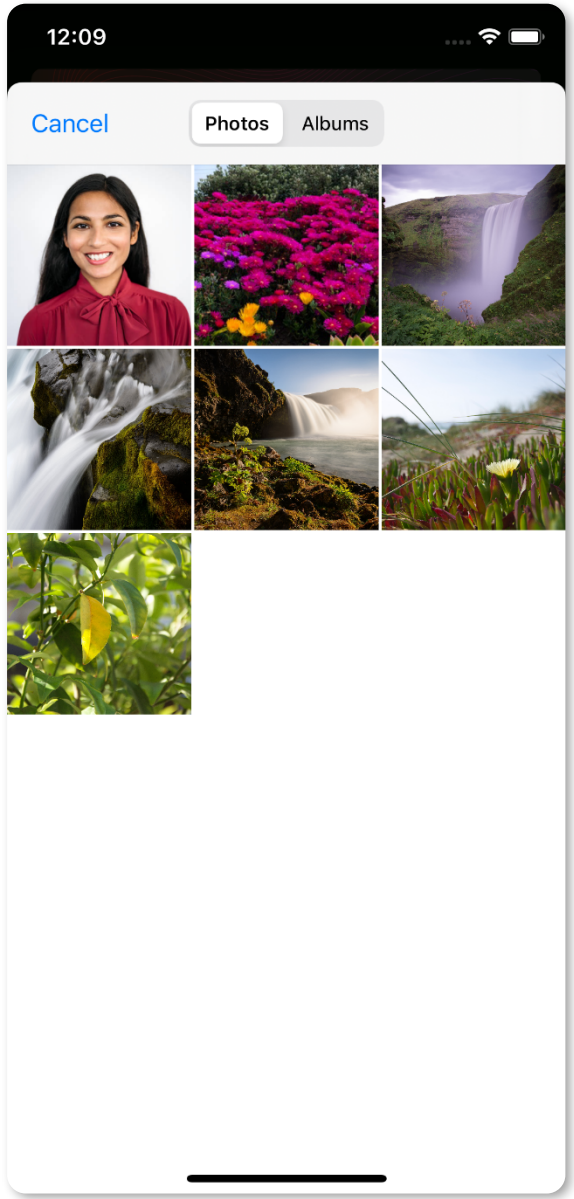

Getting started with swiftPocket
Add mobile number
Set your UPI Pin
Add cards
Go to home

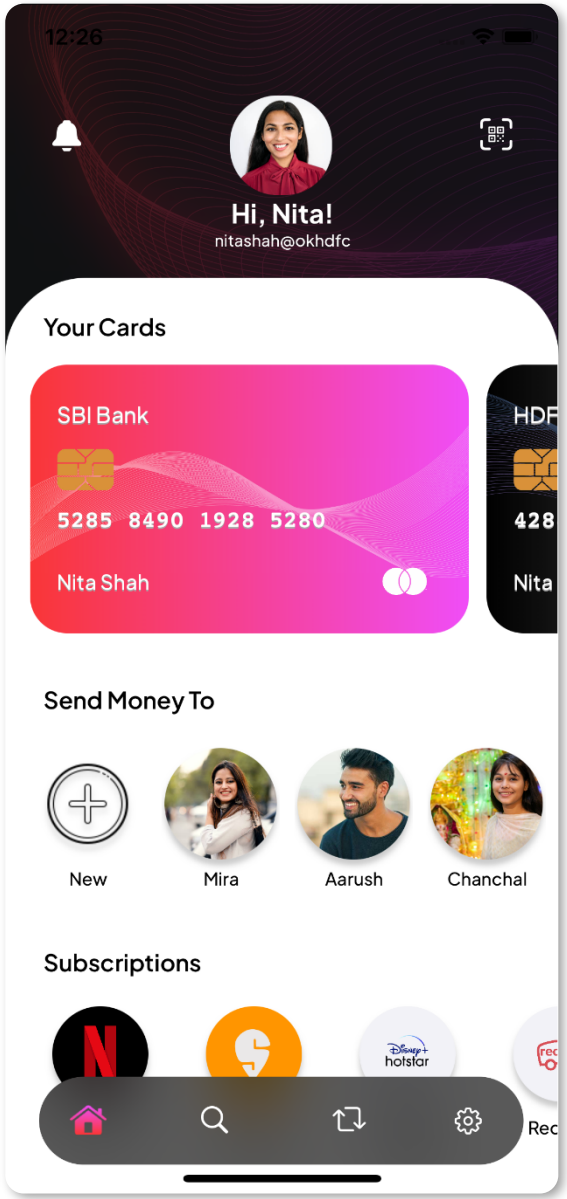

Show saved cards
Add new
SBI Bank
5284 0927 4172 8392
Nita Shah
12/23

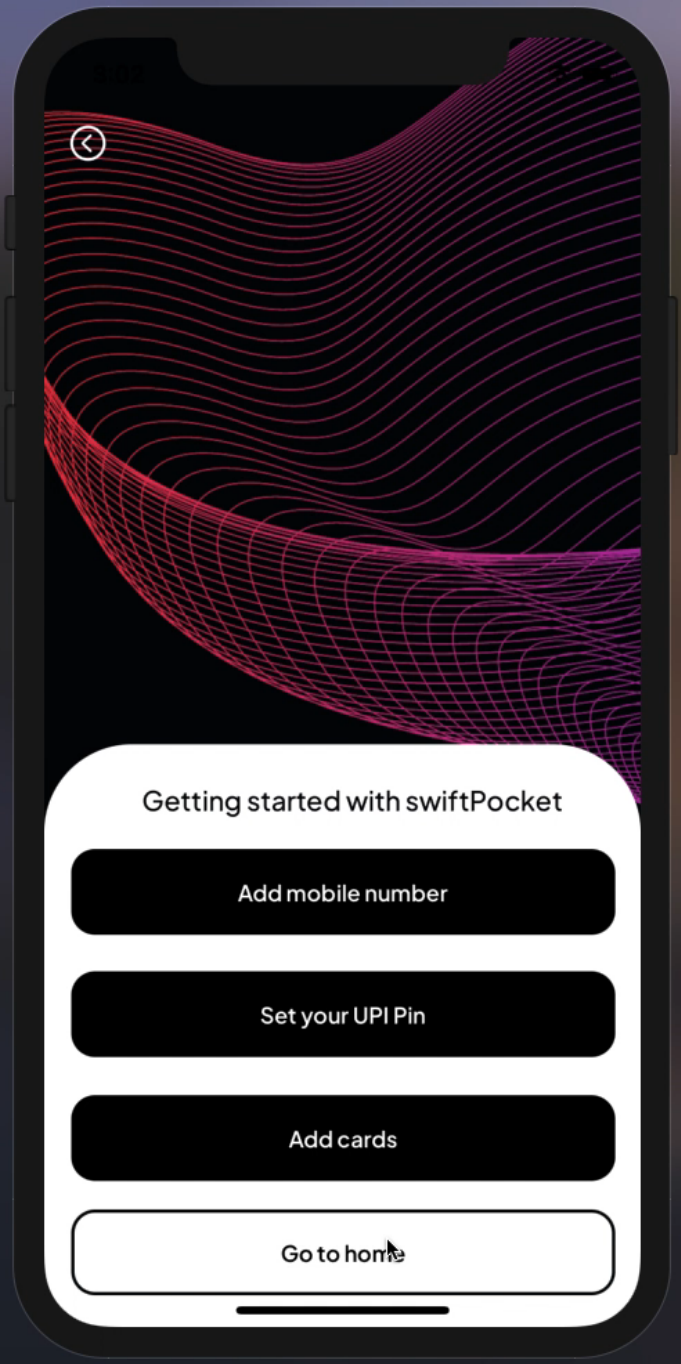

Show saved cards
Add new
SBI Bank
5284 0927 4172 8392
Nita Shah
12/23
HDFC Bank
VISA
4284 9027 9473 2731
Nita Shah
12/25

ADD PHOTO

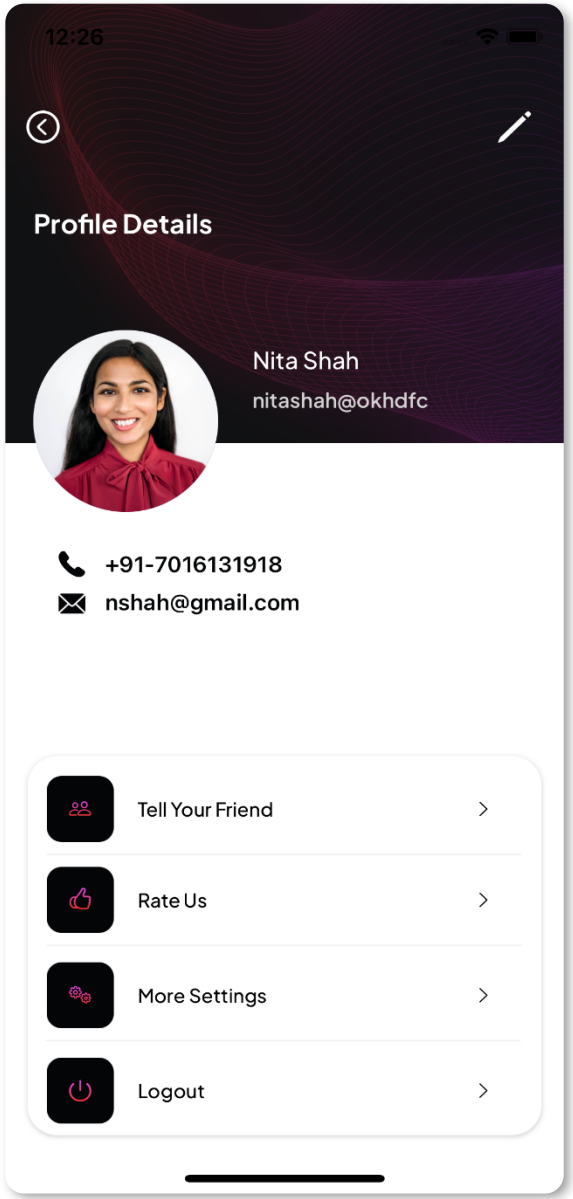

12:09
Hi, Nita!
nitashah@okhdfc
Your Cards
SBI Bank
5285 8490 1928 5820
Nita Shah
HDF
428
Nita
Send Money To
Choose Image
Camera
Gallery
Cancel

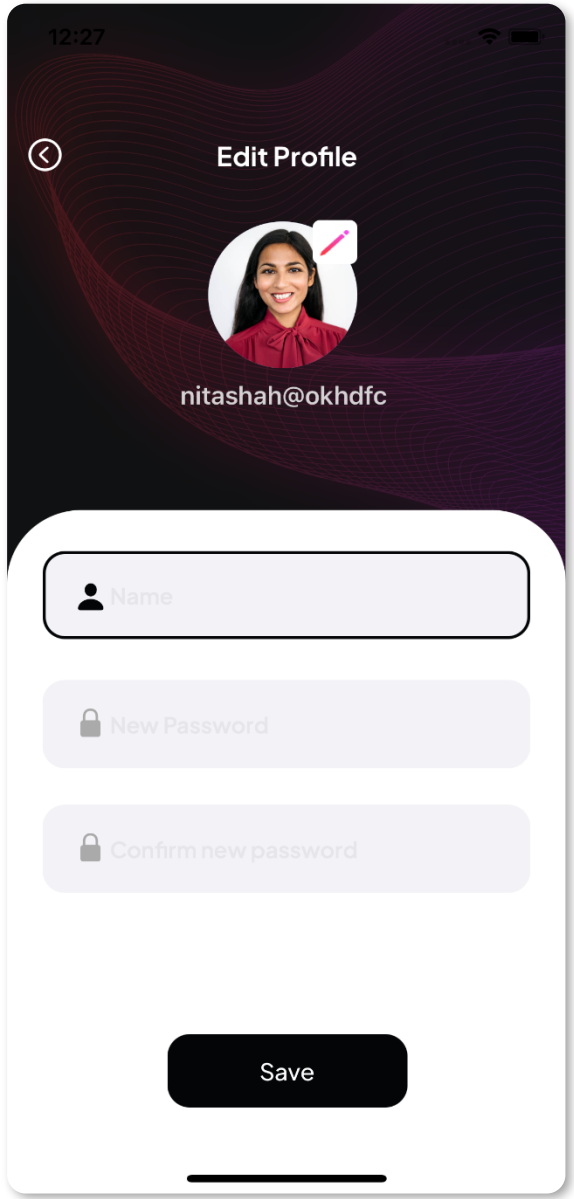

12:09
Cancel
Photos
Albums

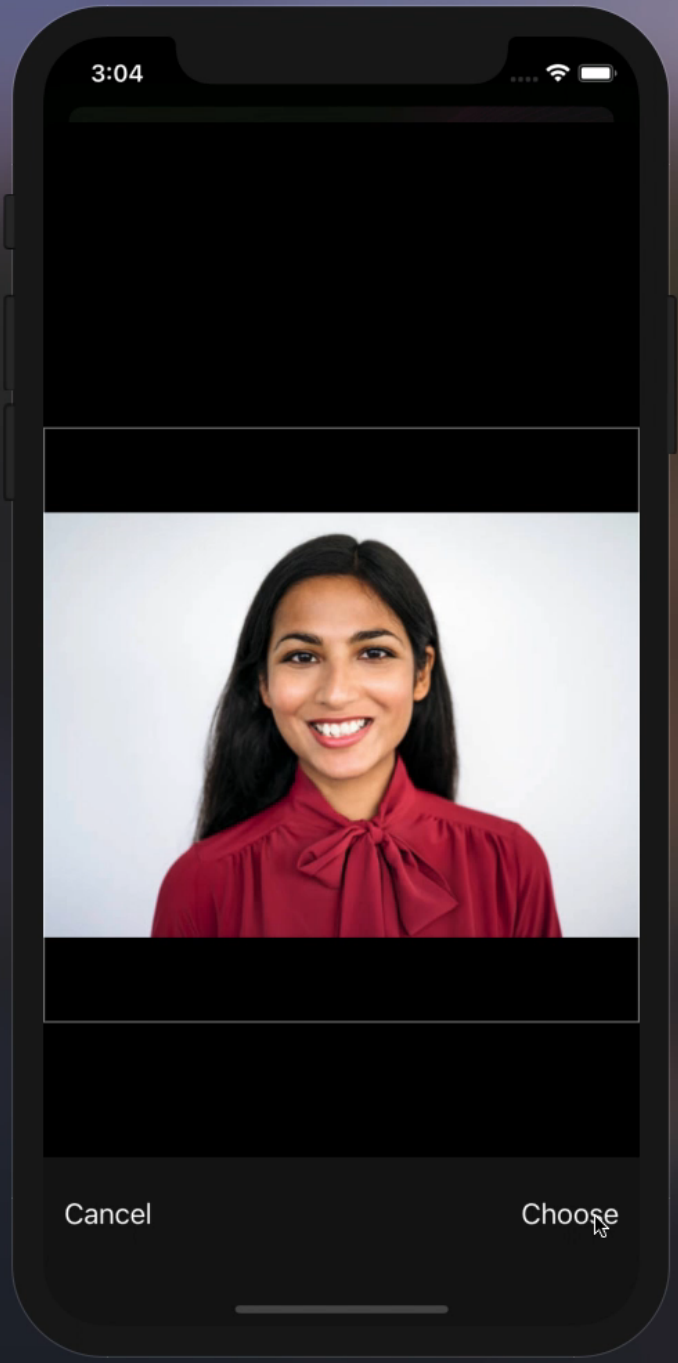

12:26
Hi, Nita!
nitashah@okhdfc
Your Cards
SBI Bank
5285 8490 1928 5280
Nita Shah
HDF
428
Nita
Send Money To
New
Mira
Aarush
Chanchal
Subscriptions
Rec


Getting started with swiftPocket
Add mobile number
Set your UPI Pin
Add cards
Go to home

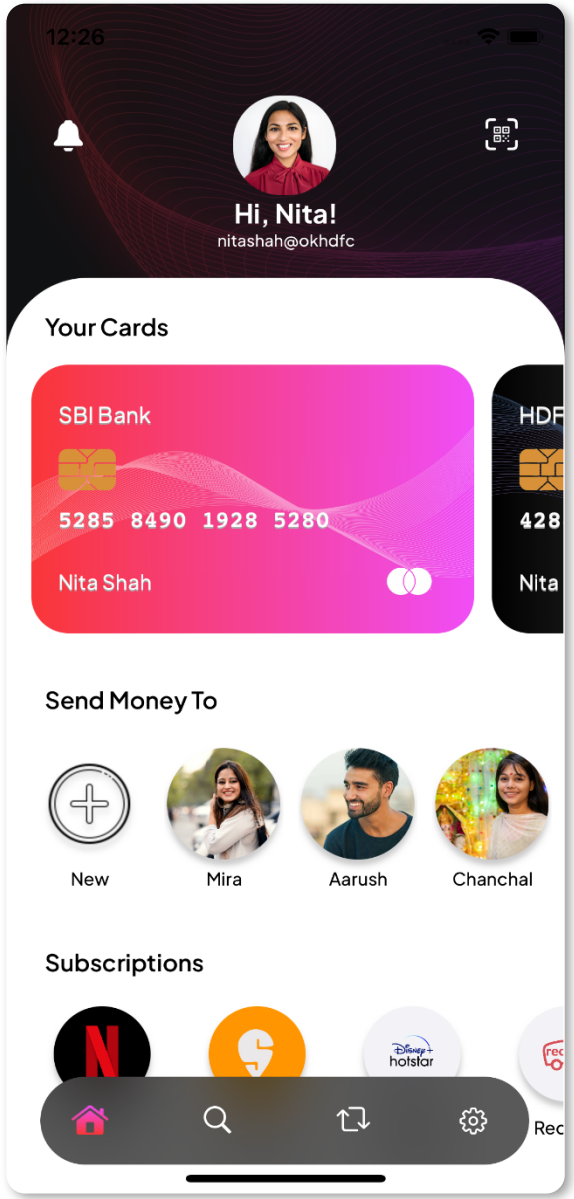
PROFILE & EDIT PROFILE

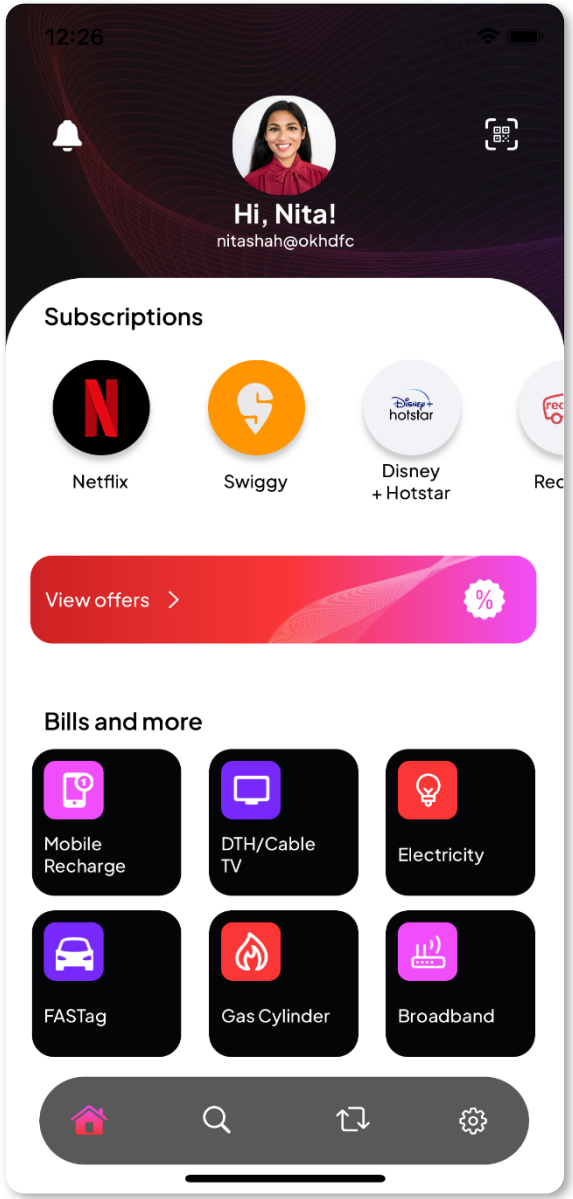


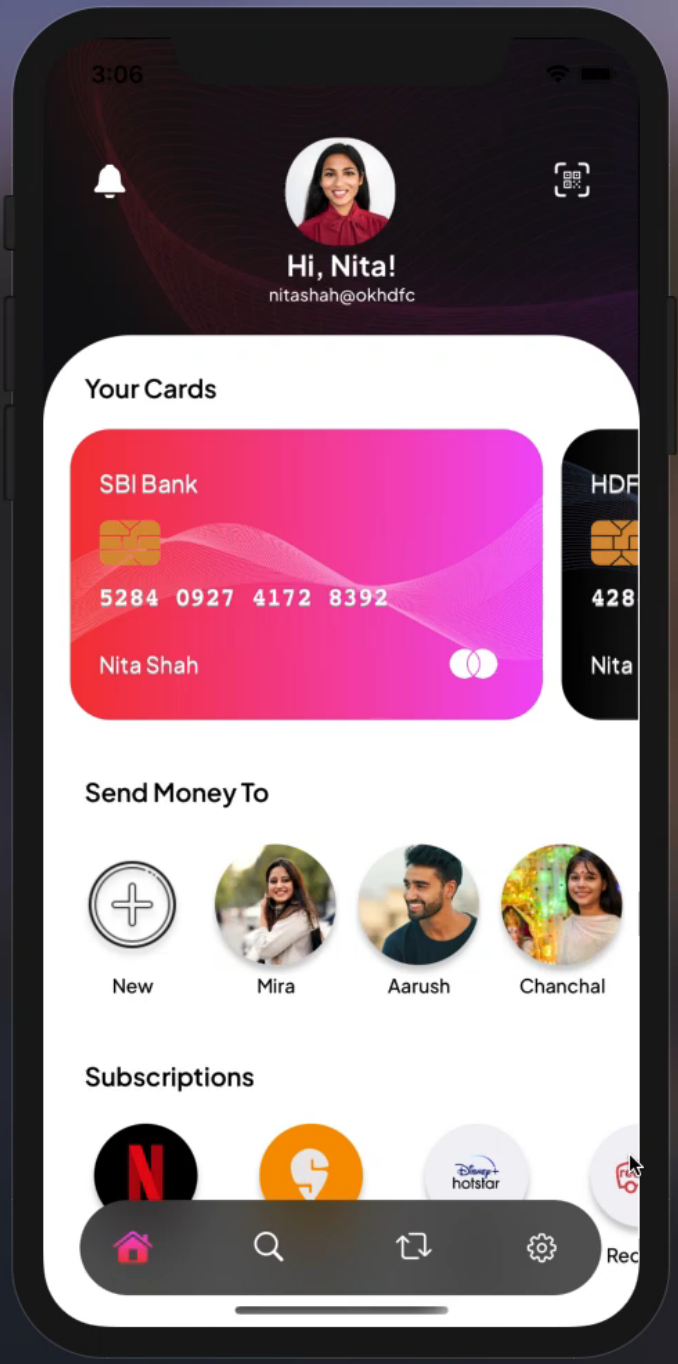


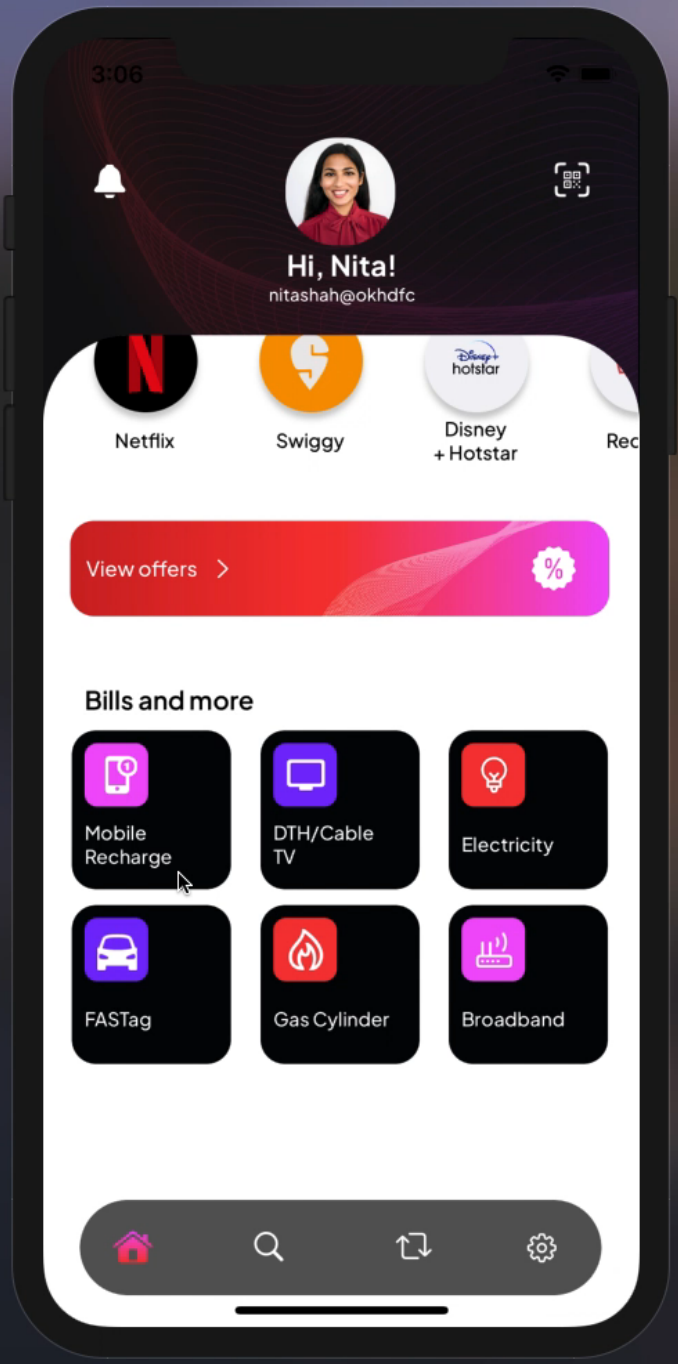

3:04
Cancel
Choose

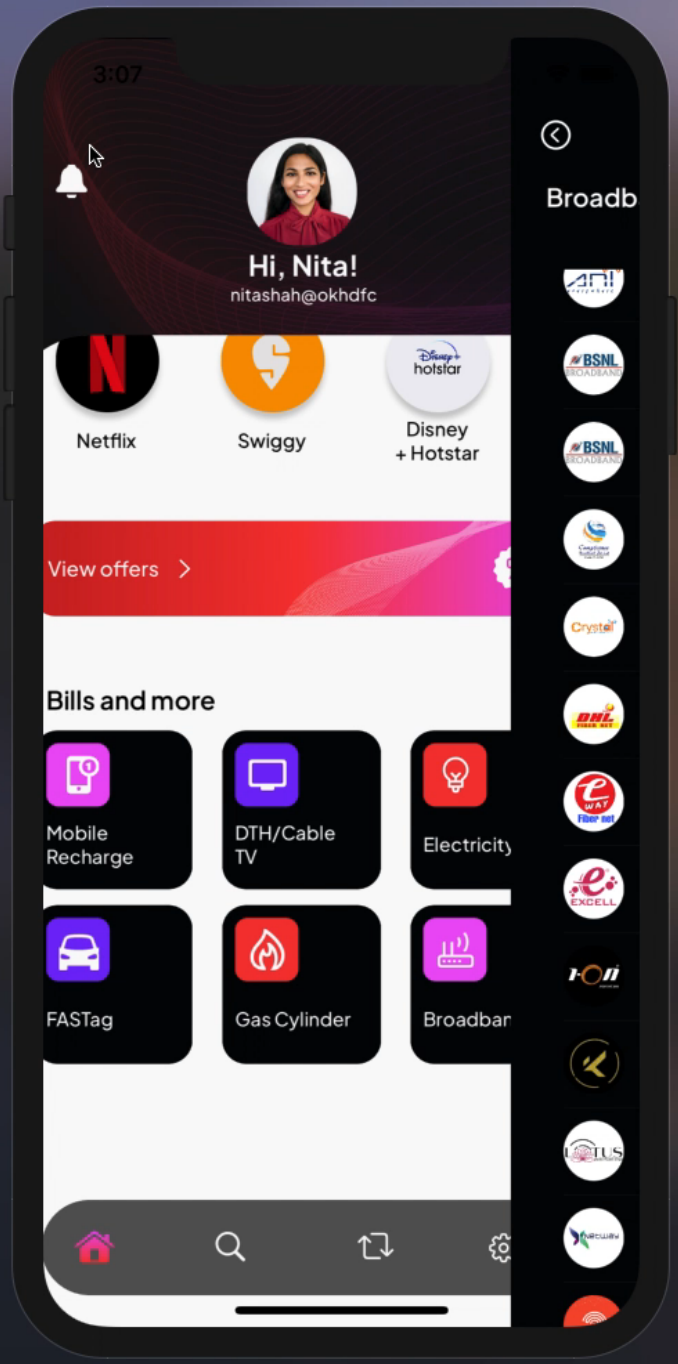
HOMEPAGE


12:26
Hi, Nita!
nitashah@okhdfc
Your Cards
SBI Bank
5285 8490 1928 5280
Nita Shah
HDF
428
Nita
Send Money To
New
Mira
Aarush
Chanchal
Subscriptions
Rec

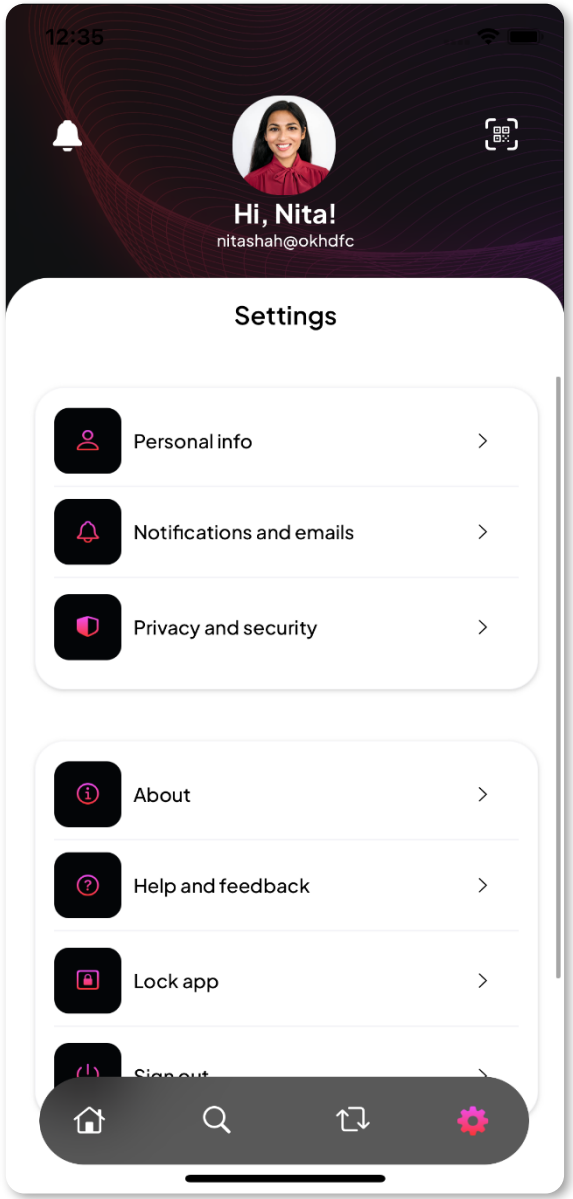

12:26
Hi, Nita!
nitashah@okhdfc
Subscriptions
Netflix
Swiggy
Disney + Hotstar
Rec
View offers
Bills and more
Mobile Recharge
DTH/Cable TV
Electricity
FASTag
Gas Cylinder
Broadband

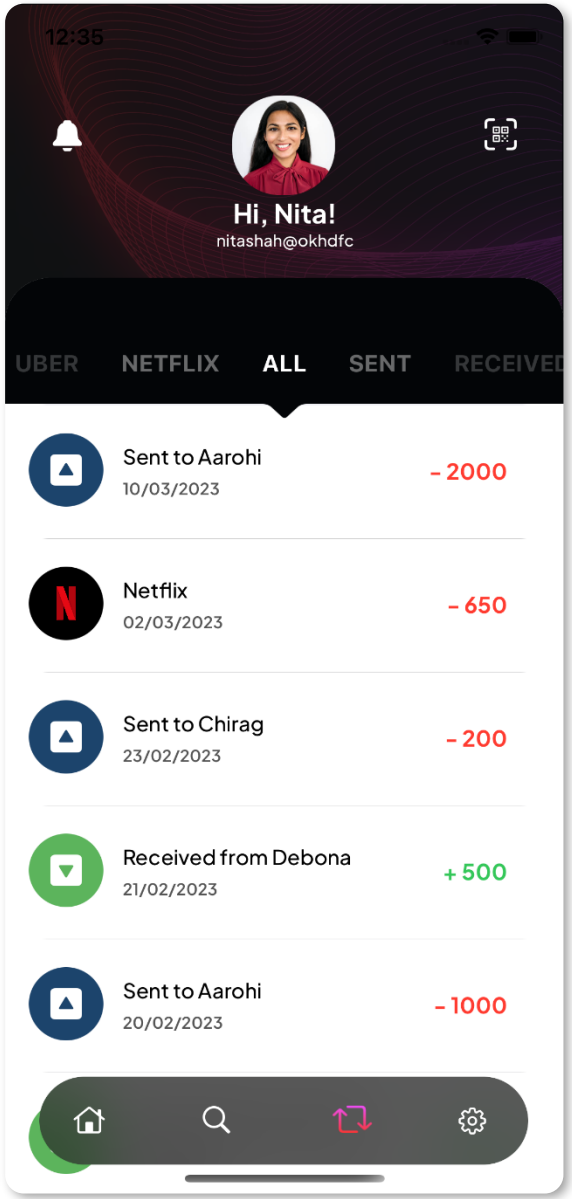

3:06
Hi, Nita!
nitashah@okhdfc
Your Cards
SBI Bank
5284 0927 4172 8392
Nita Shah
HDF
428
Nita
Send Money To
New
Mira
Aarush
Chanchal
Subscriptions
hotstar

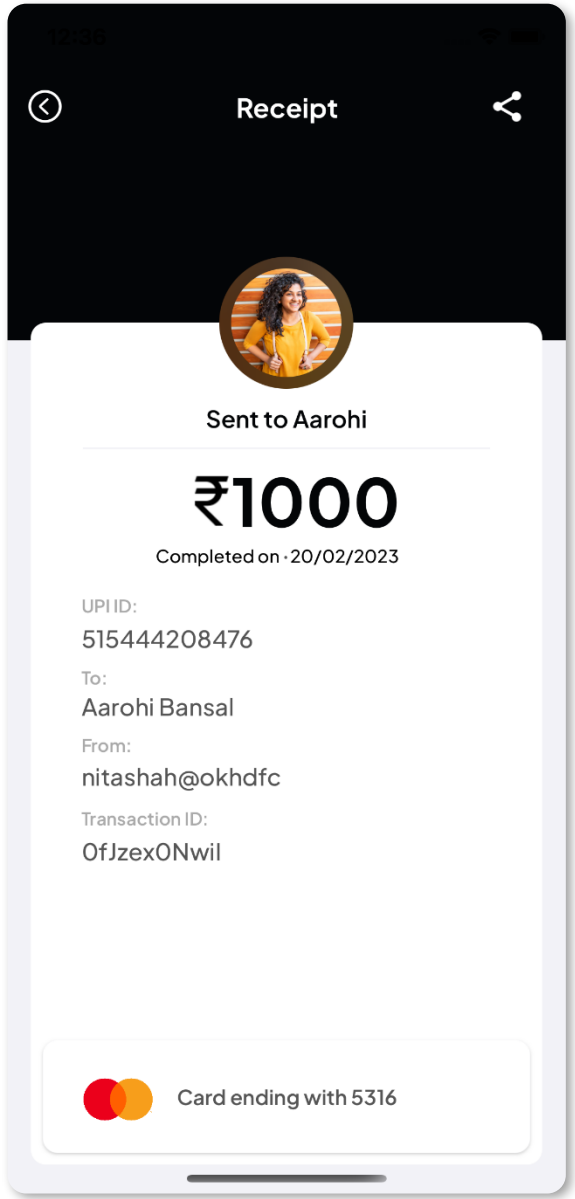

3:06
Hi, Nita!
nitashah@okhdfc
Netflix
Swiggy
Disney
+ Hotstar
View offers
Bills and more
Mobile
Recharge
DTH/Cable
TV
Electricity
FASTag
Gas Cylinder
Broadband

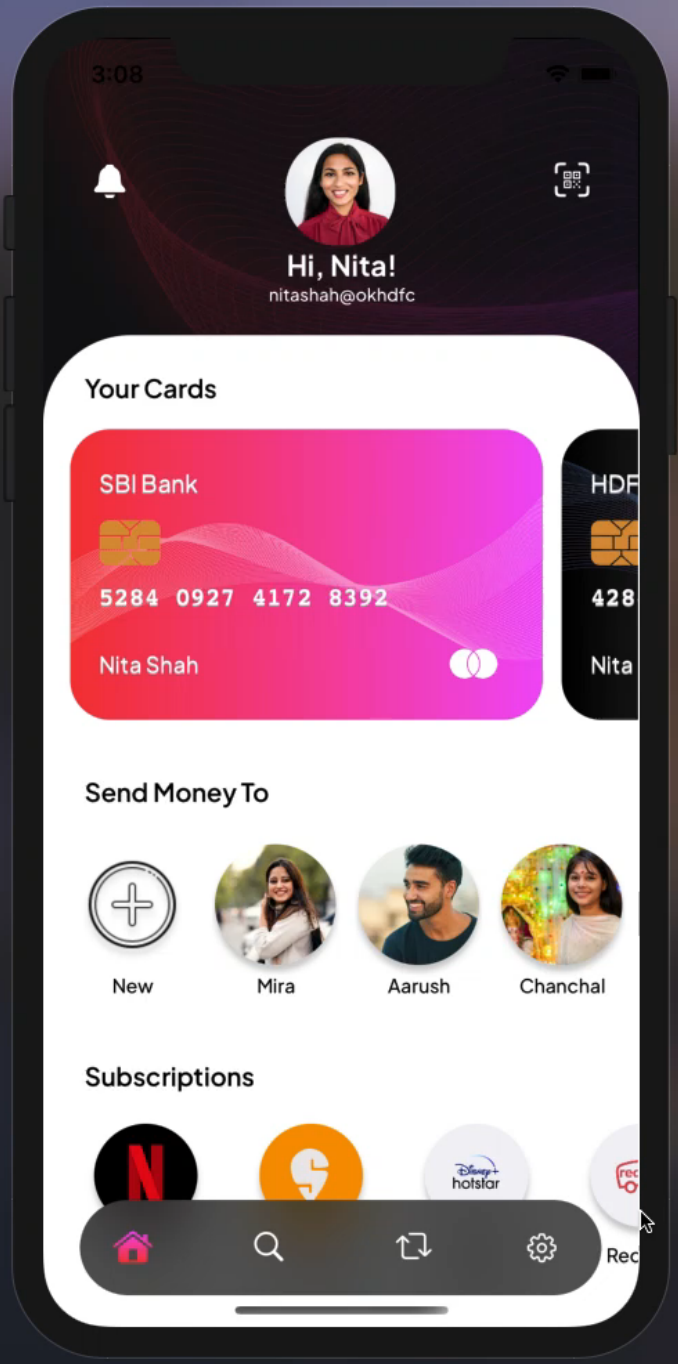

3:07
Hi, Nita!
nitashah@okhdfc
Netflix
Swiggy
Disney + Hotstar
View offers
Bills and more
Mobile Recharge
DTH/Cable TV
Electricity
FASTag
Gas Cylinder
Broadbar
Broadb

SETTINGS & TRANSACTION HISTORY

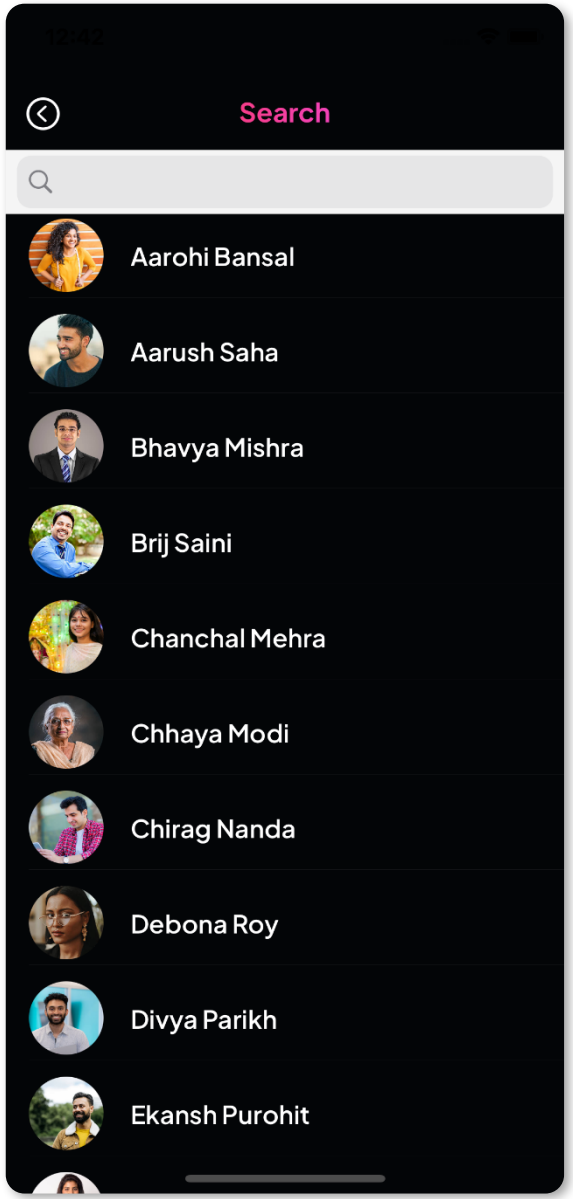


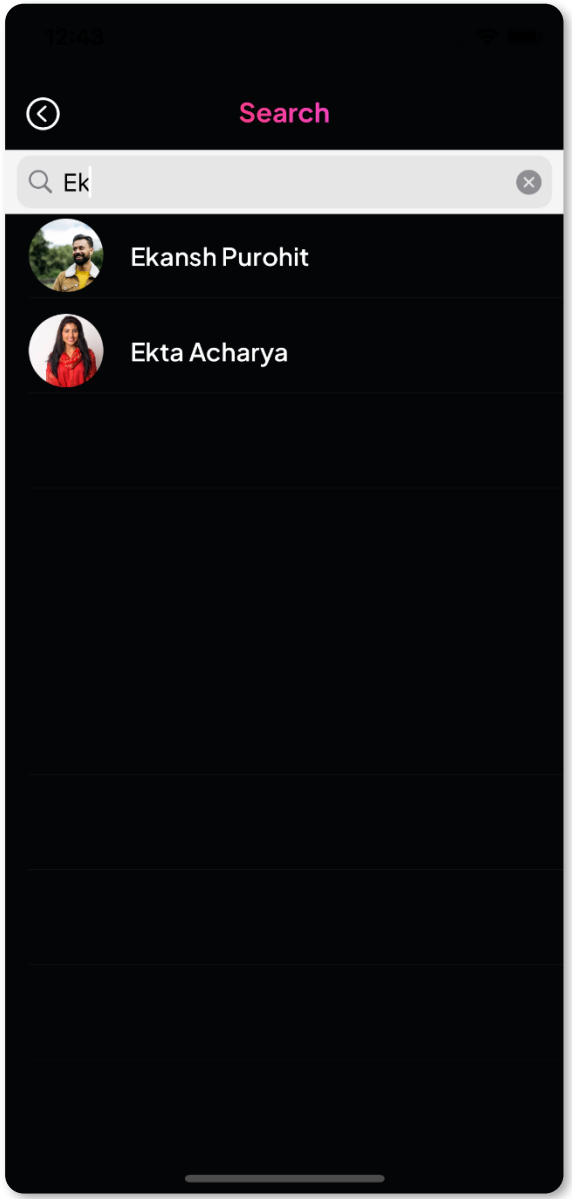


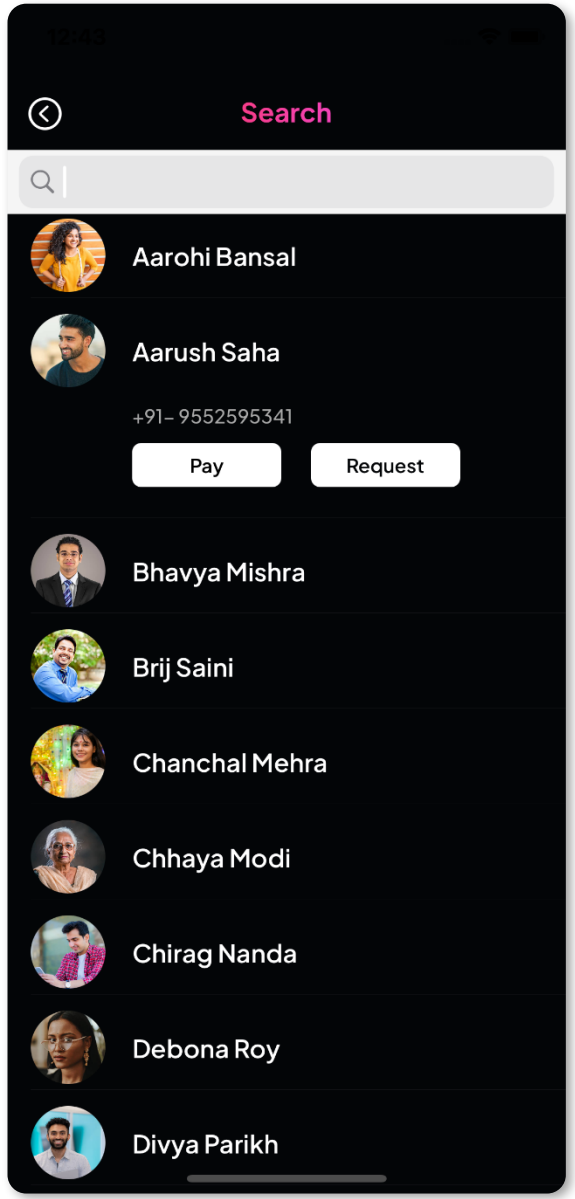


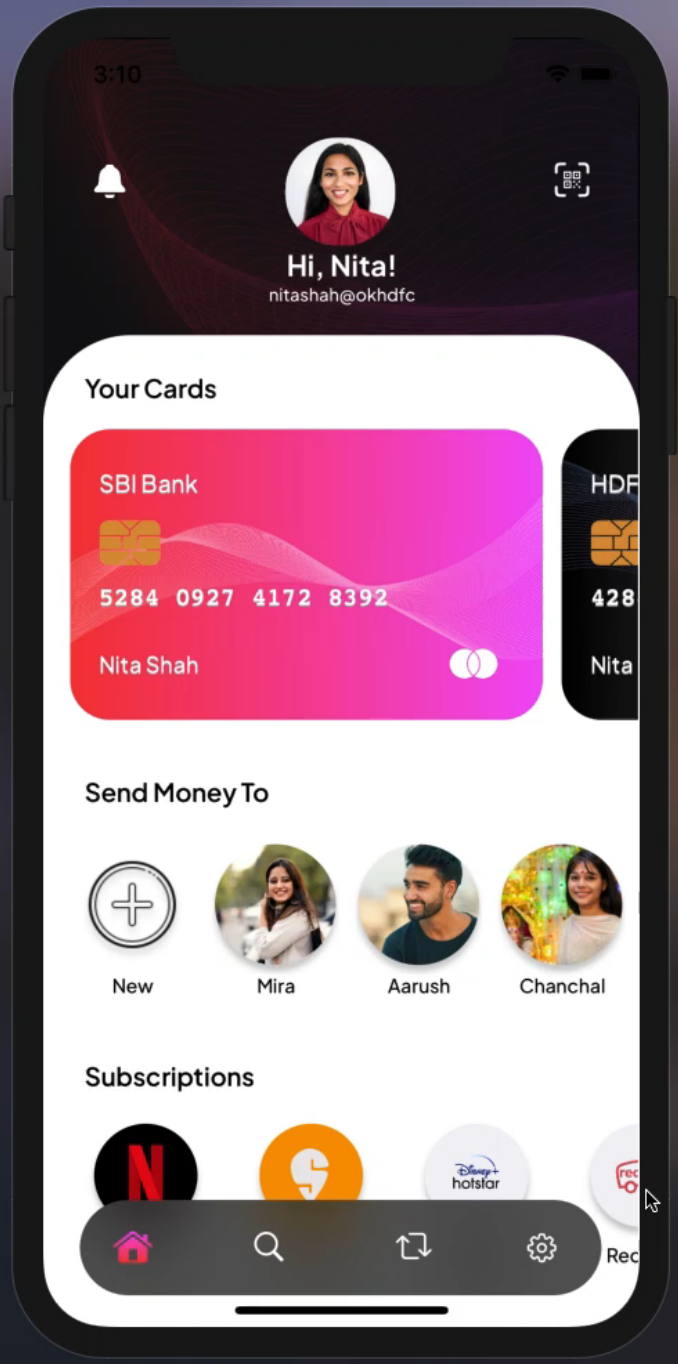

3:08
Hi, Nita!
nitashah@okhdfc
Your Cards
SBI Bank
5284 0927 4172 8392
Nita Shah
HDF
428
Nita
Send Money To
New
Mira
Aarush
Chanchal
Subscriptions
hotstar
Rec

SEARCH CONTACTS

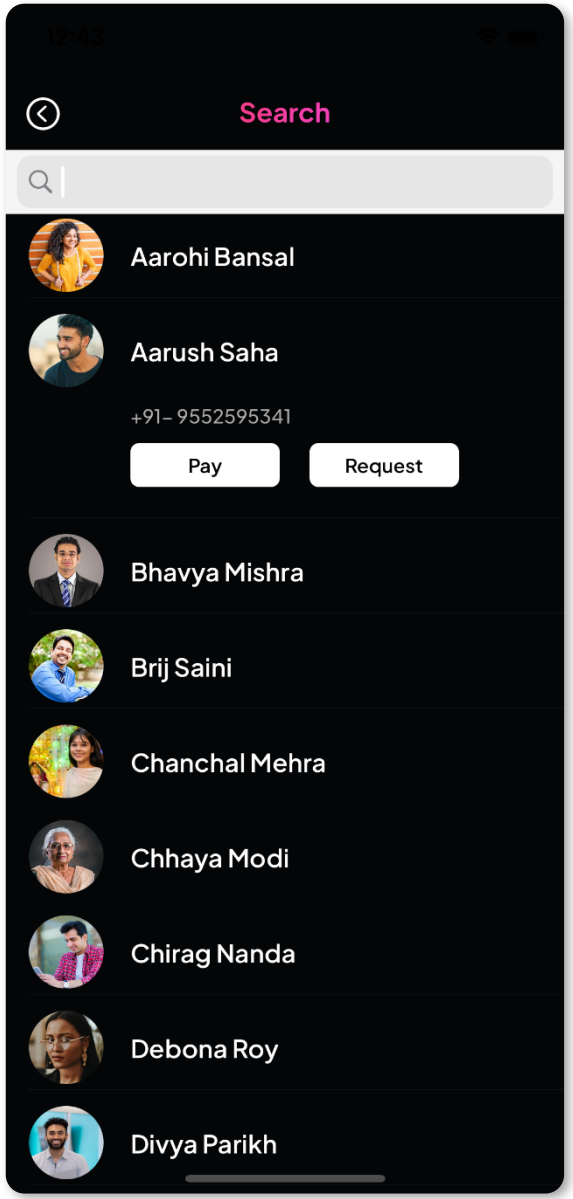


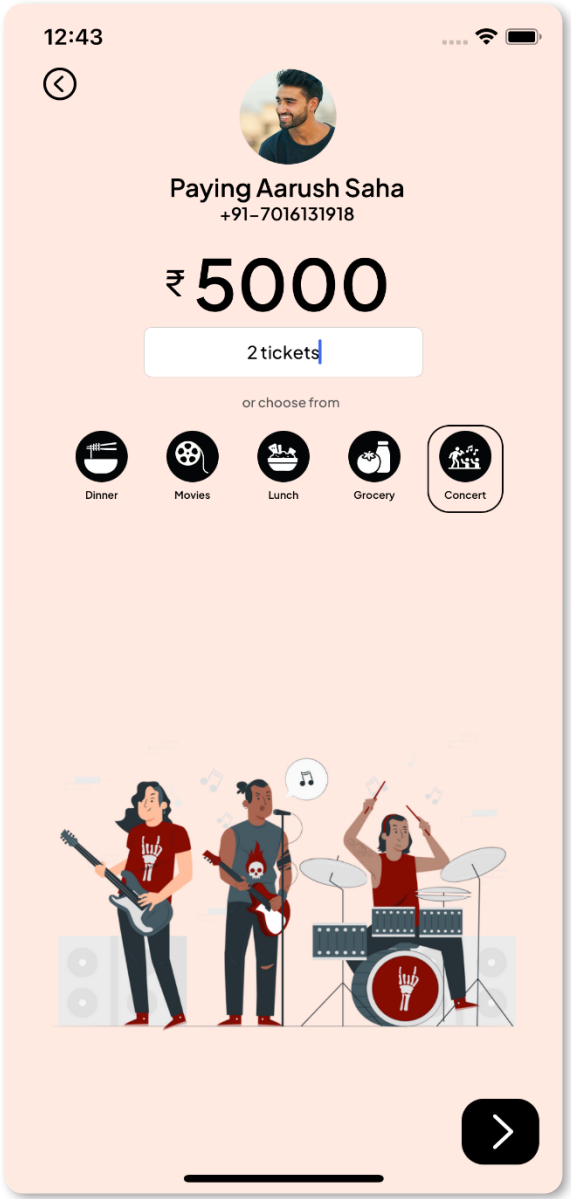


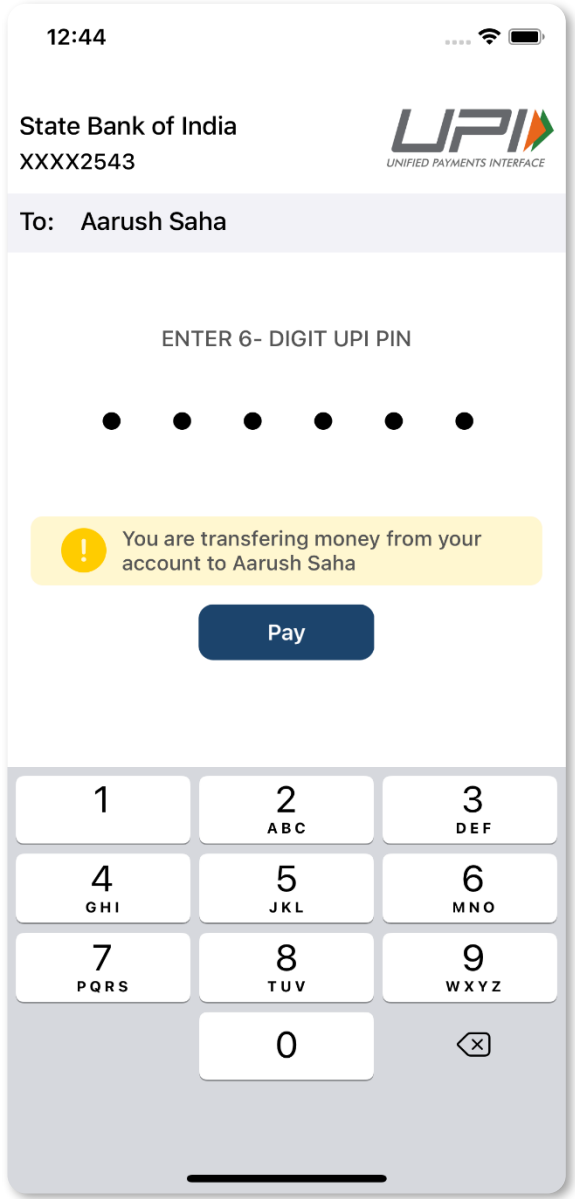



3:10
Hi, Nita!
nitashah@okhdfc
Your Cards
SBI Bank
5284 0927 4172 8392
Nita Shah
HDF
428
Nita
Send Money To
New
Mira
Aarush
Chanchal
Subscriptions
hotstar

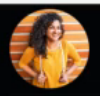
PAY A PEER

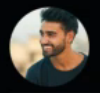

Search
Aarohi Bansal
Aarush Saha
+91- 9552595341
Pay
Request
Bhavya Mishra
Brij Saini
Chanchal Mehra
Chhaya Modi
Chirag Nanda
Debona Roy
Divya Parikh


12:43
Paying Aarush Saha
+91-7016131918
₹ 5000
2 tickets
or choose from
Dinner
Movies
Lunch
Grocery
Concert


12:44
State Bank of India
XXXX2543
UPI
UNIFIED PAYMENTS INTERFACE
To: Aarush Saha
ENTER 6- DIGIT UPI PIN
You are transfering money from your account to Aarush Saha
Pay
1
2 ABC
3 DEF
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ
0

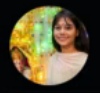
Search


Aarohi Bansal

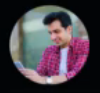

Aarush Saha

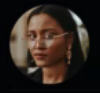

Bhavya Mishra

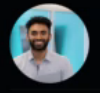

Brij Saini


Chanchal Mehra


Chhaya Modi

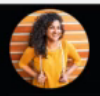

Chirag Nanda

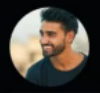

Debona Roy


Divya Parikh


Ekansh Purohit

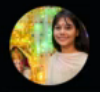
Search


Aarohi Bansal


Aarush Saha


Bhavya Mishra


Brij Saini


Chanchal Mehra

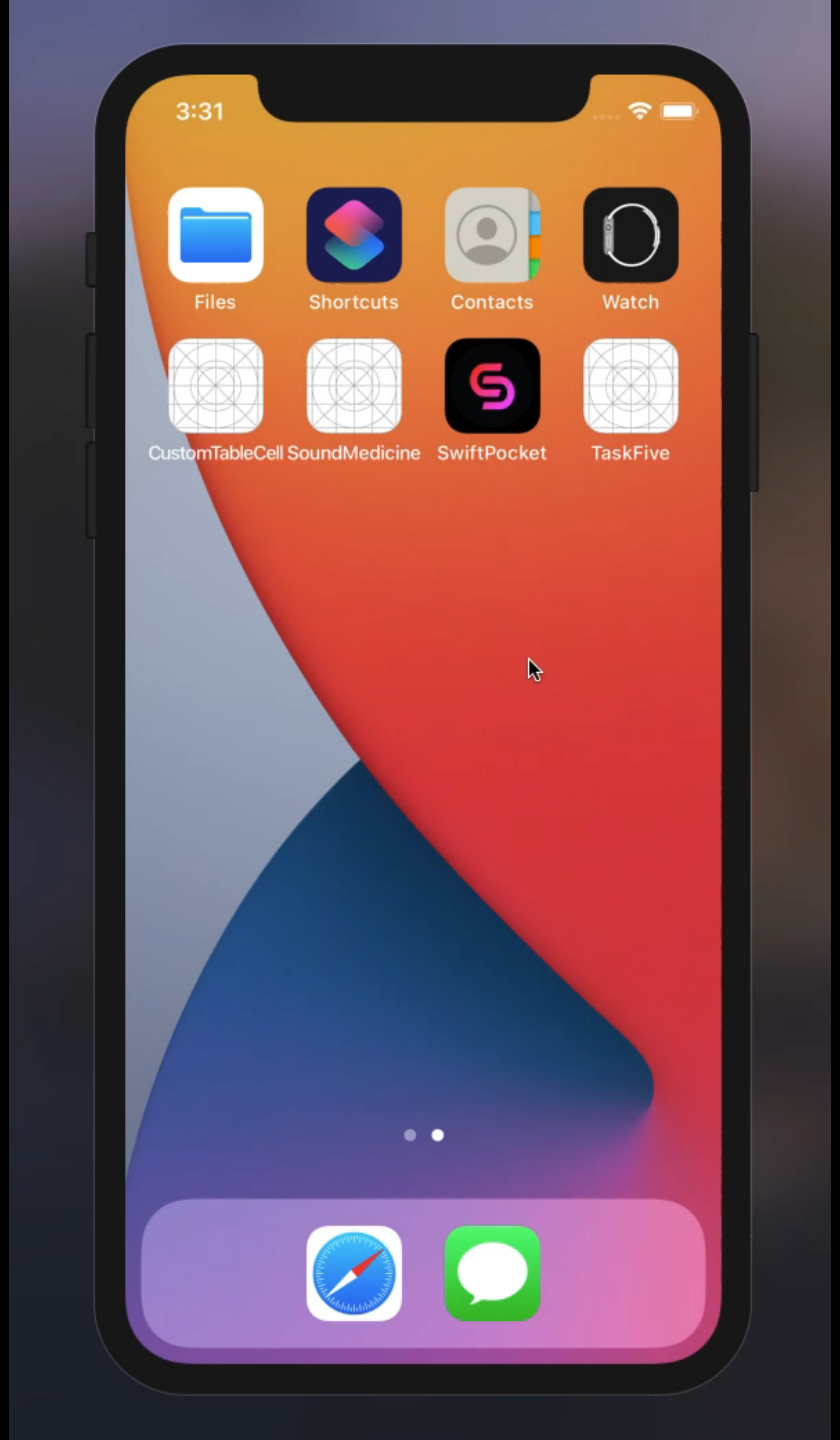

Chhaya Modi


Chirag Nanda


Debona Roy


Divya Parikh


Ekansh Purohit


3:31
Files
Shortcuts
Contacts
Watch
CustomTableCell
SoundMedicine
SwiftPocket
TaskFive

THINGS I LEARNED

A new programming language

Working with a new OS

Designing and coding

A bit of UI/UX

Teamwork

Professionalism

REFERENCES

https://developer.apple.com/

https://stackoverflow.com/

https://icons8.com/

https://dribbble.com/

https://www.programiz.com/swift-programming

THANK YOU!