[Document title]

[Document subtitle]

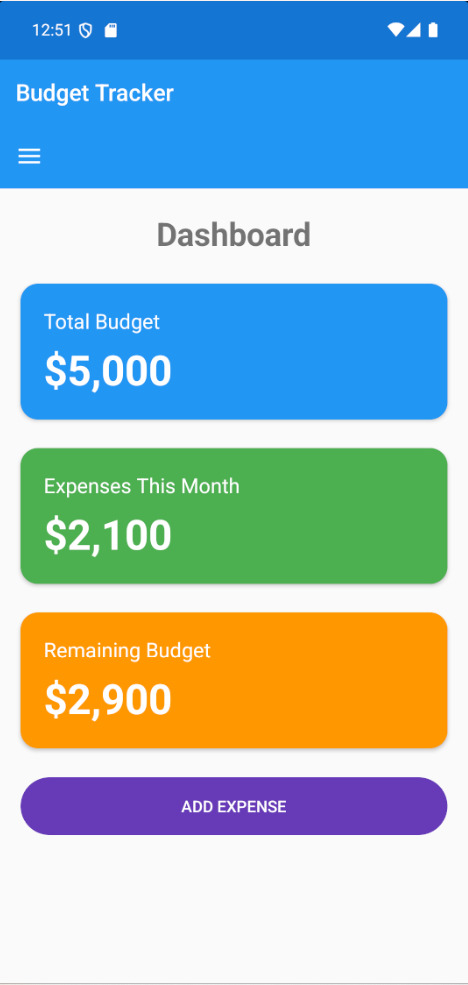
Sahinda Maharjan

2025

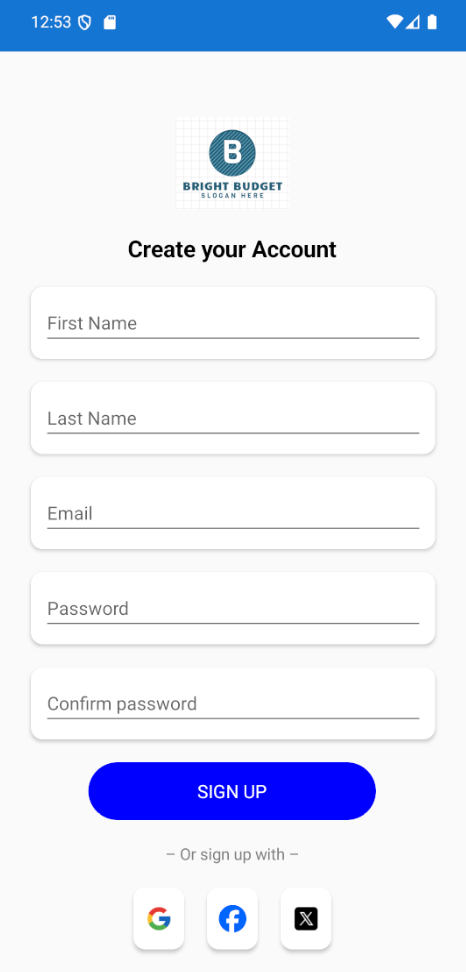
# Overview:

# UI Screenshots

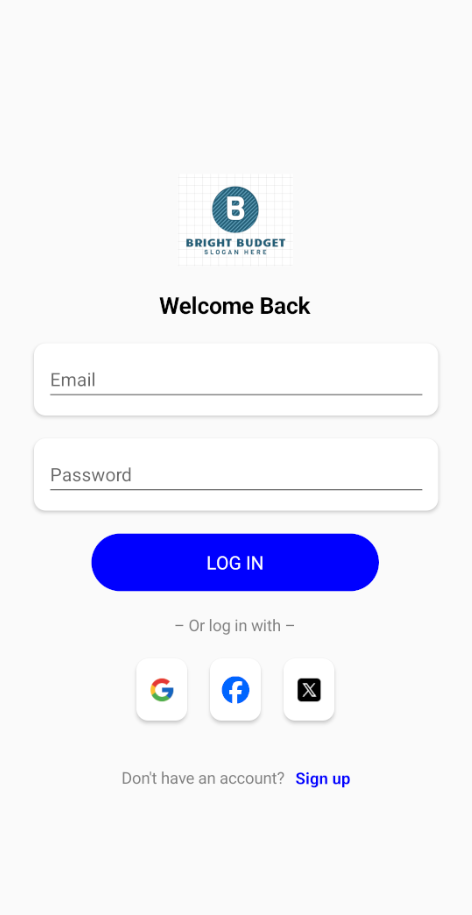
## Home Page



## Sign Up Page



## Log In Page



## Plan Selection Page

A screenshot of a phone

AI-generated content may be incorrect.

## Payment Page

A screenshot of a credit card

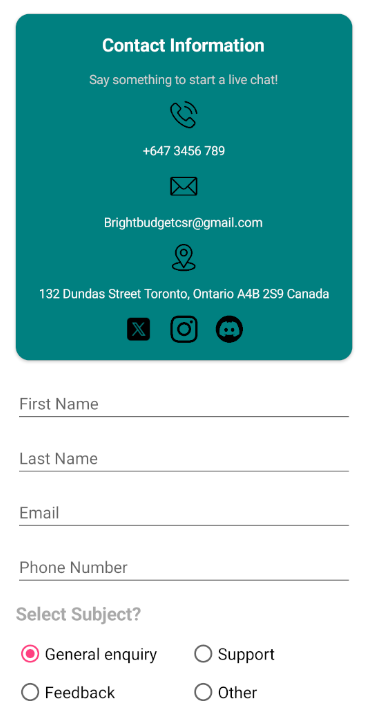
AI-generated content may be incorrect.

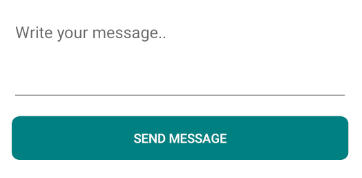
## Successful Payment Page

A screenshot of a phone

AI-generated content may be incorrect.

## 7.Contact Page:





# XAML Code

## Home Page

<?xml version="1.0" encoding="utf-8" ?>

<FlyoutPage xmlns="http://xamarin.com/schemas/2014/forms"

xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"

x:Class="Project.MainPage"

Title="Budget Tracker">

<!-- Hamburger menu -->

<FlyoutPage.Flyout>

<ContentPage Title="Menu" BackgroundColor="LightGray" Padding="10">

<StackLayout>

<Label Text="Menu" FontSize="24" FontAttributes="Bold" Margin="0,20,0,20"/>

<Button Text="Settings" Clicked="OnSettingsClicked" />

<Button Text="Help" Clicked="OnHelpClicked" />

<Button Text="Contact us" Clicked="OncontactCLicked"/>

<Button Text="Logout" Clicked="OnLogoutClicked" TextColor="Red" />

</StackLayout>

</ContentPage>

</FlyoutPage.Flyout>

<!-- Main dashboard content -->

<FlyoutPage.Detail>

<NavigationPage>

<x:Arguments>

<ContentPage>

<ScrollView>

<StackLayout Padding="20" Spacing="25">

<Label Text="Dashboard"

FontSize="28"

FontAttributes="Bold"

HorizontalOptions="Center" />

<Frame BackgroundColor="#2196F3" CornerRadius="15" Padding="20" HasShadow="True">

<StackLayout>

<Label Text="Total Budget" FontSize="18" TextColor="White" />

<Label Text="$5,000" FontSize="36" FontAttributes="Bold" TextColor="White" />

</StackLayout>

</Frame>

<Frame BackgroundColor="#4CAF50" CornerRadius="15" Padding="20" HasShadow="True">

<StackLayout>

<Label Text="Expenses This Month" FontSize="18" TextColor="White" />

<Label Text="$2,100" FontSize="36" FontAttributes="Bold" TextColor="White" />

</StackLayout>

</Frame>

<Frame BackgroundColor="#FF9800" CornerRadius="15" Padding="20" HasShadow="True">

<StackLayout>

<Label Text="Remaining Budget" FontSize="18" TextColor="White" />

<Label Text="$2,900" FontSize="36" FontAttributes="Bold" TextColor="White" />

</StackLayout>

</Frame>

<Button Text="Add Expense"

BackgroundColor="Teal"

TextColor="White"

CornerRadius="25"

HeightRequest="50"

HorizontalOptions="FillAndExpand" />

</StackLayout>

</ScrollView>

</ContentPage>

</x:Arguments>

</NavigationPage>

</FlyoutPage.Detail>

</FlyoutPage>

## Sign Up Page

<?xml version="1.0" encoding="utf-8" ?>

<ContentPage xmlns="http://xamarin.com/schemas/2014/forms"

xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"

x:Class="Project.Page1">

<ContentPage.Content>

<ScrollView>

<StackLayout Padding="30" Spacing="20" VerticalOptions="CenterAndExpand">

<Image Source="logo.png"

HeightRequest="80"

WidthRequest="160"

HorizontalOptions="Center"/>

<Label Text="Create your Account"

FontSize="20"

FontAttributes="Bold"

TextColor="Black"

HorizontalOptions="Center"/>

<!-- First Name -->

<Frame HasShadow="True" CornerRadius="10" Padding="10" BackgroundColor="White">

<Entry x:Name="firstNameEntry" Placeholder="First Name"

FontSize="16"

TextColor="Black"/>

</Frame>

<!-- Last Name -->

<Frame HasShadow="True" CornerRadius="10" Padding="10" BackgroundColor="White">

<Entry x:Name="lastNameEntry" Placeholder="Last Name"

FontSize="16"

TextColor="Black"/>

</Frame>

<!-- Email -->

<Frame HasShadow="True" CornerRadius="10" Padding="10" BackgroundColor="White">

<Entry x:Name="emailerror" Placeholder="Email"

FontSize="16"

Keyboard="Email"

TextColor="Black"/>

</Frame>

<!-- Password -->

<Frame HasShadow="True" CornerRadius="10" Padding="10" BackgroundColor="White">

<Entry x:Name="pwerror" Placeholder="Password"

IsPassword="True"

FontSize="16"

TextColor="Black"/>

</Frame>

<!-- Confirm Password -->

<Frame HasShadow="True" CornerRadius="10" Padding="10" BackgroundColor="White">

<Entry x:Name="Confirmerror" Placeholder="Confirm password"

IsPassword="True"

FontSize="16"

TextColor="Black"/>

</Frame>

<!-- Signup Button -->

<Button Clicked="Btnclick\_Clicked" Text="Sign up"

BackgroundColor="Teal"

TextColor="White"

FontSize="16"

CornerRadius="25"

HeightRequest="50"

HorizontalOptions="Center"

WidthRequest="250"/>

<Label x:Name="errorLabel"

TextColor="Red"

FontSize="14"

IsVisible="False"

HorizontalOptions="Center" />

<Label Text="– Or sign up with –"

HorizontalOptions="Center"

FontSize="14"

TextColor="Gray"/>

<StackLayout Orientation="Horizontal"

HorizontalOptions="Center"

Spacing="20">

<Frame Padding="10" CornerRadius="10" HasShadow="True" BackgroundColor="White">

<Image Source="google.png" HeightRequest="24" WidthRequest="24"/>

</Frame>

<Frame Padding="10" CornerRadius="10" HasShadow="True" BackgroundColor="White">

<Image Source="fblogo.png" HeightRequest="24" WidthRequest="24" />

</Frame>

<Frame Padding="10" CornerRadius="10" HasShadow="True" BackgroundColor="White">

<Image Source="x.png" HeightRequest="34" WidthRequest="24"/>

</Frame>

</StackLayout>

</StackLayout>

</ScrollView>

</ContentPage.Content>

</ContentPage>

## Log In Page

<?xml version="1.0" encoding="utf-8" ?>

<ContentPage xmlns="http://xamarin.com/schemas/2014/forms"

xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"

x:Class="Project.LoginPage">

<ContentPage.Content>

<ScrollView>

<StackLayout Padding="30" Spacing="20" VerticalOptions="CenterAndExpand">

<Image Source="logo.png"

HeightRequest="80"

WidthRequest="160"

HorizontalOptions="Center"/>

<Label Text="Welcome Back"

FontSize="20"

FontAttributes="Bold"

TextColor="Black"

HorizontalOptions="Center"/>

<!-- Email -->

<Frame HasShadow="True" CornerRadius="10" Padding="10" BackgroundColor="White">

<Entry x:Name="emailEntry" Placeholder="Email"

FontSize="16"

Keyboard="Email"

TextColor="Black"/>

</Frame>

<!-- Password -->

<Frame HasShadow="True" CornerRadius="10" Padding="10" BackgroundColor="White">

<Entry x:Name="passwordEntry" Placeholder="Password"

IsPassword="True"

FontSize="16"

TextColor="Black"/>

</Frame>

<!-- Login Button -->

<Button Text="Log in"

Clicked="LoginButton\_Clicked"

BackgroundColor="Teal"

TextColor="White"

FontSize="16"

CornerRadius="25"

HeightRequest="50"

HorizontalOptions="Center"

WidthRequest="250"/>

<!-- Error Label -->

<Label x:Name="errorLabel"

TextColor="Red"

FontSize="14"

IsVisible="False"

HorizontalOptions="Center" />

<!-- Social Login Text -->

<Label Text="– Or log in with –"

HorizontalOptions="Center"

FontSize="14"

TextColor="Gray"/>

<!-- Social Icons -->

<StackLayout Orientation="Horizontal"

HorizontalOptions="Center"

Spacing="20">

<Frame Padding="10" CornerRadius="10" HasShadow="True" BackgroundColor="White">

<Image Source="google.png" HeightRequest="24" WidthRequest="24"/>

</Frame>

<Frame Padding="10" CornerRadius="10" HasShadow="True" BackgroundColor="White">

<Image Source="fblogo.png" HeightRequest="24" WidthRequest="24"/>

</Frame>

<Frame Padding="10" CornerRadius="10" HasShadow="True" BackgroundColor="White">

<Image Source="x.png" HeightRequest="34" WidthRequest="24"/>

</Frame>

</StackLayout>

<!-- Sign up link -->

<StackLayout Orientation="Horizontal" HorizontalOptions="Center" Margin="0,20,0,0">

<Label Text="Don't have an account? " TextColor="Gray"/>

<StackLayout>

<Label Text="Sign up" TextColor="Blue" FontAttributes="Bold"/>

<StackLayout.GestureRecognizers>

<TapGestureRecognizer Tapped="Signup\_Tapped" />

</StackLayout.GestureRecognizers>

</StackLayout>

</StackLayout>

</StackLayout>

</ScrollView>

</ContentPage.Content>

</ContentPage>

## Plan Selection Page

<?xml version="1.0" encoding="utf-8" ?>

<ContentPage xmlns="http://xamarin.com/schemas/2014/forms"

xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"

x:Class="Project.PlanSelection">

<ContentPage.Content>

<ScrollView>

<StackLayout Padding="20" Spacing="25">

<Label Text="Choose your plan"

FontSize="24"

FontAttributes="Bold"

HorizontalOptions="StartAndExpand"/>

<!--Starter Plan-->

<Frame BorderColor="Gray" CornerRadius="10" Padding="15">

<StackLayout>

<Label Text="Starter" FontSize="18" FontAttributes="Bold"/>

<Label Text="Free" TextColor="Green"/>

<Label Text="✅ Local data only with ads"/>

<Label Text="✅ Track expenses and income"/>

<Label Text="✅ Basic balance overview"/>

</StackLayout>

</Frame>

<!--Premium Plan-->

<Frame BackgroundColor="Teal" CornerRadius="10" Padding="15">

<StackLayout>

<Label Text="Premium" TextColor="White" FontSize="18" FontAttributes="Bold"/>

<Label Text="$10/month" TextColor="AntiqueWhite"/>

<Label Text="✅ All features from Starter plan without ads" TextColor="AntiqueWhite"/>

<Label Text="✅ Charts and analytics" TextColor="AntiqueWhite"/>

<Label Text="✅ Reminders and themes" TextColor="AntiqueWhite"/>

</StackLayout>

</Frame>

<!--Button-->

<Button Text="Proceed to Payment"

Clicked="Button\_Clicked"

BackgroundColor="Teal"

TextColor="White"

CornerRadius="10"/>

</StackLayout>

</ScrollView>

</ContentPage.Content>

</ContentPage>

## Payment Page

<?xml version="1.0" encoding="utf-8" ?>

<ContentPage xmlns="http://xamarin.com/schemas/2014/forms"

xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"

x:Class="Project.Payment">

<ContentPage.Content>

<ScrollView>

<StackLayout Padding="20" Spacing="15">

<Label Text="Payment details" FontSize="24" FontAttributes="Bold" HorizontalOptions="StartAndExpand" />

<Frame BorderColor="LightGray" CornerRadius="10" Padding="10">

<StackLayout>

<Label Text="Credit Card" FontSize="18" FontAttributes="Bold" TextColor="Black"/>

<Label Text="Accepted cards:" FontSize="12" TextColor="Gray"/>

<StackLayout Padding="10" Orientation="Horizontal" Spacing="20">

<Image Source="visa.png" HeightRequest="40" WidthRequest="40"/>

<Image Source="amex.png" HeightRequest="40" WidthRequest="40"/>

<Image Source="mastercard.png" HeightRequest="40" WidthRequest="40"/>

</StackLayout>

<Label Text="Name on card" FontSize="14" FontAttributes="Bold" TextColor="Black"/>

<Entry Placeholder="Enter your name" TextColor="Gray" FontAttributes="Italic" />

<Label Text="Card number" FontSize="14" FontAttributes="Bold" TextColor="Black"/>

<Entry x:Name="CardNum" Placeholder="XXXX-XXXX-XXXX-XXXX" MaxLength="16" Keyboard="Numeric" TextColor="Gray" FontAttributes="Italic"/>

<StackLayout Orientation="Horizontal" Spacing="20">

<StackLayout HorizontalOptions="FillAndExpand" Spacing="5">

<Label Text="Expiry date" FontSize="14" FontAttributes="Bold" TextColor="Black"/>

<Entry x:Name="ExpiryDate" Placeholder="MM / YY" MaxLength="5" HorizontalOptions="FillAndExpand" FontAttributes="Italic"/>

</StackLayout>

<StackLayout HorizontalOptions="FillAndExpand" Spacing="5">

<Label Text="Security Code" FontSize="14" FontAttributes="Bold" TextColor="Black"/>

<Entry x:Name="CVV" Placeholder="CVV" Keyboard="Numeric" MaxLength="3" HorizontalOptions="FillAndExpand" FontAttributes="Italic"/>

</StackLayout>

</StackLayout>

</StackLayout>

</Frame>

<Button Text="Pay $10"

BackgroundColor="Teal"

TextColor="White"

CornerRadius="10"

Clicked="ConfirmedClicked" />

</StackLayout>

</ScrollView>

</ContentPage.Content>

</ContentPage>

## Successful Payment Page

<?xml version="1.0" encoding="utf-8" ?>

<ContentPage xmlns="http://xamarin.com/schemas/2014/forms"

xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"

x:Class="Project.SuccessfulPayment">

<ContentPage.Content>

<StackLayout Padding="30" Spacing="25" VerticalOptions="StartAndExpand">

<Image />

<Label Text="Subscription confirmed!" FontSize="24" FontAttributes="Bold" HorizontalOptions="Center"/>

<Label Text="Thank you for subscribing to the premium plan. You'll receive a confirmation email shortly." FontSize="14" HorizontalOptions="Center" HorizontalTextAlignment="Center"/>

<Button Text="Go to Home" BackgroundColor="Teal" TextColor="White" CornerRadius="10" Clicked="Button\_Clicked"/>

</StackLayout>

</ContentPage.Content>

</ContentPage>

# C# Code

## Home Page

using System;

using Xamarin.Forms;

using Xamarin.Forms.Xaml;

namespace Project

{

[XamlCompilation(XamlCompilationOptions.Compile)]

public partial class MainPage : FlyoutPage

{

public MainPage()

{

InitializeComponent();

}

private async void OnSettingsClicked(object sender, EventArgs e)

{

IsPresented = false; // Close menu

await DisplayAlert("Settings", "Settings page will open here.", "OK");

}

private async void OnHelpClicked(object sender, EventArgs e)

{

IsPresented = false;

await DisplayAlert("Help", "Help page will open here.", "OK");

}

private async void OnLogoutClicked(object sender, EventArgs e)

{

IsPresented = false; // Close the menu

bool confirm = await DisplayAlert("Logout", "Are you sure you want to logout?", "Yes", "No");

if (confirm)

{

// Navigate to LoginPage and clear navigation stack

Application.Current.MainPage = new NavigationPage(new LoginPage());

}

}

private async void OnGetStartedClicked(object sender, EventArgs e)

{

await DisplayAlert("Get Started", "Navigate to budget tracking features.", "OK");

}

private async void OncontactCLicked(object sender, EventArgs e)

{

Application.Current.MainPage = new NavigationPage(new Contactpage());

}

}

}

## Sign Up Page

using System;

using System.Linq;

using Xamarin.Forms;

using Xamarin.Forms.Xaml;

namespace Project

{

[XamlCompilation(XamlCompilationOptions.Compile)]

public partial class Page1 : ContentPage

{

public Page1()

{

InitializeComponent();

NavigationPage.SetHasNavigationBar(this, false);

}

private void ShowError(string message)

{

errorLabel.Text = message;

errorLabel.IsVisible = true;

}

private void Btnclick\_Clicked(object sender, EventArgs e)

{

string firstName = firstNameEntry.Text;

string lastName = lastNameEntry.Text;

string email = emailerror.Text;

string password = pwerror.Text;

string confirmpassword = Confirmerror.Text;

errorLabel.IsVisible = false;

if (string.IsNullOrWhiteSpace(firstName))

{

ShowError("First name is required.");

return;

}

if (string.IsNullOrWhiteSpace(lastName))

{

ShowError("Last name is required.");

return;

}

if (string.IsNullOrEmpty(email) || !email.Contains("@"))

{

ShowError("Enter a valid email.");

return;

}

if (string.IsNullOrEmpty(password) || password.Length < 10 || !password.Any(char.IsDigit))

{

ShowError("Password must be at least 10 characters and include a number.");

return;

}

if (confirmpassword != password)

{

ShowError("Passwords do not match.");

return;

}

// Clear error if everything is valid

errorLabel.IsVisible = false;

// Proceed with registration logic

DisplayAlert("Success", "Account created successfully!", "OK");

}

}

}

## Log In Page

using System;

using Xamarin.Forms;

using Xamarin.Forms.Xaml;

namespace Project

{

[XamlCompilation(XamlCompilationOptions.Compile)]

public partial class LoginPage : ContentPage

{

public LoginPage()

{

InitializeComponent();

NavigationPage.SetHasNavigationBar(this, false);

}

private void LoginButton\_Clicked(object sender, EventArgs e)

{

string email = emailEntry.Text;

string password = passwordEntry.Text;

errorLabel.IsVisible = false;

if (string.IsNullOrEmpty(email) || !email.Contains("@"))

{

ShowError("Enter a valid email.");

return;

}

if (string.IsNullOrEmpty(password))

{

ShowError("Password is required.");

return;

}

// Dummy success (replace with real logic)

Application.Current.MainPage = new NavigationPage(new MainPage());

}

private void ShowError(string message)

{

errorLabel.Text = message;

errorLabel.IsVisible = true;

}

private void Signup\_Tapped(object sender, EventArgs e)

{

// Navigate to signup page

Navigation.PushAsync(new Page1());

}

}

}

## Plan Selection Page

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using Xamarin.Forms;

using Xamarin.Forms.Xaml;

namespace Project

{

[XamlCompilation(XamlCompilationOptions.Compile)]

public partial class PlanSelection : ContentPage

{

public PlanSelection()

{

InitializeComponent();

}

private async void Button\_Clicked(object sender, EventArgs e)

{

await Navigation.PushAsync(new Payment());

}

}

}

## Payment Page

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using Xamarin.Forms;

using Xamarin.Forms.Xaml;

namespace Project

{

[XamlCompilation(XamlCompilationOptions.Compile)]

public partial class Payment : ContentPage

{

public Payment()

{

InitializeComponent();

}

private async void ConfirmedClicked(object sender, EventArgs e)

{

//validation for card number

string cardNum = CardNum.Text;

if (cardNum == null ||cardNum.Length < 16)

{

await DisplayAlert("Invalid", "Card number should be 16 numbers long.", "OK");

return;

}

//validation for cvv

string cvv = CVV.Text;

if (cvv == null || cvv.Length < 3)

{

await DisplayAlert("Invalid", "CVV should be 3 numbers long.", "OK");

return;

}

//validation for expiry date

string expiryDate = ExpiryDate.Text;

if(expiryDate == null || expiryDate[2] != '/')

{

await DisplayAlert("Invalid", "Use MM/YY format", "OK");

return;

}

var part = expiryDate.Split('/');

if (int.TryParse(part[0], out int mm) && int.TryParse(part[1], out int yy))

{

if (mm < 1 || mm > 12)

{

await DisplayAlert("Invalid", "Month should be between 01 and 12.", "OK");

return;

}

var fullDate = new DateTime(2000 + yy, mm, 1).AddMonths(1).AddDays(-1);

if (fullDate < DateTime.Now)

{

await DisplayAlert("Invalid", "Card has expired.", "OK");

return;

}

await Navigation.PushAsync(new SuccessfulPayment());

}

else

{

await DisplayAlert("Invalid", "Use numbers only in MM/YY format.", "OK");

}

}

}

}

## Successful Payment Page

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using Xamarin.Forms;

using Xamarin.Forms.Xaml;

namespace Project

{

[XamlCompilation(XamlCompilationOptions.Compile)]

public partial class SuccessfulPayment : ContentPage

{

public SuccessfulPayment()

{

InitializeComponent();

}

private async void Button\_Clicked(object sender, EventArgs e)

{

await Navigation.PushAsync(new PlanSelection());

}

}

}

# Challenges Faced

# Future Work

# Live Demo

# References