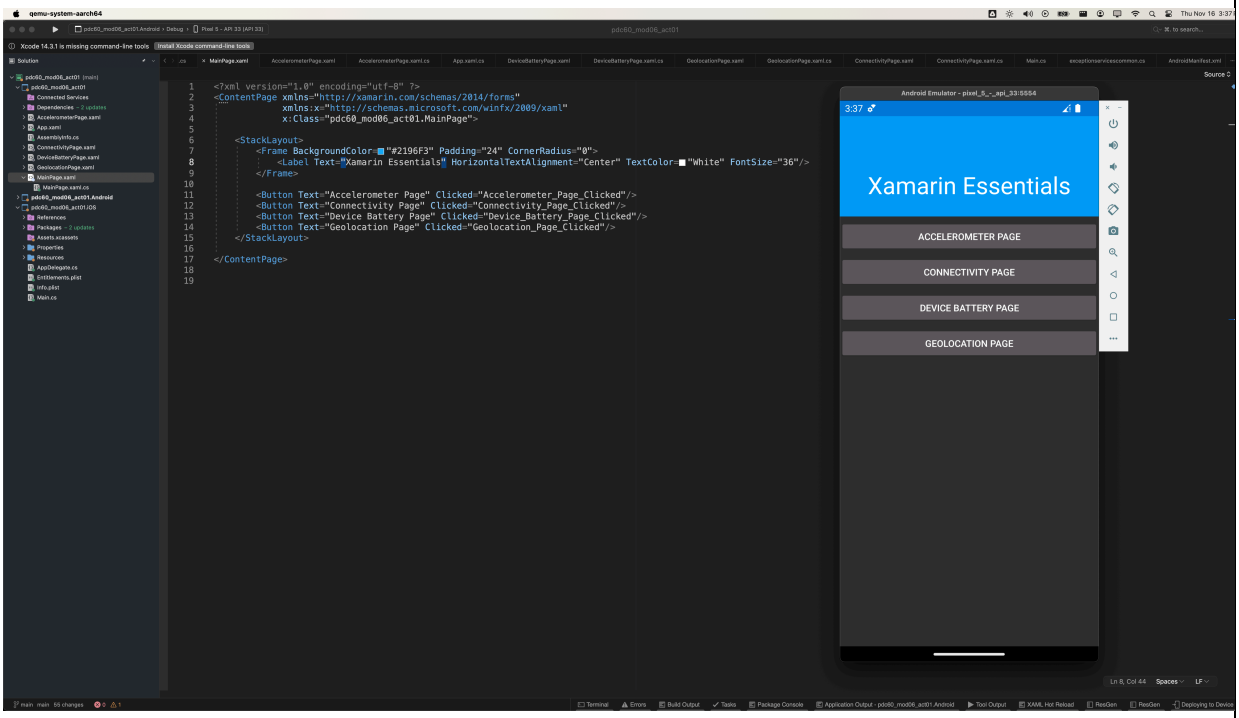
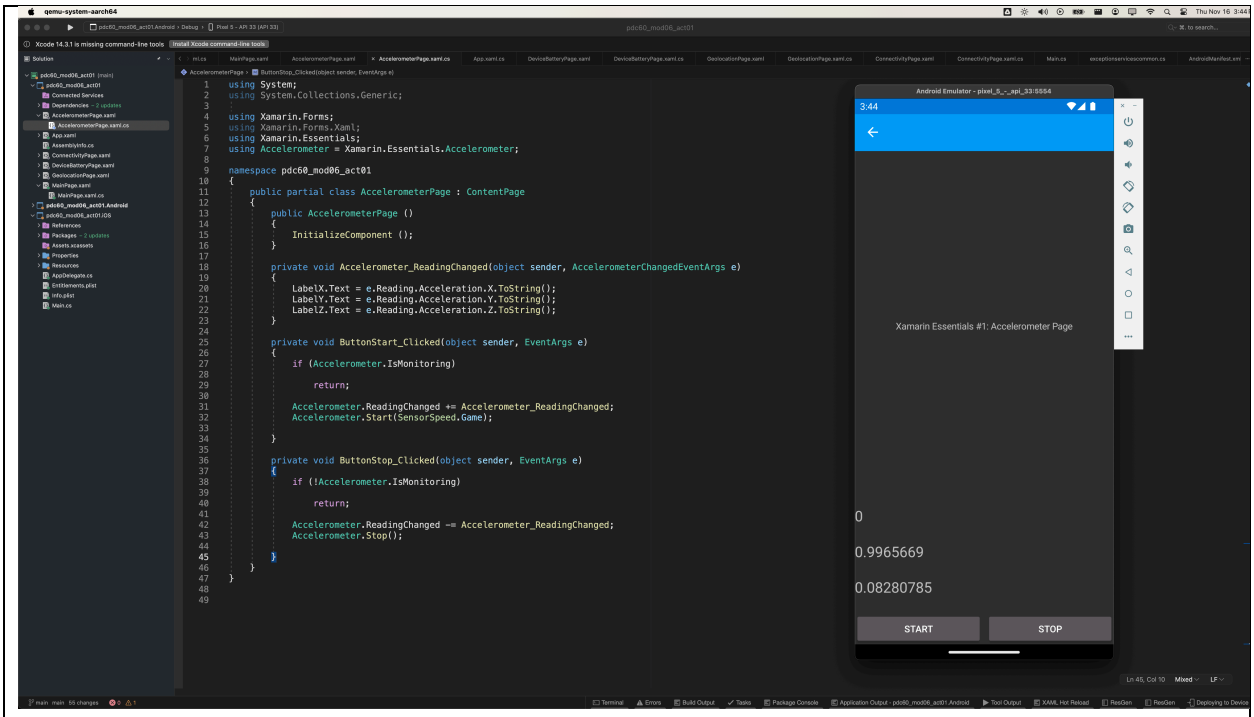
PDC60 – Xamarin
ACTIVITY SHEET

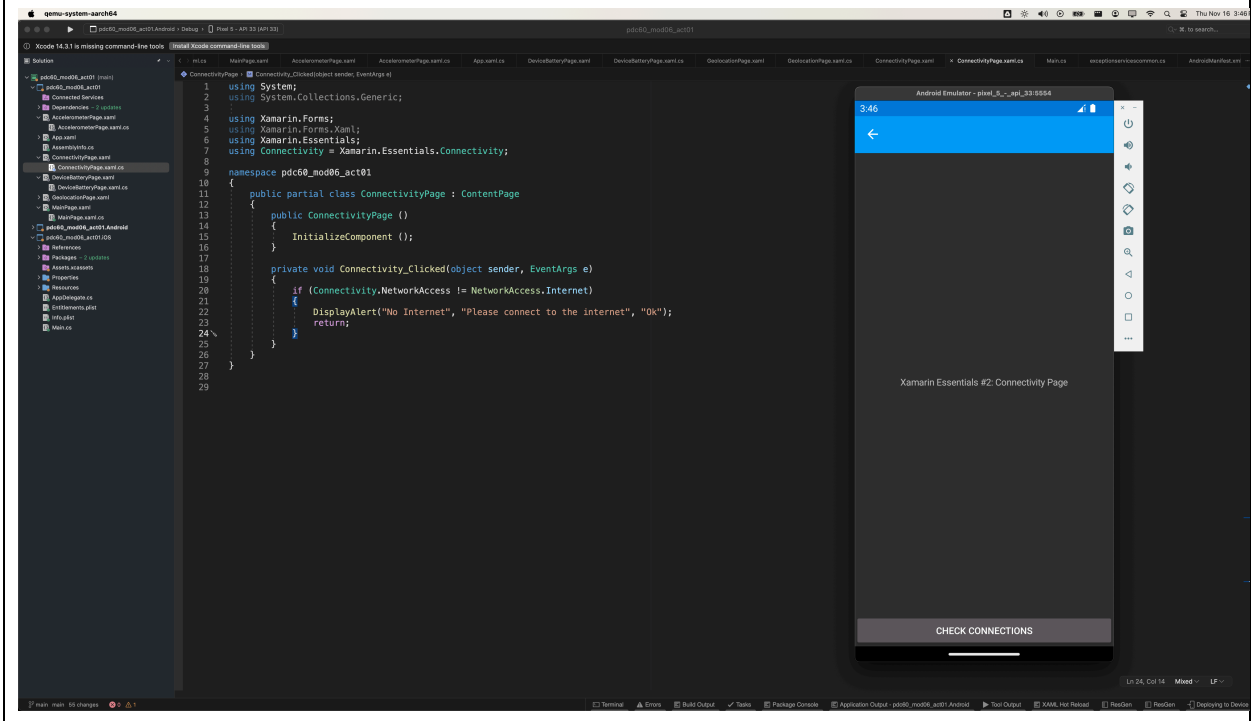
Name of Student:	**Dy, Gabriel Rhobert P.**	Activity Title:	**Xamarin Essentials**
Year and Section:	**BSIT-4A**	Date Submitted:	**November 16, 2023**

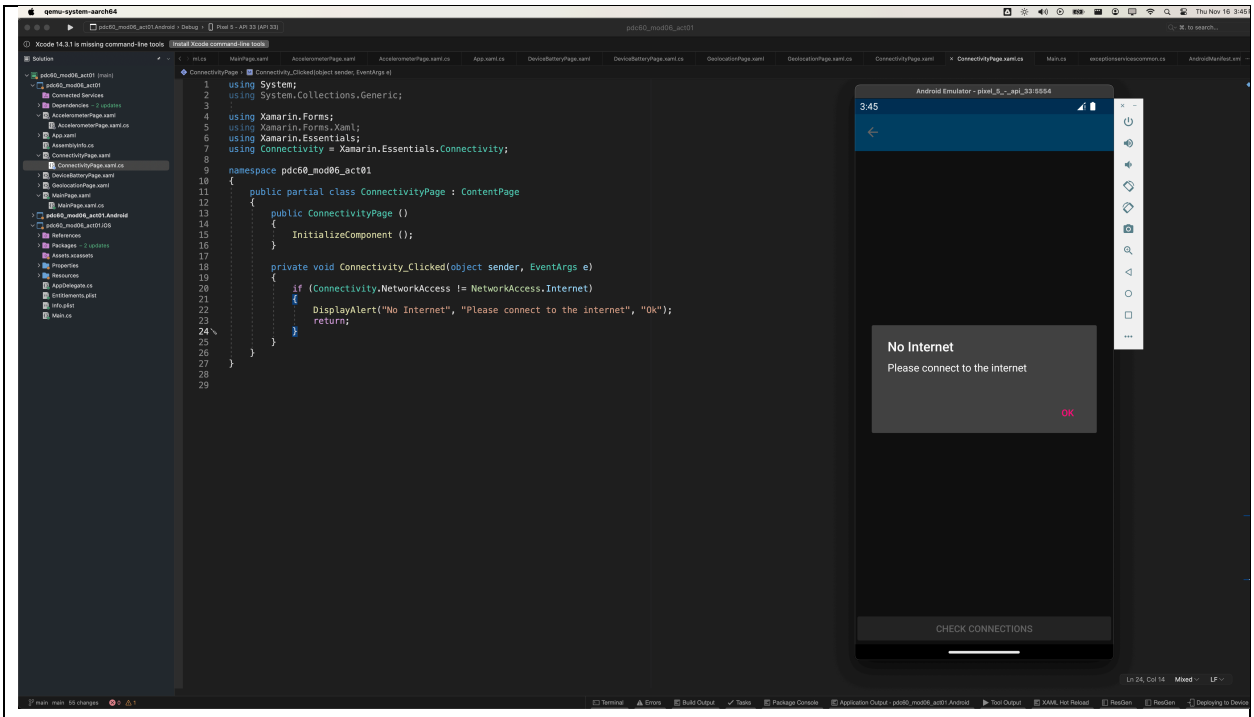
https://github.com/ehtluhg/pdc60_mod06_act01.git

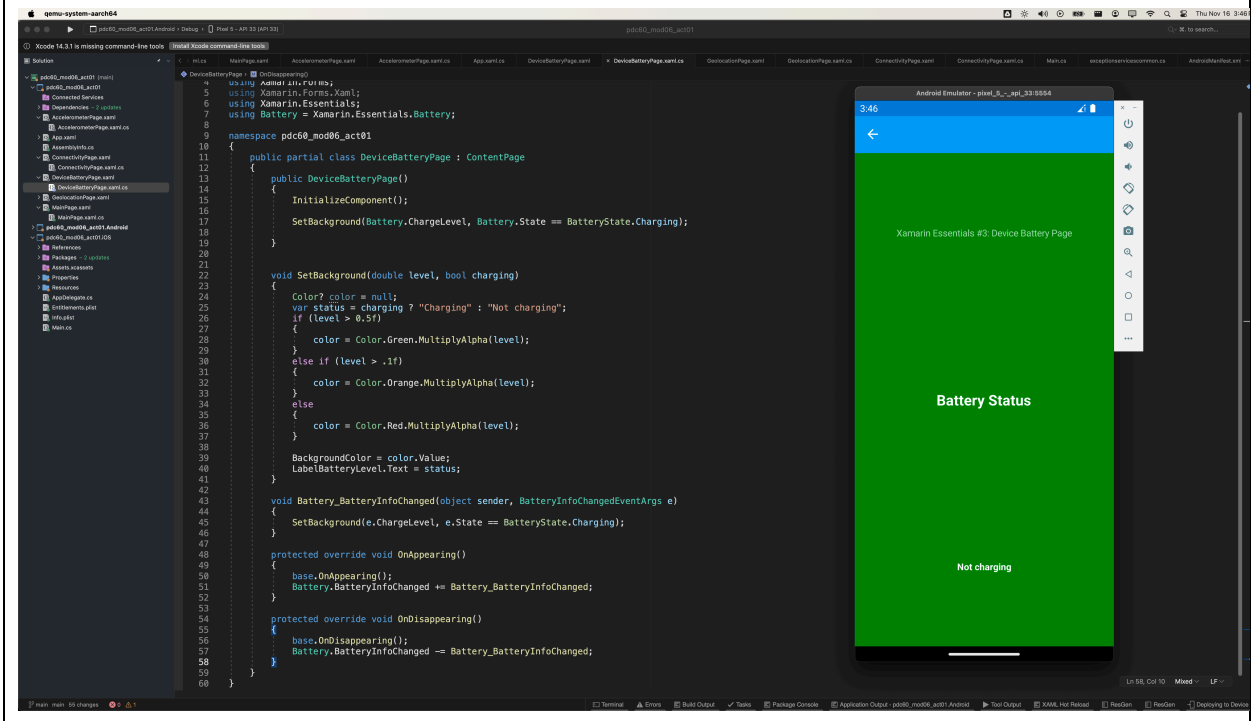
OUTPUT SCREENSHOT:

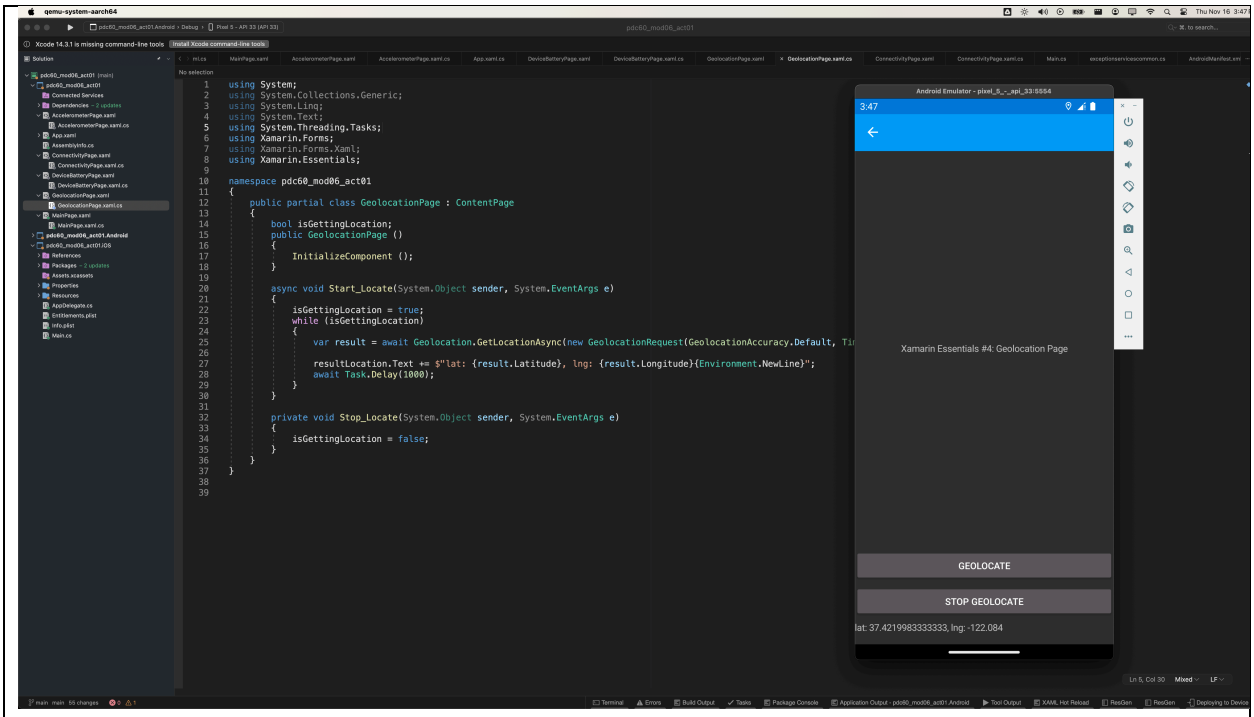



using System;
using System.Collections.Generic;
using Xamarin.Forms;
using Xamarin.Forms.Xaml;
using Xamarin.Essentials;
using Accelerometer = Xamarin.Essentials.Accelerometer;
namespace pdc60_mod06_act01
{
public partial class AccelerometerPage : ContentPage
{
public AccelerometerPage ()
{
InitializeComponent ();
}
private void Accelerometer_ReadingChanged(object sender, AccelerometerChangedEventArgs e)
{
LabelX.Text = e.Reading.Acceleration.X.ToString();
LabelY.Text = e.Reading.Acceleration.Y.ToString();
LabelZ.Text = e.Reading.Acceleration.Z.ToString();
}
private void ButtonStart_Clicked(object sender, EventArgs e)
{
if (Accelerometer.IsMonitoring)
return;
Accelerometer.ReadingChanged += Accelerometer_ReadingChanged;
Accelerometer.Start(SensorSpeed.Game);
}
private void ButtonStop_Clicked(object sender, EventArgs e)
{
if (!Accelerometer.IsMonitoring)
return;
Accelerometer.ReadingChanged -= Accelerometer_ReadingChanged;
Accelerometer.Stop();
}
}
}
Android Emulator - pixel_5_-_api_33:5554
3:44
Xamarin Essentials #1: Accelerometer Page
0
0.9965669
0.08280785
START
STOP


using System;
using System.Collections.Generic;
using Xamarin.Forms;
using Xamarin.Forms.Xaml;
using Xamarin.Essentials;
using Connectivity = Xamarin.Essentials.Connectivity;
namespace pdc60_mod06_act01
{
public partial class ConnectivityPage : ContentPage
{
public ConnectivityPage ()
{
InitializeComponent ();
}
private void Connectivity_Clicked(object sender, EventArgs e)
{
if (Connectivity.NetworkAccess != NetworkAccess.Internet)
{
DisplayAlert("No Internet", "Please connect to the internet", "Ok");
return;
}
}
}
}
Android Emulator - pixel_5_-_api_33:5554
3:46
Xamarin Essentials #2: Connectivity Page
CHECK CONNECTIONS


using System;
using System.Collections.Generic;
using Xamarin.Forms;
using Xamarin.Forms.Xaml;
using Xamarin.Essentials;
using Connectivity = Xamarin.Essentials.Connectivity;
namespace pdc60_mod06_act01
{
public partial class ConnectivityPage : ContentPage
{
public ConnectivityPage ()
{
InitializeComponent ();
}
private void Connectivity_Clicked(object sender, EventArgs e)
{
if (Connectivity.NetworkAccess != NetworkAccess.Internet)
{
DisplayAlert("No Internet", "Please connect to the internet", "Ok");
return;
}
}
}
}
Android Emulator - pixel_5_-_api_33:5554
3:45
No Internet
Please connect to the internet
OK
CHECK CONNECTIONS


using Xamarin.Forms;
using Xamarin.Forms.Xaml;
using Xamarin.Essentials;
using Battery = Xamarin.Essentials.Battery;
namespace pdc60_mod06_act01
{
public partial class DeviceBatteryPage : ContentPage
{
public DeviceBatteryPage()
{
InitializeComponent();
SetBackground(Battery.ChargeLevel, Battery.State == BatteryState.Charging);
}
void SetBackground(double level, bool charging)
{
Color? color = null;
var status = charging ? "Charging" : "Not charging";
if (level > 0.5f)
{
color = Color.Green.MultiplyAlpha(level);
}
else if (level > .1f)
{
color = Color.Orange.MultiplyAlpha(level);
}
else
{
color = Color.Red.MultiplyAlpha(level);
}
BackgroundColor = color.Value;
LabelBatteryLevel.Text = status;
}
void Battery_BatteryInfoChanged(object sender, BatteryInfoChangedEventArgs e)
{
SetBackground(e.ChargeLevel, e.State == BatteryState.Charging);
}
protected override void OnAppearing()
{
base.OnAppearing();
Battery.BatteryInfoChanged += Battery_BatteryInfoChanged;
}
protected override void OnDisappearing()
{
base.OnDisappearing();
Battery.BatteryInfoChanged -= Battery_BatteryInfoChanged;
}
}
}
Android Emulator - pixel_5_-_api_33:5554
3:46
Xamarin Essentials #3: Device Battery Page
Battery Status
Not charging


qemu-system-aarch64
Thu Nov 16 3:47
Xcode 14.3.1 is missing command-line tools
Install Xcode command-line tools
Solution
No selection
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using Xamarin.Forms;
using Xamarin.Forms.Xaml;
using Xamarin.Essentials;
namespace pdc60_mod06_act01
{
public partial class GeolocationPage : ContentPage
{
bool isGettingLocation;
public GeolocationPage ()
{
InitializeComponent ();
}
async void Start_Locate(System.Object sender, System.EventArgs e)
{
isGettingLocation = true;
while (isGettingLocation)
{
var result = await Geolocation.GetLocationAsync(new GeolocationRequest(GeolocationAccuracy.Default,
resultLocation.Text += $"lat: {result.Latitude}, lng: {result.Longitude}{Environment.NewLine}";
await Task.Delay(1000);
}
}
private void Stop_Locate(System.Object sender, System.EventArgs e)
{
isGettingLocation = false;
}
}
}
Android Emulator - pixel_5_-_api_33:5554
3:47
Xamarin Essentials #4: Geolocation Page
GEOLOCATE
STOP GEOLOCATE
lat: 37.421998333333, lng: -122.084
Ln 5, Col 30
Mixed
LF