

Source: C# Corner ([www.c-sharpcorner.com](http://www.c-sharpcorner.com))

PRINT

## Article



# How To Add Azure Mobile App To An UWP App

By [Romil Bheda](#) on **Aug 29 2016**

In this article, you will go step by step to create Azure Mobile App using Azure Portal and Insert data from Universal Windows Platform App. Mobile Apps come under Azure App Service. Azure App Service is a fully managed **Platform as a Service** (PaaS) offering for professional developers that brings a rich set of capabilities to web, mobile, and integration scenarios. Mobile Apps offer a highly scalable, globally available mobile application development platform for Enterprise Developers and System Integrators that brings a rich set of capabilities to mobile developers. Mobile App features:

- **Build native and cross platform apps**
  - Building native Windows, iOS, Android apps
  - Cross platform Xamarin or Cordova
- **Connect to your enterprise systems** – With the help of this feature, you can add corporate sign on option to connect with on-premises or cloud resources. Azure Active Directory is available for identity providers for enterprise authentication, also, social providers, such as Facebook, Twitter and Microsoft account.
- **Build offline-ready apps with data sync** – Develop app using this feature to save data offline as well as sync data with the cloud to get the latest data or records in the background when the connectivity is available. This service allows you to easily integrate with other NoSQL and SQL data providers, including Azure Table Storage, MongoDB, DocumentDB and SaaS API providers like Office 365 and Salesforce.com
- **Push Notifications to millions in seconds** - Engage your customers with instant push notifications on any device, personalized to their needs, sent when the time is right.

## Prerequisites

- Microsoft Azure Subscription (MSDN subscribers or [sign up](#) for one month free trial )
- Visual Studio 2015 with UWP SDK – For Download Click [here](#)
- .NET Azure SDK for Visual Studio 2015 – For Download Click [here](#)

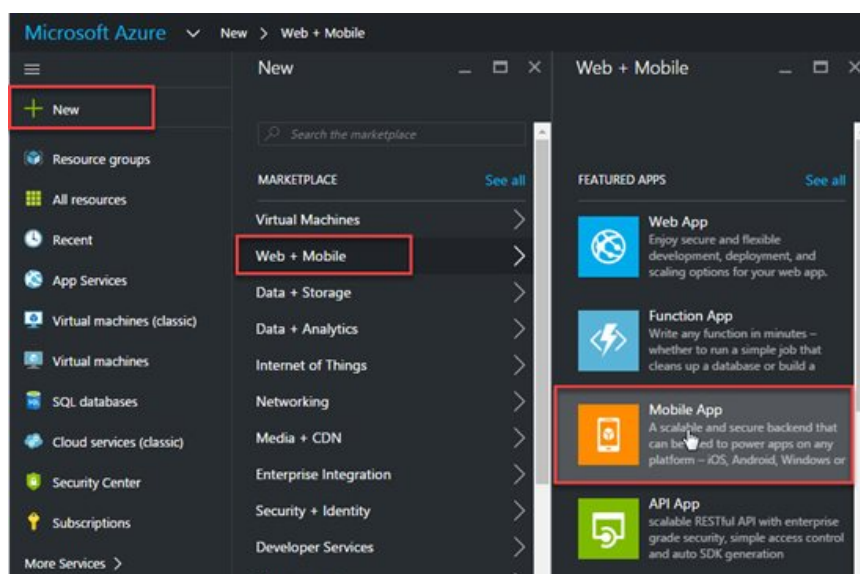
You will learn,

- How to Create Azure Mobile App
- How to Create Database & Server
- How to Develop UWP App
- Add Mobile App to Existing UWP App

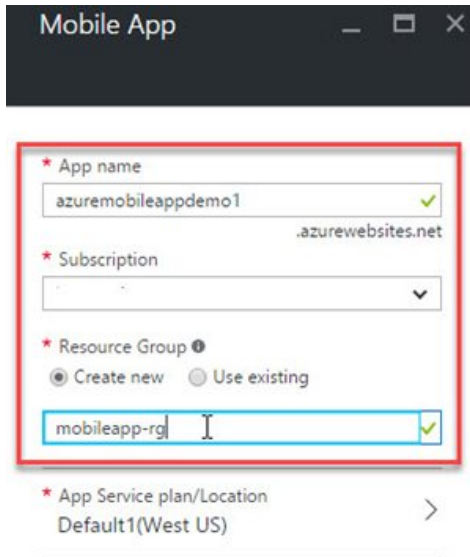
## Create Azure Mobile App

**Step 1:** Navigate to [Azure Portal](#) & Sign in with Azure Credentials.

**Step 2:** Click on New button -> Web + Mobile -> Mobile App



**Step 3:** Enter Mobile App Name, Choose Azure Subscription, Create new or use existing Resource Group.



Mobile App

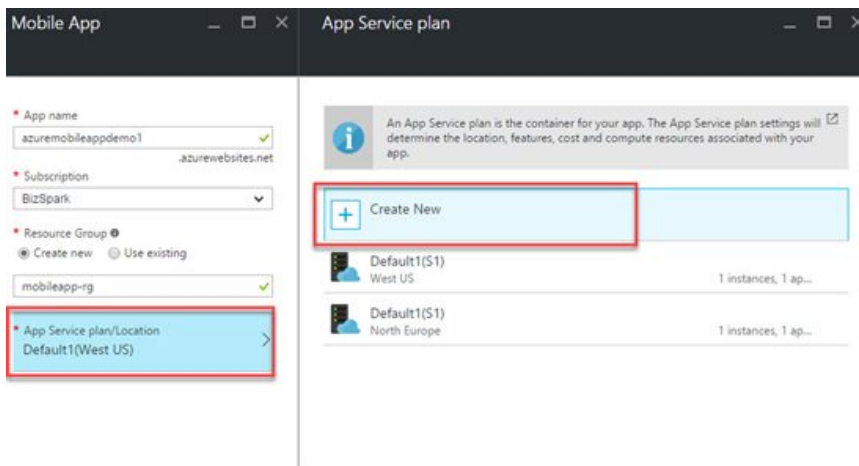
\* App name  
azuremobileappdemo1 ✓  
.azurewebsites.net

\* Subscription  
BizSpark

\* Resource Group ⓘ  
☒ Create new ☐ Use existing  
mobileapp-rg ✓

\* App Service plan/Location  
Default1(West US) >

Click on App Service Plan/Location -> Create New.



Mobile App | App Service plan

\* App name  
azuremobileappdemo1 ✓  
.azurewebsites.net

\* Subscription  
BizSpark

\* Resource Group ⓘ  
☒ Create new ☐ Use existing  
mobileapp-rg ✓

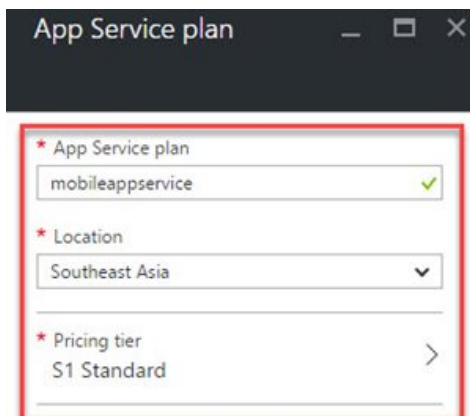
\* App Service plan/Location  
Default1(West US) >

An App Service plan is the container for your app. The App Service plan settings will determine the location, features, cost and compute resources associated with your app.

+ Create New

Default1(S1) West US	1 instances, 1 ap...
Default1(S1) North Europe	1 instances, 1 ap...

Enter App Service Plan name, Location, Pricing tier.



App Service plan

\* App Service plan  
mobileappservice ✓

\* Location  
Southeast Asia

\* Pricing tier  
S1 Standard >

Mobile App

\* App name  
azuremobileappdemo1 ✓  
.azurewebsites.net

\* Subscription  
▼

\* Resource Group ⓘ  
☒ Create new ☐ Use existing  
mobileapp-rg ✓

\* App Service plan/Location  
mobileappservice(Southeast Asia) >

**Step 4:** Mobile App is created successfully. Click on “Easy tables” inside Mobile section. Click on Easy Table Configuration option.

azuremobileappdemo1  
MOBILE APP

Search (Ctrl+F)

Overview  
Activity log  
Access control (IAM)  
Tags  
Diagnose and solve problems

APP DEPLOYMENT  
Quickstart  
Deployment credentials  
Deployment slots  
Deployment options

Resource group: mobileapp-rg  
Status: Running  
Location: Southeast Asia  
Subscription name: c3...  
Subscription ID: c3...

URL: http://azuremobileappdemo1.azurewebsite...  
App Service plan/pricing tier: mobileappservice (Standard: 1 Small)  
FTP/Deployment username: No FTP/deployment user set  
FTP hostname: ftp://waws-prod-sg1-011.ftp.azurewebsites...  
FTPS hostname: ftps://waws-prod-sg1-011.ftp.azurewebsite...

Monitoring  
Add tiles +  
Requests and errors  
100  
80  
60  
40  
No available data.

azuremobileappdemo1 - Easy Tables  
MOBILE APP

+ Add + Add from CSV

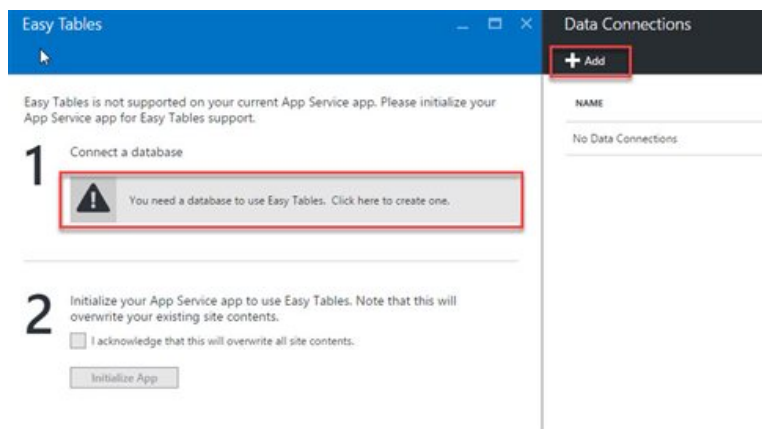
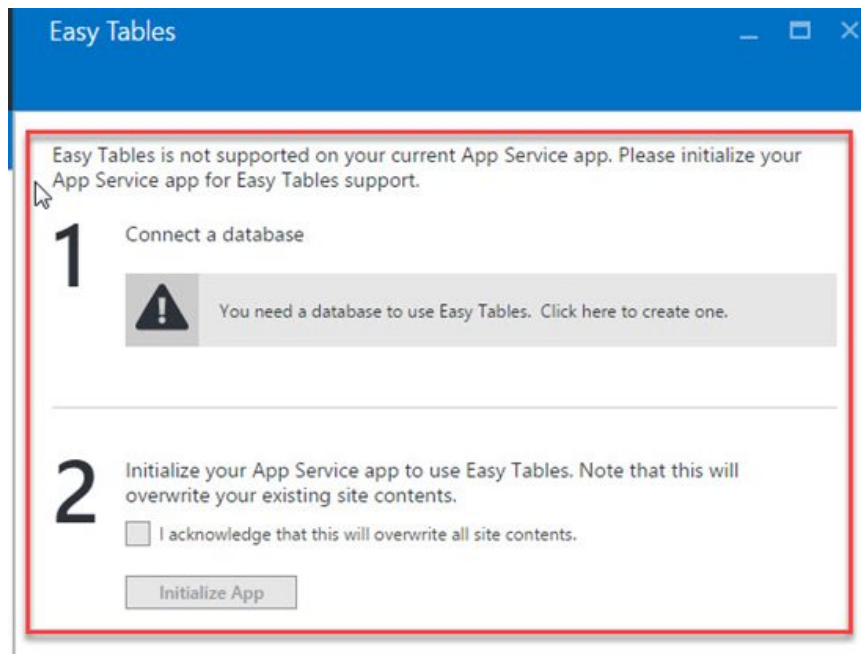
Need to configure Easy Tables/Easy APIs - Click here to continue →

NAME  
No results.

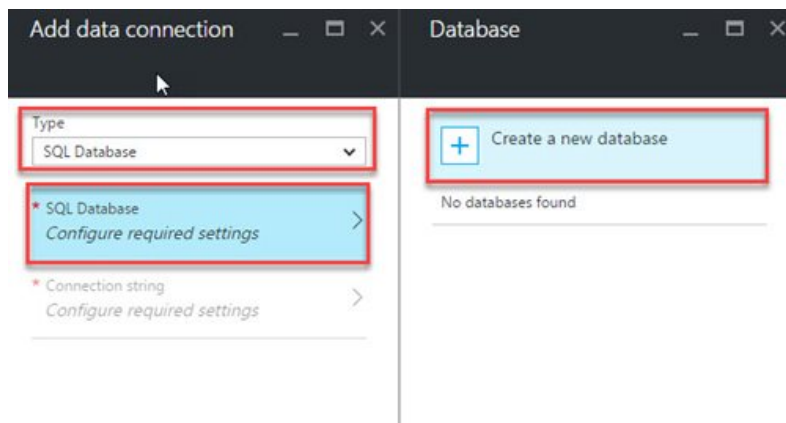
MOBILE  
Easy tables  
Easy APIs  
Data connections  
Push

API

**Step 5:** First, select “Connect to database” option. Add new data connection by clicking on “Add” button.



**Step 6:** Choose Type of Database: SQL Database or Storage. Click on SQL Database & create a new database.



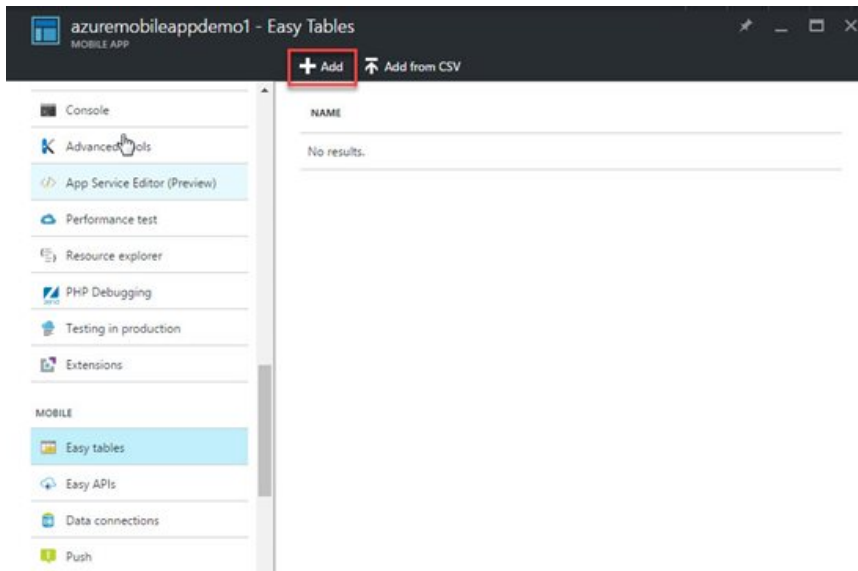
**Step 7:** Enter Database name, Pricing Tier, Target Server, Collation. No server created as of now; so please select Target server & create a new Server. Enter Server name, admin login, password, location.

**Step 8:** Select last option of database “Connection string” option. Just check if all the data filled is correct or not.

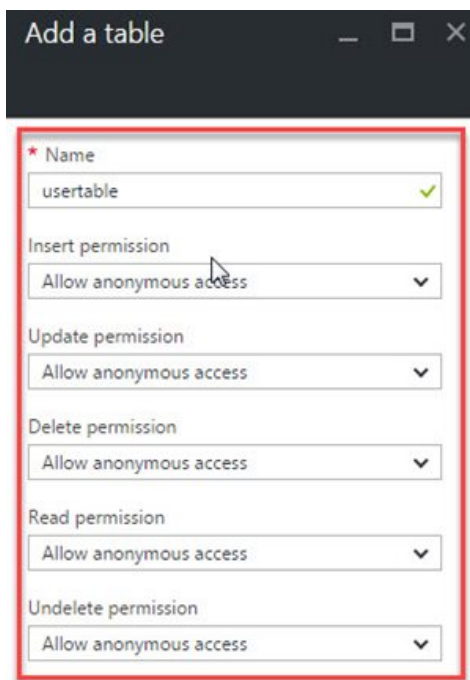
Wait for few seconds. The database & server are being created.

**Step 9:** Database & Server has been created in Easy Tables. Now, check on “I acknowledge that this will overwrite all site contents” & click on “Initialize App” button.

**Step 10:** Click on Add button to create table in database.

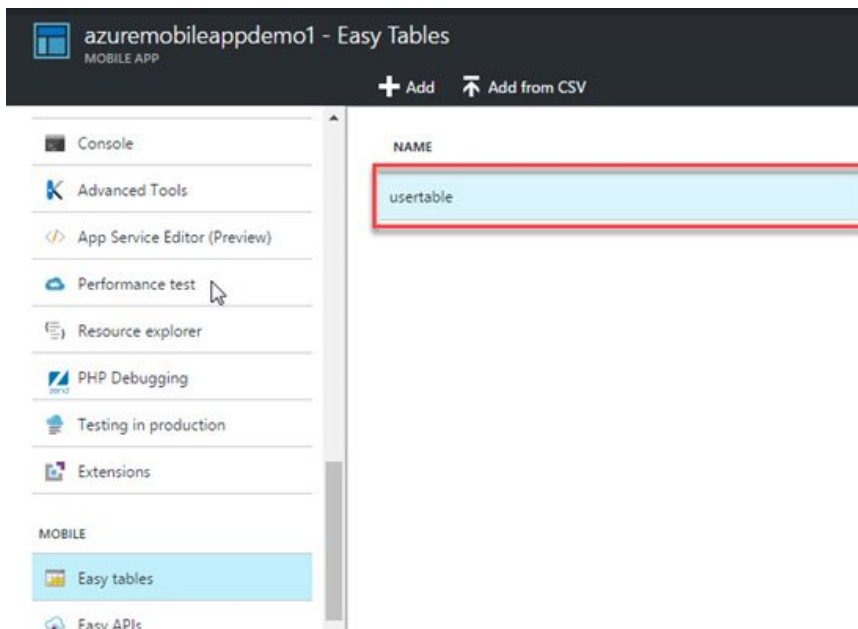


**Step 11:** Enter table name & all permissions: Insert, Update, Delete, Read, Undelete.

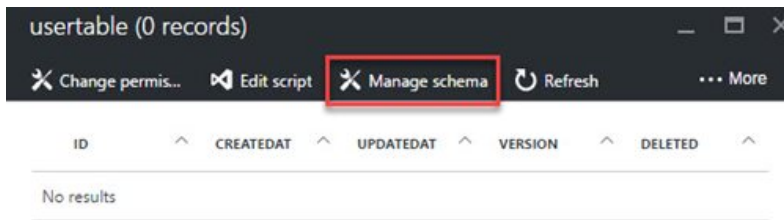


For this example, we are considering "Allow anonymous access".

**Step 12:** Click on Table Name.

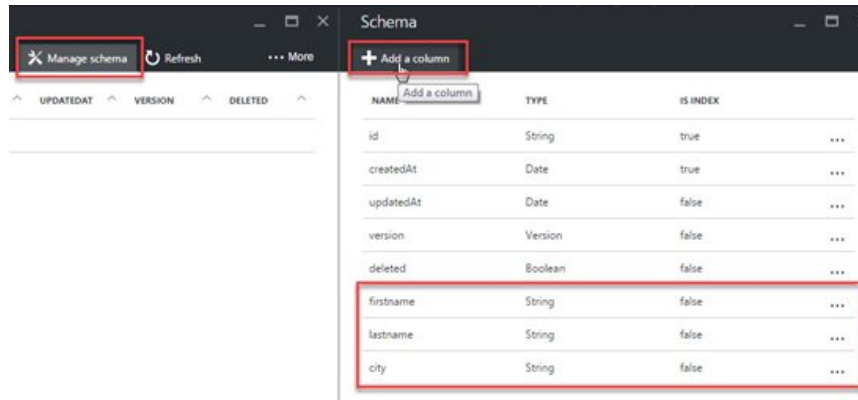


Next step is to create columns or fields in table, so click on "Manage Schema".



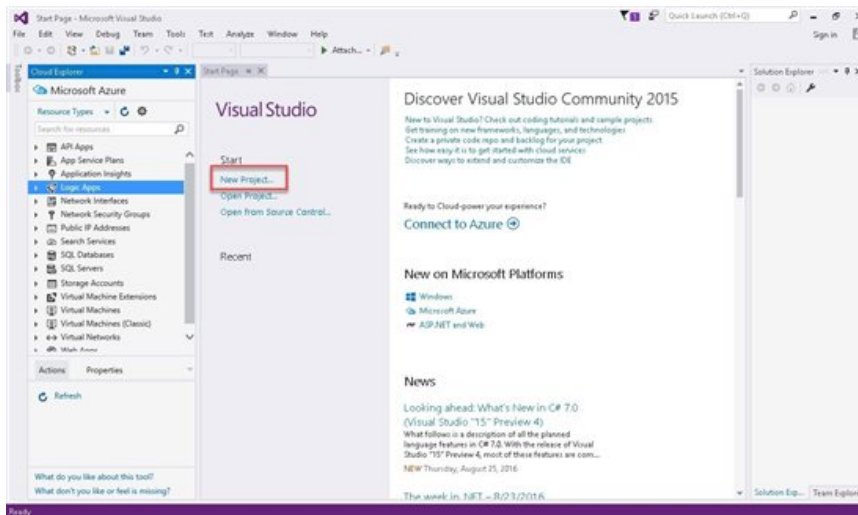
### Step 13: Add columns,

- Column name : firstname , Type : String
- Column name : lastname , Type : String
- Column name : city , Type : String



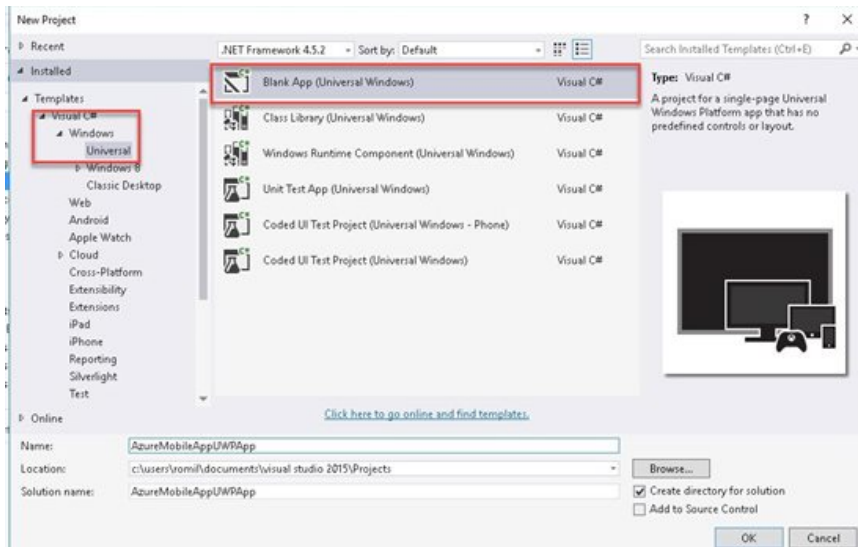
## Create UWP App

### Step 14: Start Visual Studio 2015 & Create New Project.



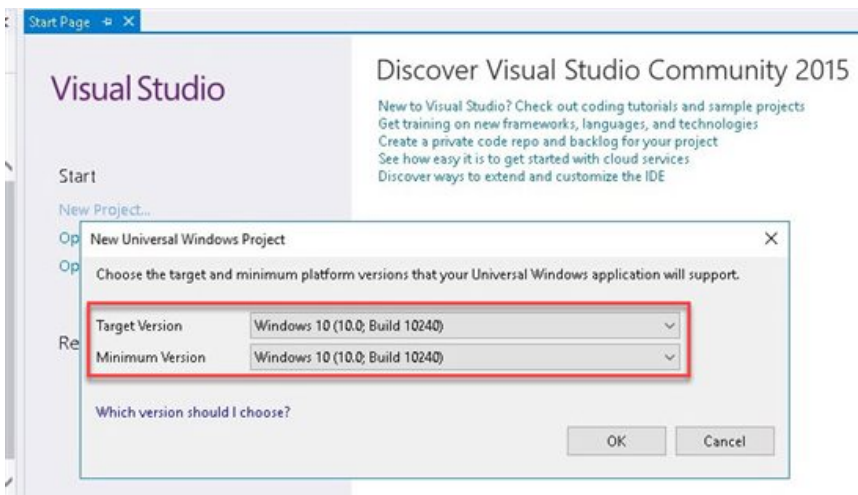
### Step 15: First, select Universal templates & then select Blank App (Universal Windows).



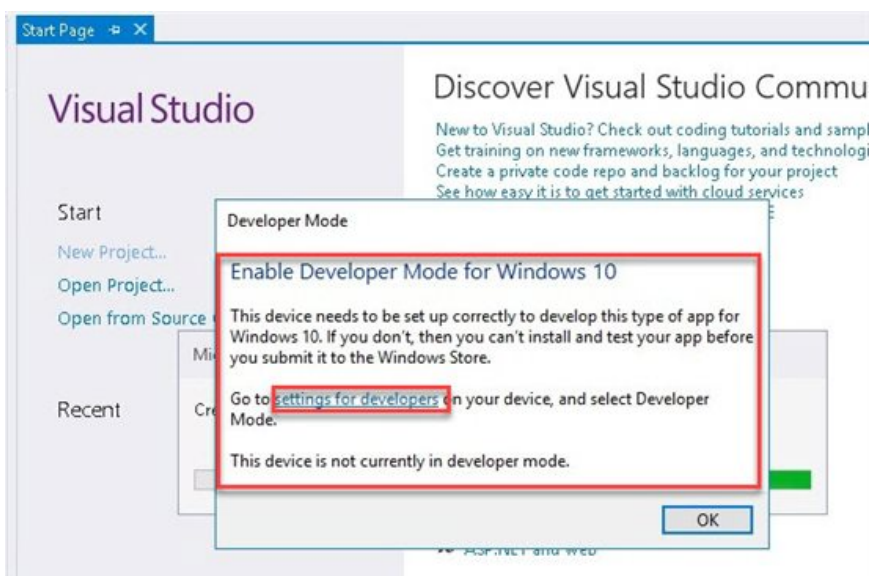


**Note:** if Windows Universal Platform SDK is not installed, then this options will not be available. So, please check when the Visual Studio installation is going on.

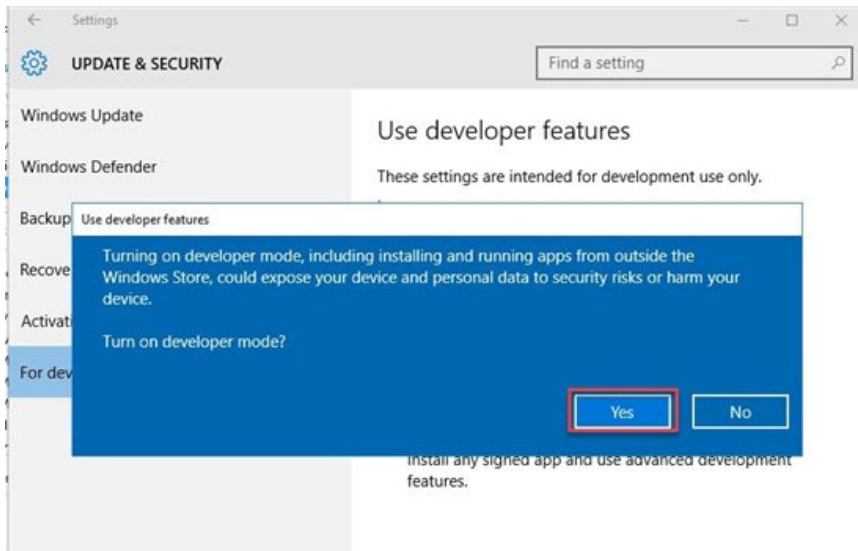
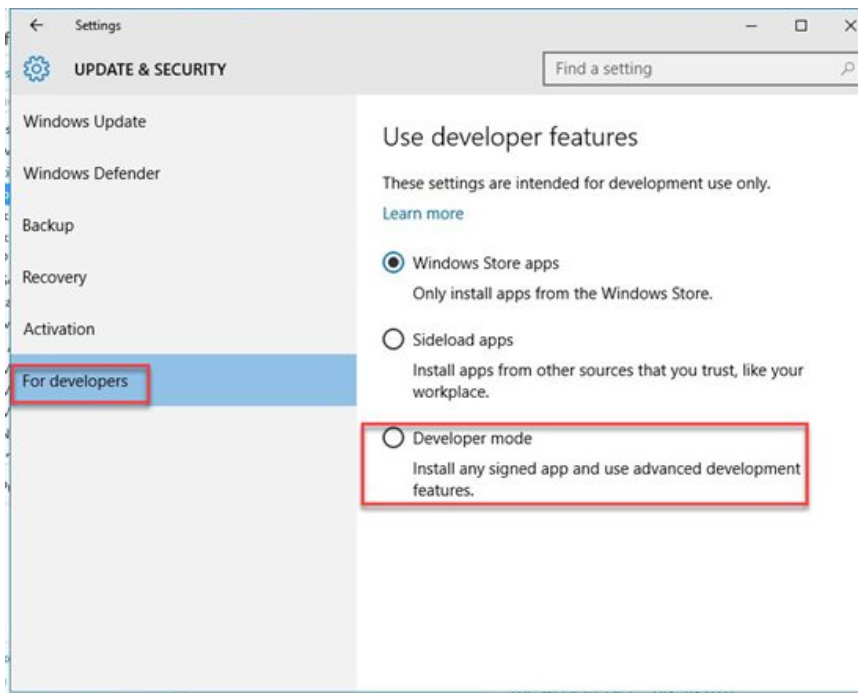
### Select Target Version of UWP Project



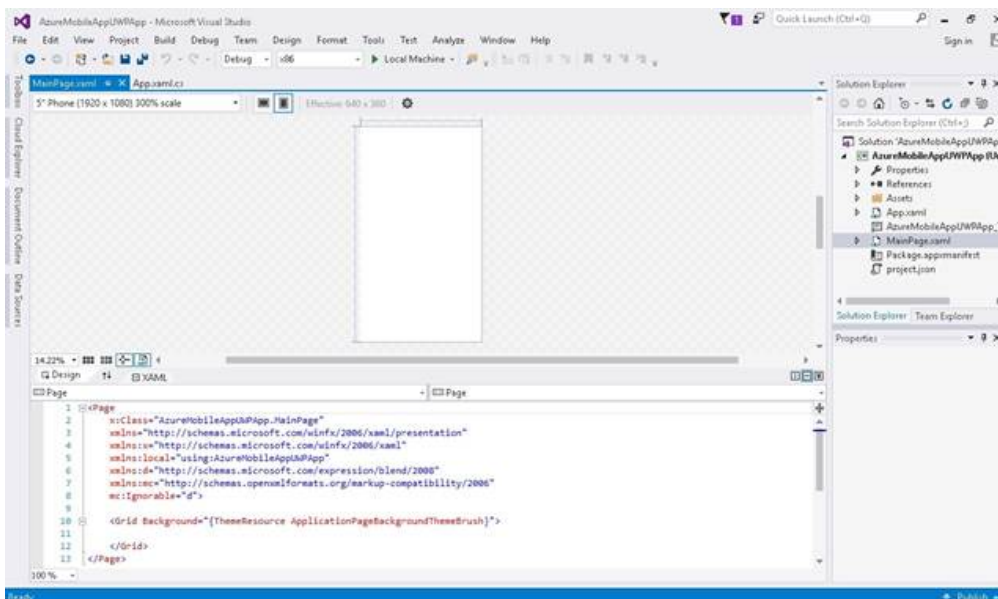
**Step 16:** To deploy or run a UWP App, it's required to enable the Developer Mode. So, please follow the below steps to enable the same.



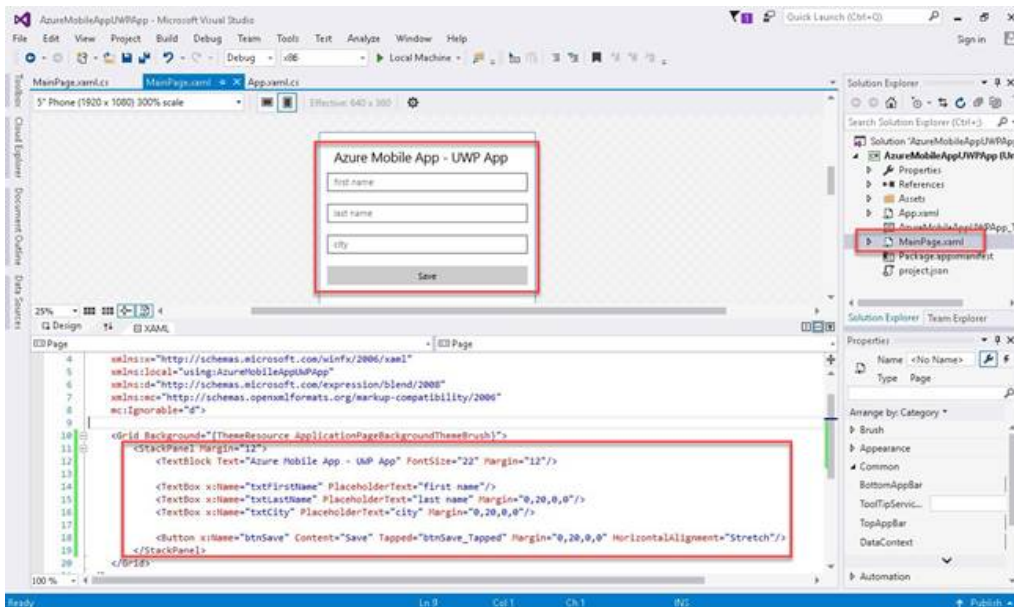




Now, the UWP app is ready to add Azure Mobile app.

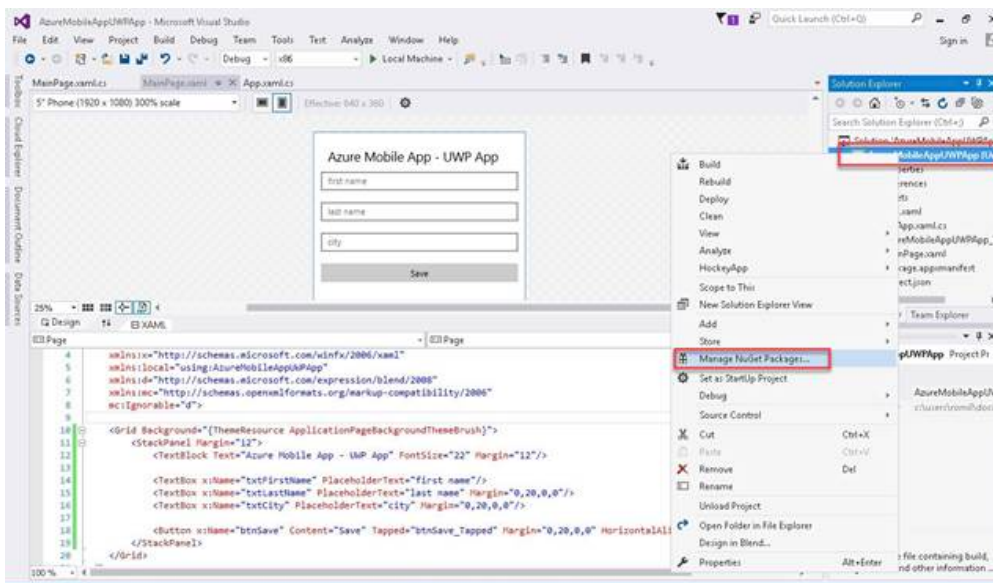


**Step 17:** Open MainPage.xaml file & add the below code for app designing or UI part.

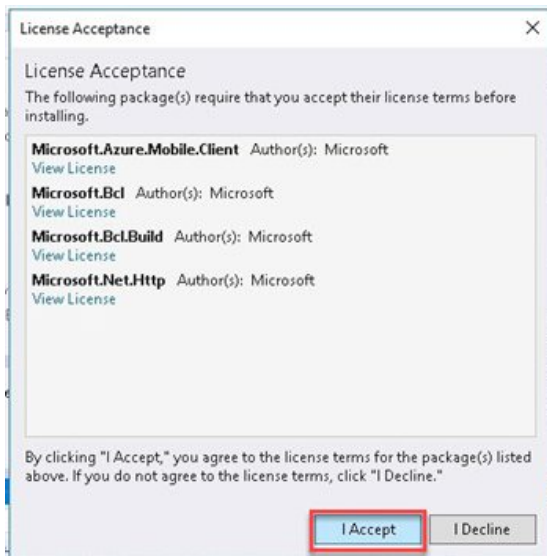
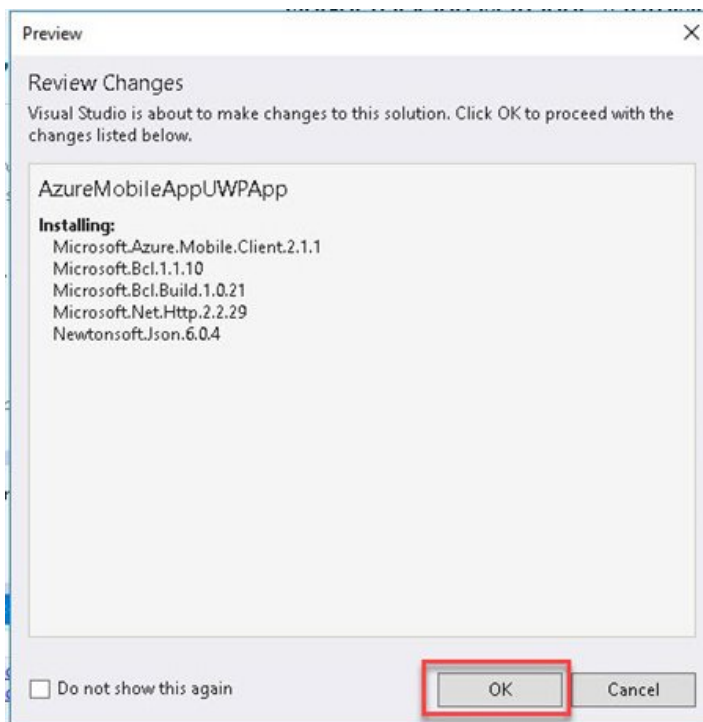
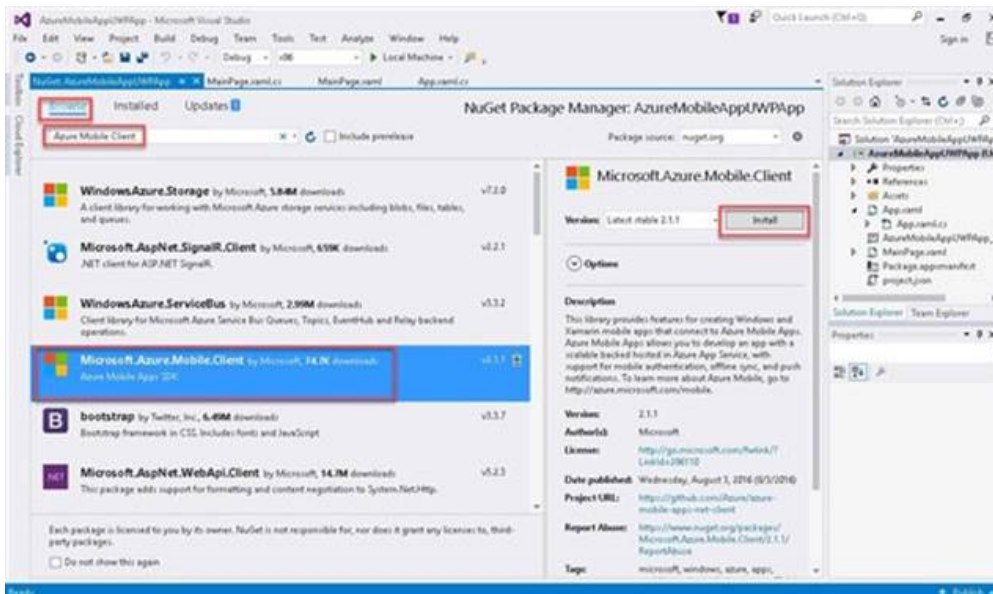


1. <StackPanel Margin="12">
2. <TextBlock Text="Azure Mobile App - UWP App" FontSize="22" Margin="12" />
3. <TextBox x:Name="txtFirstName" PlaceholderText="first name" />
4. <TextBox x:Name="txtLastName" PlaceholderText="last name" Margin="0,20,0,0" />
5. <TextBox x:Name="txtCity" PlaceholderText="city" Margin="0,20,0,0" />
6. <Button x:Name="btnSave" Content="Save" Tapped="btnSave\_Tapped" Margin="0,20,0,0" HorizontalAlignment="Stretch" />
7. </StackPanel>

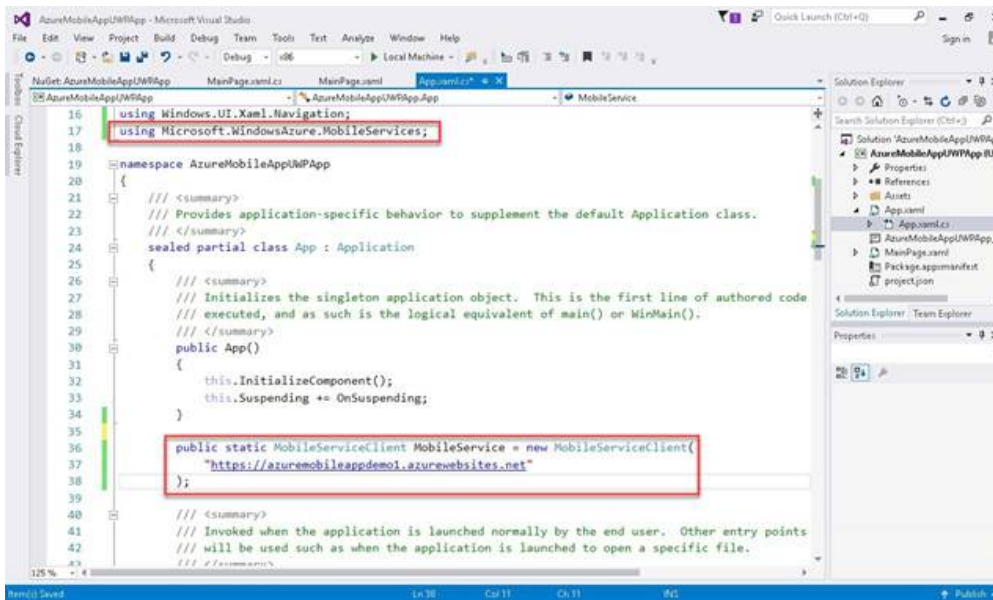
**Step 18:** Right click on Project Name & select "Manage NuGet Packages..."



Select "Browse" tab. Search for "Azure Mobile Client" & install the packages.



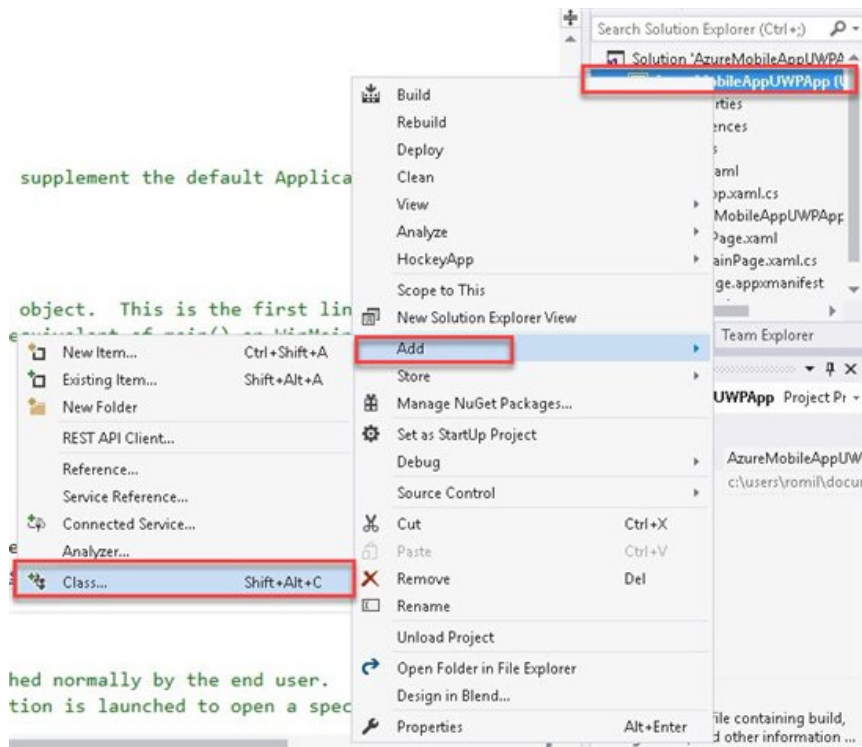
**Step 19:** After adding Azure Mobile App NuGet Packages, open App.xaml.cs.



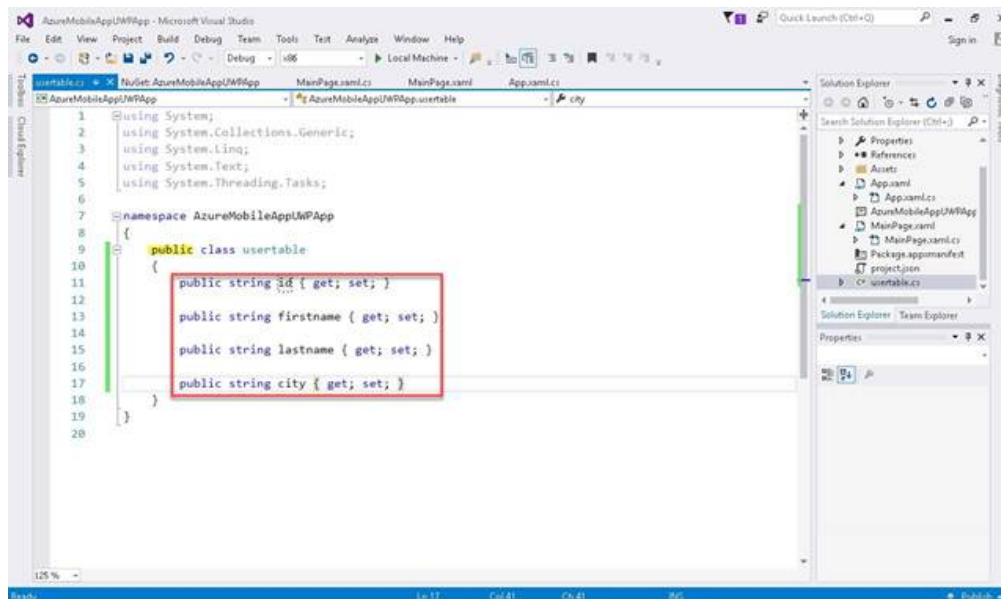
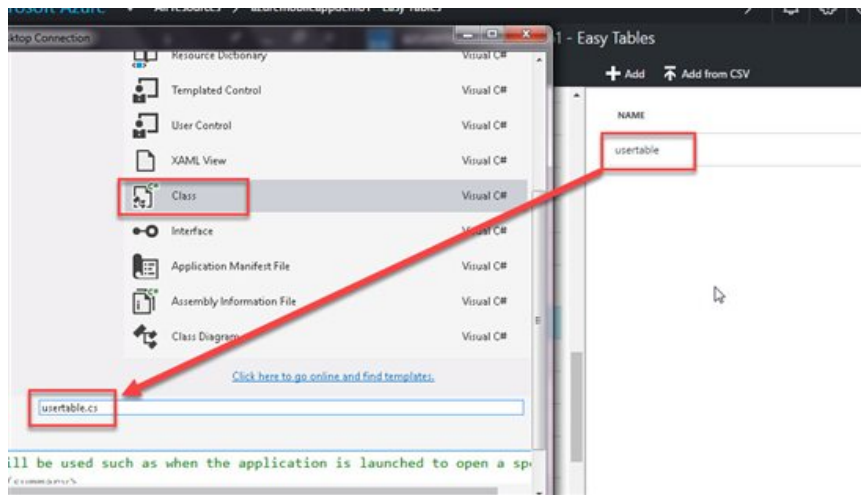
#### Add reference:

1. using Microsoft.WindowsAzure.MobileServices;
2. Also add MobileServiceClient
3. //Please change Mobile App name
4. public static MobileServiceClient MobileService = new MobileServiceClient("https://<azuremobileappname>.azurewebsites.net");

**Step 20:** Again, right click on Project Name & Add new class. Please mention the same name of the class as given to table name on Azure.







```

1. public class usertable {
2.     public string id {
3.         get;
4.         set;
5.     }
6.     public string firstname {
7.         get;
8.         set;
9.     }
10.    public string lastname {
11.        get;
12.        set;
13.    }
14.    public string city {
15.        get;
16.        set;
17.    }
18. }

```

**Step 21:** Open MainPage.xaml.cs file.



- ```

1. using Microsoft.WindowsAzure.MobileServices;
2. using Windows.UI.Popups;
3. IMobileServiceTable < usertable > userTableObj = App.MobileService.GetTable < usertable > ();
4. private void btnSave_Tapped(object sender, TappedRoutedEventArgs e) {
5.     try {
6.         usertable obj = new usertable();
7.         obj.firstname = txtFirstName.Text;
8.         obj.lastname = txtLastName.Text;
9.         obj.city = txtCity.Text;
10.        userTableObj.InsertAsync(obj);
11.        MessageDialog msgDialog = new MessageDialog("Data Inserted!!!");
12.        msgDialog.ShowAsync();
13.    } catch (Exception ex) {
14.        MessageDialog msgDialogError = new MessageDialog("Error : " + ex.ToString());
15.        msgDialogError.ShowAsync();
16.    }
17. }

```

The image displays two screenshots of the Azure Mobile App - UWP App interface. The top screenshot shows the 'Add' screen with a red box around the input fields for 'Romil', 'Bheda', and 'New Delhi', and another red box around the 'Save' button. The bottom screenshot shows the 'Edit' screen with a red box around the 'Data Inserted!!!' message and another red box around the 'Close' button.

14/15



usertable (1 record)

Change permis...

Edit script

Manage schema

Refresh

More

| ID                                  | CRE...     | UPD...     | VER...     | DEL...   | FIRS... | LAST... | CITY  |           |
|-------------------------------------|------------|------------|------------|----------|---------|---------|-------|-----------|
| <input checked="" type="checkbox"/> | 22815cc... | 2016-08... | 2016-08... | AAAAA... | false   | Romil   | Bheda | New Delhi |

Congratulations from UWP! The app data is successfully saved on Azure, using Mobile App.

Thank you for using C# Corner