# Azure Mobile Apps – UWP Client

1. Create a new Project from Visual Studio. File > New > Project > Visual C#> Universal > Blank App.
2. Download the nugget package Microsoft.Mobile.Azure.Client.
3. Add the below code above the constructor in App.Xaml.cs

public static MobileServiceClient MobileService = new MobileServiceClient(

"https://apchin-MobileApp.azurewebsites.net/"

);

1. Create the below class

public class ToDoItem

{

public string Id { get; set; }

[JsonProperty(PropertyName = "text")]

public string Text { get; set; }

[JsonProperty(PropertyName = "complete")]

public bool Complete { get; set; }

}

1. Declare the Classes which will be used by the Mobile Services Client

private MobileServiceCollection<ToDoItem,ToDoItem> itemsAdd;

private IMobileServiceTable<ToDoItem> todoTable = App.MobileService.GetTable<ToDoItem>();

1. Open MainPage.xaml and insert below code.

<Grid.RowDefinitions>

<RowDefinition></RowDefinition>

</Grid.RowDefinitions>

<Grid.ColumnDefinitions>

<ColumnDefinition Width="\*"></ColumnDefinition>

<ColumnDefinition></ColumnDefinition>

</Grid.ColumnDefinitions>

<StackPanel Orientation="Horizontal" Grid.Row="0" Grid.Column="0" VerticalAlignment="Top">

<TextBox MinWidth="160" Margin="0,10,10,0" x:Name="TextInput" KeyDown="TextInput\_KeyDown" Height="44"/>

<Button x:Name="ButtonSave" Visibility="Visible"

Margin="0,0,0,0" Click="ButtonSave\_Click">

<StackPanel Orientation="Horizontal">

<SymbolIcon Symbol="Add"/>

<TextBlock Margin="5">

<Run Text="Save"/>

</TextBlock>

</StackPanel>

</Button>

</StackPanel>

1. C# code for ButtonSave

private async void ButtonSave\_Click(object sender, RoutedEventArgs e)

{

var todoItem = new ToDoItem { Text = TextInput.Text };

TextInput.Text = "";

await InsertTodoItem(todoItem);

}

private async Task InsertTodoItem(ToDoItem todoItem)

{

await todoTable.InsertAsync(todoItem);

itemsAdd.Add(todoItem);

}

You can see a new item inserted in the Azure Mobile App.

1. Add the below code in MainPage.XAML below the first StackPanel

<StackPanel Orientation="Vertical" Grid.Row="0" Grid.Column="1">

<Button x:Name="ButtonRefresh" Click="ButtonRefresh\_Click" Height="44"

HorizontalAlignment="Center">

<StackPanel Orientation="Horizontal">

<SymbolIcon Symbol="Refresh"/>

<TextBlock Margin="5">Refresh</TextBlock>

</StackPanel>

</Button>

<ScrollViewer ScrollViewer.VerticalScrollBarVisibility="Visible"

VerticalAlignment="Stretch" HorizontalAlignment="Left">

<ListView x:Name="ListItems">

<ListView.ItemTemplate>

<DataTemplate>

<StackPanel Orientation="Horizontal">

<CheckBox x:Name="CheckBoxComplete"

IsChecked="{Binding Complete, Mode=TwoWay}"

Checked="CheckBoxComplete\_Checked"

Content="{Binding Text}"

Width="550"

VerticalAlignment="Center"/>

</StackPanel>

</DataTemplate>

</ListView.ItemTemplate>

</ListView>

</ScrollViewer>

</StackPanel>

1. Below code is for REFRESH BUTTON.

private async void ButtonRefresh\_Click(object sender, RoutedEventArgs e)

{

ButtonRefresh.IsEnabled = false;

await RefreshTodoItems();

ButtonRefresh.IsEnabled = true;

}

private async Task RefreshTodoItems()

{

MobileServiceInvalidOperationException exception = null;

try

{

itemsAdd = await todoTable

.Where(todoItem => todoItem.Complete == false)

.ToCollectionAsync();

}

catch (MobileServiceInvalidOperationException e)

{

exception = e;

}

if (exception != null)

{

await new MessageDialog(exception.Message, "Error loading items").ShowAsync();

}

else

{

ListItems.ItemsSource = itemsAdd;

this.ButtonSave.IsEnabled = true;

}

}

1. Below is to update the checkbox item.

private async void CheckBoxComplete\_Checked(object sender, RoutedEventArgs e)

{

CheckBox cb = (CheckBox)sender;

ToDoItem item = cb.DataContext as ToDoItem;

await UpdateCheckedTodoItem(item);

}

private async Task UpdateCheckedTodoItem(ToDoItem item)

{

await todoTable.UpdateAsync(item);

itemsAdd.Remove(item);

ListItems.Focus(Windows.UI.Xaml.FocusState.Unfocused);

}

1. To Hit ENTER from keyboard and Save Items.

private void TextInput\_KeyDown(object sender, Windows.UI.Xaml.Input.KeyRoutedEventArgs e)

{

if (e.Key == Windows.System.VirtualKey.Enter)

{

ButtonSave.Focus(FocusState.Programmatic);

}

}

# OfflineSync

private IMobileServiceSyncTable<TodoItem> todoTable = App.MobileService.GetSyncTable<TodoItem>();

#region Offline sync

private async Task InitLocalStoreAsync()

{

if (!App.MobileService.SyncContext.IsInitialized)

{

var store = new MobileServiceSQLiteStore("localstore.db");

store.DefineTable<TodoItem>();

await App.MobileService.SyncContext.InitializeAsync(store);

}

await SyncAsync();

}

private async Task SyncAsync()

{

await App.MobileService.SyncContext.PushAsync();

await todoTable.PullAsync("todoItems", todoTable.CreateQuery());

}

#endregion