Motz Codes Live

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Integrating Mobile App Preferences/Settings

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Who is Motz?
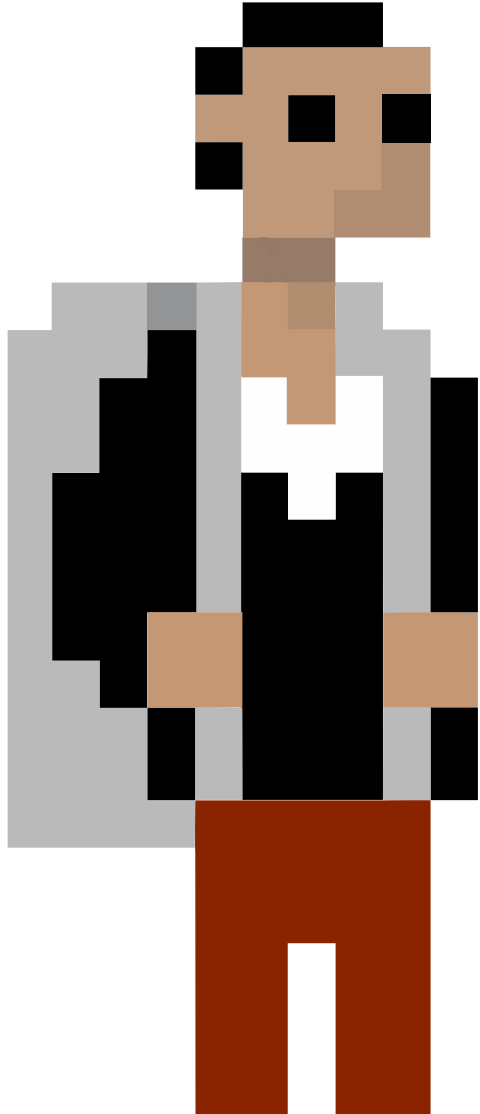
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How do we store data?

Database

- Tables of data
- Columns of different types
- Good for:
  - Complex Data
- Use:
  - SQLite.net PCL

How do we store data?

Database

File System

- Persistent Files
- Flat file system
- Read/Write with IO
- Good for:
  - Config Files, Embedded Data, Static Complex Settings
- Use:
  - PCL Storage

How do we store data?

Database

File System

Preferences

- App Specific Settings
- Key-Value Pairs
- Good For:
  - App Config, user preferences/settings, small customizations
  - Simple data

iOS Preferences

- NSUserDefaults
  - var defaults = NSUserDefaults.StandardUserDefaults;

- Get:
  - var user = defaults.StringForKey("username");

- Set:
  - defaults.SetString(value, "username");
  - defaults.Synchronize();

Android Preferences

- SharedPreferences
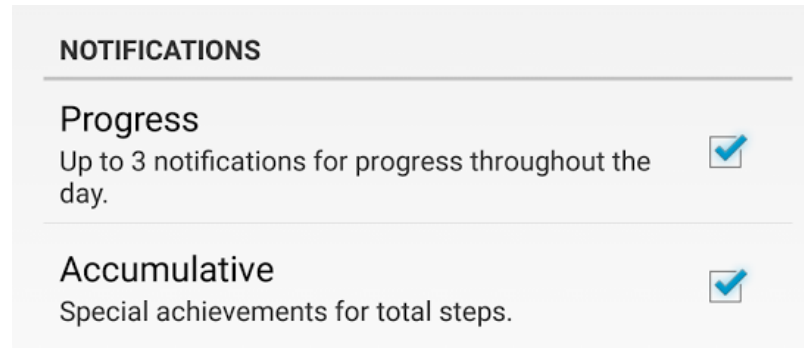 - var prefs = PreferenceManager.GetDefaultSharedPreferences(Application.Context);

- Get:
  - var user = prefs.GetString("username", string.Empty);

- Set:
  - prefsEdit = prefs.Edit();
  - prefsEdit.PutString("username", value);
  - prefEdit.Commit();

Android Preferences (easy settings screens)


```xml
<PreferenceCategory android:title="@string/category_notifications_preferences">
    <CheckBoxPreference android:key="ProgressNotifications"
                            android:title="@string/notifications_progress"
                            android:summary="@string/notifications_progress_summary"
                            android:defaultValue="true" />
    <CheckBoxPreference android:key="AccumulativeNotifications"
                            android:title="@string/notifications_accumulative"
                            android:summary="@string/notifications_accumulative_summary"
                            android:defaultValue="true" />
</PreferenceCategory>
```

Windows Phone Preferences

- IsolatedStorageSettings
  - var prefs = IsolatedStorageSettings.ApplicationSettings;

- Get:
  - var user = prefs["username"];
  - **Should probably check .Contains("username")

- Set:
  - if (prefs.Contains("username"))
    - prefs["username"] = value;
  - else
    - prefs.Add("username", value);

Windows RT Preferences

- ApplicationDataContainer
  - var prefs = ApplicationData.Current.LocalSettings;

- Get:
  - var user = prefs.Values["username"];
  - **Should probably check .Contains("username")

- Set:
  - if (prefs.Values.ContainsKey("username"))
    - prefs.Values["username"] = value;
  - Else
    - prefs.CreateContainer(key, ApplicationDataCreateDisposition.Always);
    - prefs.Values["username"] = value;

A Better, More Cross-Platform Way!

- Settings Plugin for Xamarin and Windows!

 https://www.nuget.org/packages/Xam.Plugins.Settings/

The API: ISettings

- Supports:
  - Bool, Int32, Int64, String, Single (float), Guid, Double, Decimal, DateTime

- Get:
  - var name = AppSettings.GetValueOrDefault<string>("username", string.Empty);

- Set:
  - AppSettings.AddOrUpdateValue<string>("username", value);

Under the hood:

- Uses the Native Preferences!!!
- NSUserDefault
- SharedPreferences
- IsolatedStorageSettings
- ApplicationData
- NO json or xml files!

Totally Support Android Preference Screens!
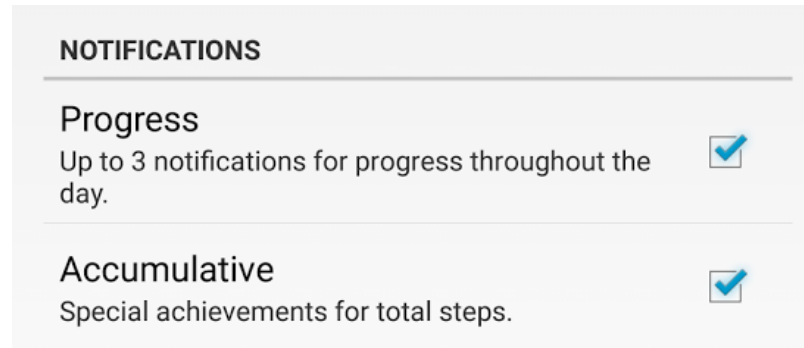

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                        android:title="@string/notifications_accumulative"
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</PreferenceCategory>
```
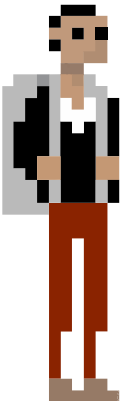
Let's Preferences!?!

Resources

- Settings Plugin for Xamarin
  - https://www.nuget.org/packages/Xam.Plugins.Settings/
- Xamarin University XAM-160
  - SQLite and Mobile Data
- Motz Codes Live:
  - https://www.youtube.com/user/jamesmontemagno
  - https://github.com/jamesmontemagno/MotzCodesLive

Thank you. Questions?

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