Verify SDK Sample Windows Project

Steps to Test the Sample Application

Before beginning:

- The developer should have Administrator privileges.
- The developer should be in the 'Developer Mode' on the device.
- The current implementation uses the webcam for QR Scanning and BLE for data transfer. So a webcam and Bluetooth is required for executing the sample application and using the SDK.

The sample application will be provided as a zip file consisting of the following files:

- Add-AppDevPackage.resources
- Dependencies
- Add-AppDevPackage.ps1
- VerifySDK_App_x.x.x.0_x86.appxbundle
- VerifySDK_App_x.x.x.0_x86.appxsym
- VerifySDK_App_x.x.x.0_x86.cer
- VerifySDKDlls (Folder containing all the Dlls)

1. Extract any folders or files that need to be extracted.
2. Once the files have been extracted, open *Windows PowerShell* as an administrator and navigate to the folder location of the unzipped files.
3. Run the command `.\\Add-AppDevPackage.ps1`. This will show a progress bar.
4. After the installation is complete, the following message will appear: "Success: Your app was successfully installed."
5. An application by name of **IDEMIA Verify SDK - Windows** will be installed on the system.
6. Execute this application. The following screen will appear:

Currently, this application only supports device engagement using QR code scanning. To scan the QR code, use the webcam.

7. When the **IDEMIA Mobile ID Verify App** is launched, then a UI page will appear with a title "Create New Namespace".
8. On this page to enter multiple documents, first enter data in “N1818: Enter Doc Type”, then in "Enter Namespace", and in the last "Enter Fields for the Namespace". Make sure that fields are separated by a comma. Click **Add Fields**.
9. For N1818, select only "Set Retain Intent". To set the "Intent to Retain" to `True`, check the boxes corresponding to the fields in the "Intent to Retain" field choices.
10. Select the fields that needs to be added into the request by checking the fields and then clicking **Add Selected Fields**.
11. To add more Namespaces and their fields for the same `DocType`, enter a new Namespace name in "Enter Namespace" and in "Enter Fields for the new Namespace" separated by commas.
12. Once done adding new a `DocType` and its related Namespaces, click **Next Page**.
13. Access a custom namespace page by clicking **Custom Namespace Page**.

14. On the main page for N1818, when fields from ISO standard are selected, check the 'is N1818' box and click **Set Retain Intent**. A list of all the selected fields will be displayed in 'Retain Intent (N1818 Only)'. Check the box for which field(s) the end-user wants 'Intent to Retain' to be 'True'. By default it's set to `False`.
15. A mobile device (iOS or Android) will be needed with the **Mobile ID App** running on it for performing this test.
16. On the mobile device, launch the **Mobile ID App** in peripheral mode and generate the QR code.
17. To check whether the condition that the age is over a certain value, select an age value from `Age Over NN`.
18. When the barcode is a PDF417, then the `Age Over NN` response will be based upon calculating the age. If the barcode is a QR code then whatever the response received from the **Mobile ID App** is what will be shown.

    The following fields can be requested from the **Mobile ID** credential holder as `optional`:

- `RealID`
- `family_name`
- `given_name`
- `birthdate`
- `issue_date`
- `expiry_date`
- `issuing_country`
- `issuing_authority`
- `driving_privileges`
- `portrait`
- `mgmt_lastupdate`
- `mgmt_validity`
- `online_token_xxxx`
- `administrative_number`
- `gender`
- `height`
- `weight`
- `eye_color`
- `hair_color`
- `birthplace`
- `resident_address`
- `portrait_capture_date`
- `age_in_years`
- `age_birth_year`
- `age_over_NN`
- `issuing_jurisdiction`
- `nationality`
- `resident_city`
- `resident_state`
- `resident_postal_code`
- `biometric_template_xx`
- `name_nat_char`
- `mgmt_nextupdate`

19. To check the final parsed result after completing the entire execution cycle click **Let's Scan**.
20. When using this for the first time, a popup will appear and will ask the end-user to install a webcam from the Microsoft Store.

21. A webcam UI will popup. Scan the generated QR code or PDF417 barcode from the **Mobile ID App** by placing the QR code or PDF417 barcode in the middle of the rectangle box of the UI.

- For QR codes, the entire device engagement and data transfer will take place between the **IDEMIA Verify SDK - Windows** and the **Mobile ID App**.
- For a PDF417 barcode, an image will be generated using the data of the scanned PDF417 barcode. The generated image will be saved by the name *generatedPDF417.jpg*.

NOTE: It is recommended to open this image using *Paint*.

22. The final result shows in the *Received Response* text box.
23. Check the result of the previous steps by navigating to the *Sequential SDK Testing* section of the UI. There are three buttons:
    - **Scan Mobile ID**
    - **Send Mobile ID Request**
    - **Received Mobile ID Response**

After the application is executed, only the **Scan Mobile ID** button is enabled, while the rest two buttons are disabled.

24. Start the test by clicking **Scan Mobile ID**. When it's clicked, the two disabled buttons will become enabled. In the response window, the scanned QR code and its parsed values will be displayed.
25. Click the **Send Mobile ID Request** button. The response window will show the requested data, the `CBOR` created request and `CBOR Byte` array.
26. Click the **Received Mobile ID Response** button. The response window will show the parsed received data. When the test is successful, the following will display: