

Flutter SDK for WA Digital Wallet

This Flutter package provides wallet functionality for the **ServiceWA** application, enabling issuance, storage, presentation and revocation of verifiable credentials via the WA Digital Wallet service. It abstracts away the complexities of OIDC/OAuth flows, cryptographic operations and offline presentation.

Installation

Add the package to your `pubspec.yaml`:

```
dependencies:
  wa_digital_wallet:
    git:
      url: git@github.com:yourorg/wa_digital_wallet_flutter.git
      ref: v1.0.0
```

Then run `flutter pub get`.

Initialisation

```
import 'package:wa_digital_wallet/wa_digital_wallet.dart';

void main() async {
  final wallet = WalletSdk(
    tenantId: 'tenant-id',
    apiBaseUrl: 'https://wallet.api.gov.wa.au/api/v1',
    clientId: 'your-client-id',
    redirectUri: 'servicewa://callback',
  );
  await wallet.initialise();
  runApp(MyApp(wallet));
}
```

Configure your tenant ID, API base URL and OAuth client ID. The SDK uses the device's secure key store (Android Keystore / iOS Secure Enclave) to protect private keys.

Issuing a credential

```
final credential = await wallet.issueCredential(
  schemaId: 'mDL',
  attributes: {
    'familyName': 'Citizen',
```

```
'givenName': 'John',  
'expiry': '2030-12-31',  
},  
);  
// The credential is stored securely in the wallet and can be displayed or  
presented.
```

Presenting a credential

```
final request = await wallet.fetchPresentationRequest(qrCodeUri);  
final presentation = await wallet.createPresentation(request);  
await wallet.presentCredential(presentation);
```

The SDK handles selective disclosure and generates a proof with the appropriate claims. Offline presentation via QR codes or NFC is supported; if the verifier is offline, the SDK includes the credential status in the presentation.

Revoking or updating a credential

Users are notified when a credential is revoked or updated via push notifications. They can also manually check for updates:

```
await wallet.syncCredentials();
```

Customisation & UI

The package provides widgets for listing credentials, displaying details, scanning QR codes and performing presentations. Widgets follow Material design and are accessible (WCAG 2.2 AA). Developers can override styling to align with ServiceWA's look and feel.

Contributions

This SDK is open source. Contributions via pull requests are welcome. Please read the contribution guidelines in the repository.
