

SK-ID-Solutions-Test-Task

The document describes the procedure of test task implementation.

The Demo app was installed, and Postman was used to construct the requests to make sure they work as expected. Then the python script was written to perform the following sequence:

1. Make authentication request to RP API.
2. Verify status of authentication request repeatedly after 2 seconds.
3. Approve authentication after approx. 10 seconds from step 1 by inserting PIN1 in Smart-ID app.
4. Verify status of authentication request.

Program description:

The parameters were defined to enable HTTP requests:

- POST (init_session()):

BASE_URL = 'https://sid.demo.sk.ee/smart-id-rp/v2'

PERSON_ID = 39803273710

COUNTRY_CODE = 'EE'

IDENTITY_TYPE = 'PNO'

Based on that, the post URL was created: *https://sid.demo.sk.ee/smart-id-rp/v2/authentication/etsi/PNOEE-39803273710*

Additionally, the following body was required to allow post request (as per documentation):

```
{
  'relyingPartyUUID': DEMO_UUID,
  'relyingPartyName': DEMO_PARTY_NAME,
  'hash': generate_hash_sha512().decode('utf-8'),
  'hashType': 'SHA512',
  'allowedInteractionsOrder': [
    {
      'type': 'displayTextAndPIN',
      'displayText60': 'Up to 60 characters of text here..'
    }
  ]
}
```

Every new session requires a unique hash value. Therefore, the random hash value generator was created (generate_hash_sha512())

```
def generate_hash_sha512():  
    hash_function = hashlib.sha512()  
    hash_function.update(bytearray(os.urandom(64)))  
    return base64.b64encode(hash_function.digest())
```

Once the request is sent, the session ID is returned.

```
{  
  "sessionID": "478cbd4e-a8f4-441f-a581-af4e41abe190"  
}
```

- GET (session_status(session_id)):

BASE_URL = 'https://sid.demo.sk.ee/smart-id-rp/v2/session'

session_id = "e19f7c47-0731-44dd-afb2-1f82eb4cae02"

timeout_ms = 2000

It allows to create the Get request: <https://sid.demo.sk.ee/smart-id-rp/v2/session/e19f7c47-0731-44dd-afb2-1f82eb4cae02?timeoutMs=2000>

Following the Get request, the status message is reported:

1. "RUNNING" - still waiting for pin to be entered.
2. "COMPLETED" - the pin was entered/session expired.

```
{  
  "state": "RUNNING"  
}
```

The program allows to send the post request and continuously check the status. Once the pin is entered or number of retries has exceeded the limit, the program is terminated with the latest status.