



Project name	OpenID Connect Doctor
Project mission	Our ambitious goal is to develop a fast and easy-to-use tool that is able to provide the users with the analysis of the OpenID Connect tokens and thus allows them to document the endpoint and token structure. Core functionality will be endpoint analysis, requesting tokens, token analysis and providing a short summary to the user.
Industry partner	SEAL Systems AG
Team logo	
Project summary	<p>The OpenID Connect Doctor is a tool to test and check OpenID Connect providers. Using the OIDC Doctor, a user can view the endpoint of an OIDC provider and in case valid credentials are provided a decoded token can be viewed. For both the endpoint and the token, the user can check whether the JSON structure of the object matches their own expectations (does value x exist, etc.) by checking against a schema. Furthermore, the user can validate the token signature either against the public key provided by the OIDC provider or by using their own public key. To request a token, the OIDC Doctor supports three different means of requesting a token, the Password Grant, Client Credential Grant, and Authorization Code Flow. In case they have a token generated using a different means of authorization, the token can still be validated. Finally, in case any errors occur at any point while using the application, the OIDC Doctor has a detailed protocol,</p>

	which can be used to find the reason for why the error occurred.
Project illustration	<div><div><div>Protocol</div><div><div>Issuer: <input type="text" value="Input your issuer here"/> ▼</div><div>Submit</div></div></div></div> <div><div><div>Client-Credentials</div><div>Normally used for machine-2-machine-communication.</div><div>Try it out</div></div><div><div>Password-Grant</div><div>Combines the client-credentials-flow with a user-authentication.</div><div>Try it out</div></div><div><div>Authentication-Code-Flow</div><div>Redirects the user to the identity-provider to handle authentication.</div><div>Try it out</div></div></div> <div><div><div>Download header</div><div>Download payload</div><div>Copy header</div><div>Copy payload</div></div><div><div>Header</div><div>{ "alg": "HS256", "typ": "JWT" }</div></div><div><div>Payload</div><div>{ "sub": "1234567890", "name": "John Doe", "iat": 1516239822 }</div></div></div>

Team photo



Project repository

<https://github.com/amosproj/amos2022ss08-openid-connect-doctor>

Additional information

Any additional information you would like to provide (optional)