Exercise 1 (sequence diagram 1): create a diagram

Create a UML Sequence diagram to represent a simplified version of the OAuth2 protocol as described below. Recommended lifelines are **bold** on first mention and recommended message names are marked with ().

"A user is visiting some web site for the first time and their **browser** came to view() the **login** page. Rather than create a new account, the user clicks the button in their browser to ask the login page to googleAuth() to authenticate with Google instead. The login page sends an authRequest() to **Google** which returns some data (e.g., a login form) that the login page returns to the browser. The user fills out the form and then the browser tells Google to authorize() the website and Google replies to the browser. The browser then sends this grant() token back to the login page so this website will (in the future, not in this diagram) be able to make requests on behalf of the user."

- Actor is User
- Browser is Use case
- website is Use case
- login is use case
- google is use case