

Interaction Design Challenge

Background

Global Relay is in the archiving and compliance business with the primary market focus being the financial industry. Global Relay primarily delivers its software to customers via the software-as-a-service (SaaS) model. Most services deal with archiving unstructured content for financial companies such as email and text messages. Other services deal with getting access to the archived data and facilitate searching, compliance and e-Discovery. Since Global Relay archives and manages data, data integrity and security are paramount issues that need to be dealt with.

Feature: Global Login

As part of our effort to unify and simplify the user experience for these services, Global Relay has implemented a global authentication system covering all of our services, so that logging in to one service logs you in to all of them. When a user reaches the login form, there is always a target service specified, so that we know which service to redirect the user to after a successful login.

Persona

Global Login will be used by all Global Relay end-users, and should behave the same regardless of persona. Consider the target user to be any modern office worker.

Use case: Determine Login Method

Each user is configured to have one of the following login methods:

1. Traditional login ID/password combination.
2. Login via a page hosted by a customer (specifically via SAML, but the details of this technology are not necessary for this assignment).

The first step of the login process is thus determining which of the two login methods a given user is configured to use. The configuration is associated with a user's Login ID. The Login ID can be any arbitrary string, not necessary just an email address.

It cannot be assumed that the user knows which login method they are configured for.

After determining the authorization method we then proceed with the login process specific to that method.

Use case: Password

ID/Password should behave according to conventional expectations for a login form. Upon successful authentication they are simply redirected to the target Global Relay service.

Additional requirements:

- Required input:
 - Login ID: can be any arbitrary string, not necessarily an email address or username
 - Password: alphanumeric password. Password strength policy varies by user/customer
- Error handling
 - Error handling for all standard expected user and system errors
- Security considerations
 - Malicious users should not be able to easily discover valid IDs or passwords.

Use case: Login via page hosted by customer

Once it is determined that a user is configured to login via a page hosted by the customer, the following process occurs:

1. Global Relay looks up the login page associated with that user
2. Global Relay redirects the user to that login page hosted by the customer
3. The user then logs in in via whatever method their company specifies.
4. Once the login is successful, the customer's login service notifies Global Relay that authentication has succeeded, and redirects the user back to Global Relay
5. The user is then presented with their original targeted service within Global Relay.

This means that once a user has been passed off to the company's log in page, the next Global Relay page they will see is the service that they were trying to log in to.

One benefit of this login method is that the employee's company completely controls the ID's and passwords of their users. Another benefit is that this can be used as a single login for many different products and services, that is the user will only need to login the first time any product uses this method, after which the user will not have to re-enter their credentials again for any ensuing logins that use this same method.

Additional requirements:

- Required input:
 - Login ID: can be any arbitrary string, not necessarily an email address or username
- Error handling
 - Error handling for all standard expected user and system errors
 - Do not have to be concerned with errors in the customer-hosted login page.
- Security considerations
 - Malicious users should not be able to easily discover valid IDs or passwords
 - Global Relay should not see a password for this type of user, since one of the key advantages to this method is that the user's password never leaves their company's intranet.

Additional Considerations

- The single-login paradigm might be potentially confusing to users: logging in to one service has a side-effect of logging in to all services. Likewise logging out of one service has a side-effect of logging out of all services. We would like to mitigate this confusion if possible.
- Login page will likely be used often, possibly by the same user and possibly by many different users.
- Though not necessary yet, page will likely be localized at a later date
- ID lookup and authentication process are not guaranteed to always respond efficiently.

Task

You have been asked to design a standard login panel according to the behavior described above.

The login panel can be used in different contexts to allow users to log in to Global Relay services.

Contexts include:

- On a webpage viewed on anything from large-screen (27-inch) monitors, to laptops screens, to mobile phones and tablets.
- On a mobile phone or tablet app
 - **NOTE: For this challenge, you only need to design for mobile browsers. You do not need a separate design for mobile apps.**
- On private and public computers

Deliverable

Provide a document showing your design process and proposed solution for the Login interface, to a level of detail such that a developer could understand how to build the flow, but also appropriate for a stakeholder to understand and approve the design.

Feel free to expand beyond the requirements as listed if you feel certain features might improve the overall user experience. Additionally, if any areas are not clear, please make assumptions in order to make your work possible, but be sure to mark them down in your document so that we are aware of them.

PDF and DOC files are best, though HTML or other universal formats are also acceptable. Do not assume we have anything other than basic Windows office tools at our disposal.

Please complete this assignment within 4 days of its receipt.