

Assignment 5: Design and Authentication System

Imagine that you are the CISO of a startup. You are tasked with designing the architecture and policies for your company's public-facing website, which is the main way that customers will access your services. Because this is a business and there are paying customers, you need to balance two conflicting goals:

- Information stored on the website will include billing information—such as credit card details—and personal data, and therefore needs to be protected.
- Usability needs to be considered for two reasons:
 - Making it too difficult to log in might mean that potential customers are turned away in favor of competitors.
 - Similarly, people having trouble logging in will lead to increased support costs. That is, poor usability could hurt your bottom line.

Your assignment is to create policy documents and architecture specifications that will answer the following questions:

1. How will the system store the passwords on the backend?
2. What does the user experience look like? To answer this, you should provide mockups and augment them with documents that explain the various design decisions.
3. What happens if someone forgets their password?
4. What are the policies that govern passwords?