

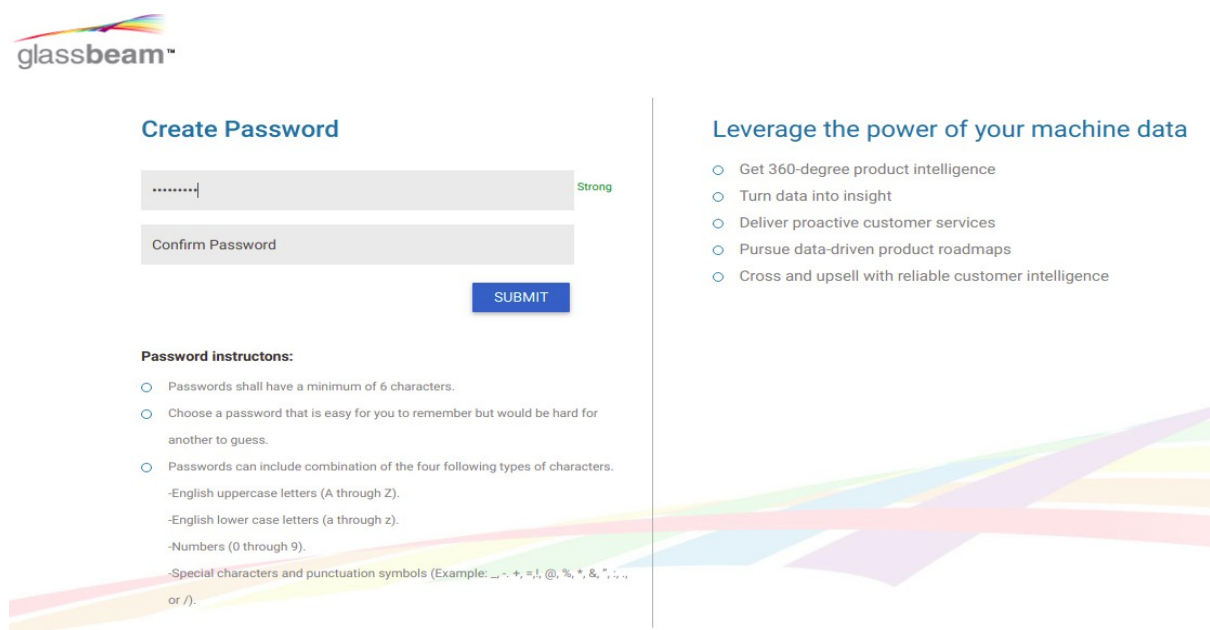
As per proposed document I have designed the mockups for the features as follows.

### Password Policies:

#### Password Strength:

We need to rely on some kind of an indicator to indicate the strength of the password to the user during registration. The indicator serves as a good reminder for the user as to the level of difficulty to crack the password.

The below figure shows how the strength of the password is shown to the user.



The mockup shows a 'Create Password' form with two input fields: a password field and a 'Confirm Password' field. The password field is filled with dots and has a green 'Strong' indicator to its right. Below the fields is a blue 'SUBMIT' button. To the right of the form is a section titled 'Leverage the power of your machine data' with a list of five bullet points. Below the form is a 'Password instructions:' section with four bullet points and their details. The background features a colorful abstract graphic.

**Create Password**

..... Strong

Confirm Password

SUBMIT

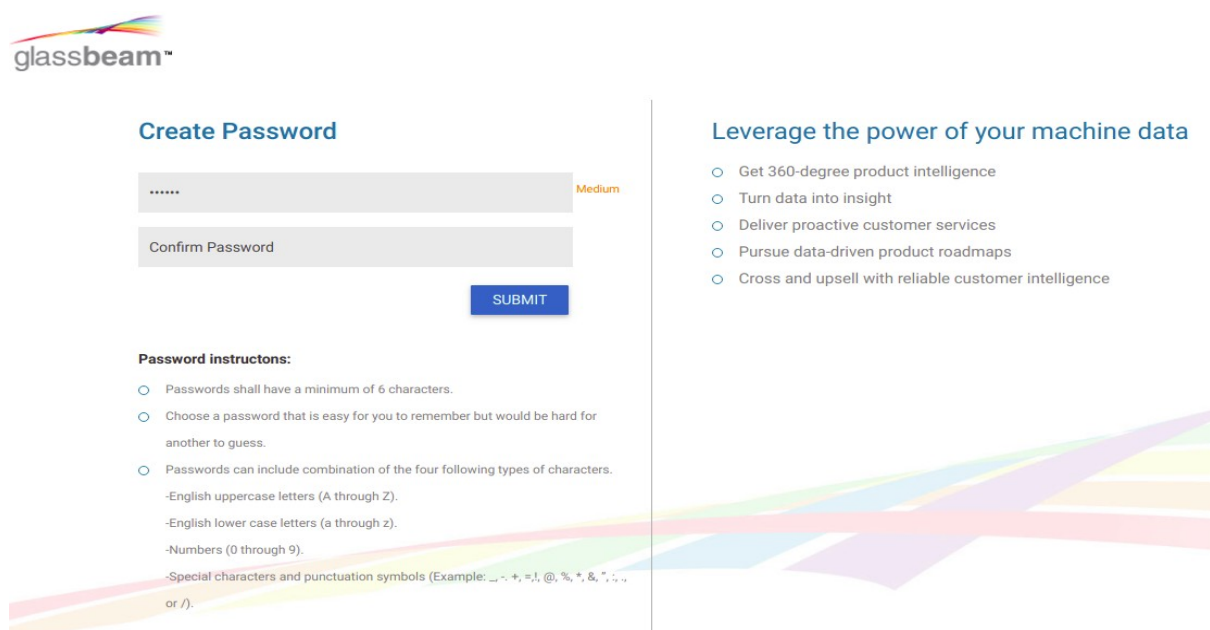
**Password instructions:**

- Passwords shall have a minimum of 6 characters.
- Choose a password that is easy for you to remember but would be hard for another to guess.
- Passwords can include combination of the four following types of characters.
  - English uppercase letters (A through Z).
  - English lower case letters (a through z).
  - Numbers (0 through 9).
  - Special characters and punctuation symbols (Example: \_ , - , \* , = , ! , @ , % , \* , & , " , ' , : , ; , or / ).

**Leverage the power of your machine data**

- Get 360-degree product intelligence
- Turn data into insight
- Deliver proactive customer services
- Pursue data-driven product roadmaps
- Cross and upsell with reliable customer intelligence

Figure 1: Strong Password



The mockup shows a 'Create Password' form with two input fields: a password field and a 'Confirm Password' field. The password field is filled with dots and has an orange 'Medium' indicator to its right. Below the fields is a blue 'SUBMIT' button. To the right of the form is a section titled 'Leverage the power of your machine data' with a list of five bullet points. Below the form is a 'Password instructions:' section with four bullet points and their details. The background features a colorful abstract graphic.

**Create Password**

..... Medium

Confirm Password

SUBMIT

**Password instructions:**

- Passwords shall have a minimum of 6 characters.
- Choose a password that is easy for you to remember but would be hard for another to guess.
- Passwords can include combination of the four following types of characters.
  - English uppercase letters (A through Z).
  - English lower case letters (a through z).
  - Numbers (0 through 9).
  - Special characters and punctuation symbols (Example: \_ , - , \* , = , ! , @ , % , \* , & , " , ' , : , ; , or / ).

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Figure 2: medium Password

## Create Password

....

weak

Confirm Password

SUBMIT

### Password instructions:

- Passwords shall have a minimum of 6 characters.
- Choose a password that is easy for you to remember but would be hard for another to guess.
- Passwords can include combination of the four following types of characters.
  - English uppercase letters (A through Z).
  - English lower case letters (a through z).
  - Numbers (0 through 9).
  - Special characters and punctuation symbols (Example: \_ ~ - + = ! , @ , % , \* , & , " , ' , ~ , ~ or /).

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Figure 3: Weak Password

## Password Expiry/Duration:

After a certain period of time 60 to 90 days, we can alert the user once he logs in saying that the password is greater than 90 days, In addition, we can provide an option to not show the alert and a checkbox stating that he doesn't want to change his password.

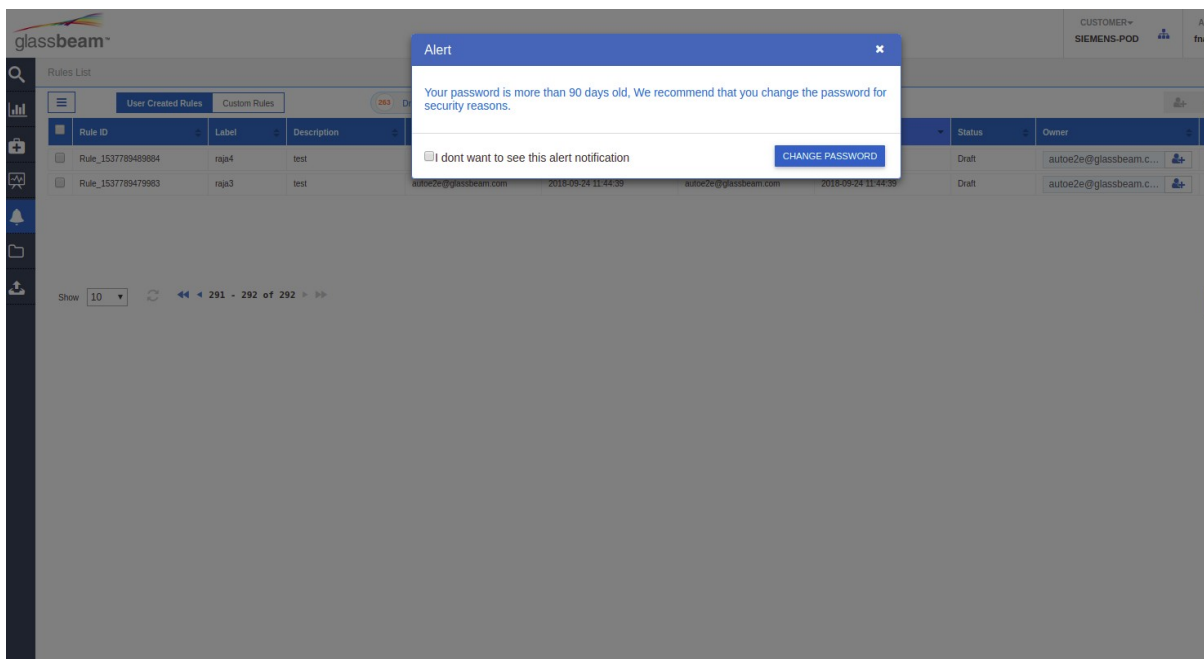


Figure 4: Password Expiry

The user has an option to opt out from this notice if he doesn't want to change his password. The change password will work as per the existing process.

## Login/Logout Policies:

### Login Captcha:

[Google reCaptcha](#) V2 is used for this implementation which is a free captcha service provided by Google.

The captcha will appear on the login screen after sequential failed login attempts. This would reduce automated brute force attempts. The user would need to solve the captcha in order to login after failed attempts.

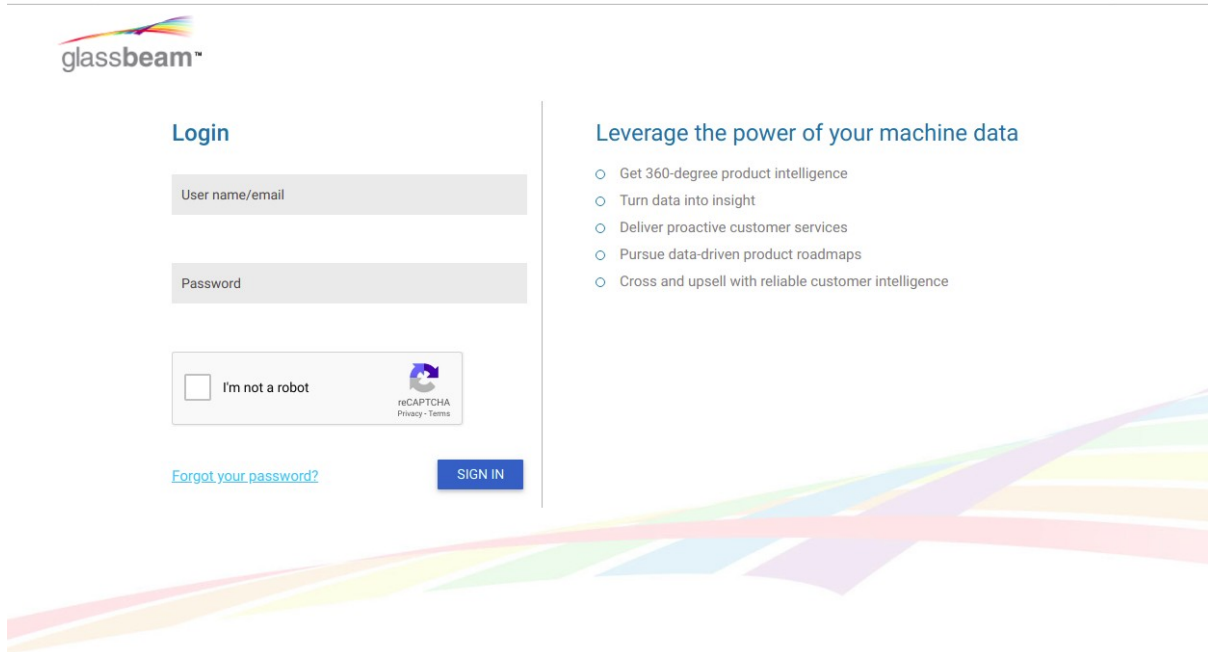


Figure 5: Login Captcha

### Failed & Limit login attempts:

Limiting the number of times a user can attempt to log in to your application helps reduce the risk of brute force attack. A brute force attack happens when an attacker tries to gain access by guessing your username and password through the process of cycling through combinations. To help protect against brute force attacks, you want to limit the number of times any user can try to log in to your website. After 'n' number of attempts, the account can be temporarily blocked for few minutes.

