UX Sprint Review #42

Account - Lockout functionality

How to handle the workflow regarding what happens when user locks their account

Amable Rodríguez
v2.0 / 2018-07-17

Digital Collaboration Division, Chief Information Officer Branch
Treasury Board of Canada Secretariat / Government of Canada

Division de la collaboration numérique, Direction du dirigeant principal de l'information
Secrétariat du Conseil du Trésor du Canada / Gouvernement du Canada

Document revisions

Version #	Comments	Author	Date
1.0	Document creation	Amable Rodríguez	2018-07-10
2.0	Migrated content to the new UX Document template, added explanatory texts	Amable Rodríguez	2018-07-17

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1. Team

Product Owner

Bryan Robitaille

Development

Nick Pietrantonio

Development

Stéphanie C.Lefebvre

UX Design

Amable Rodríguez

Technical Writing

Marianne Aubrey

UX Research

Donna Monbourquette

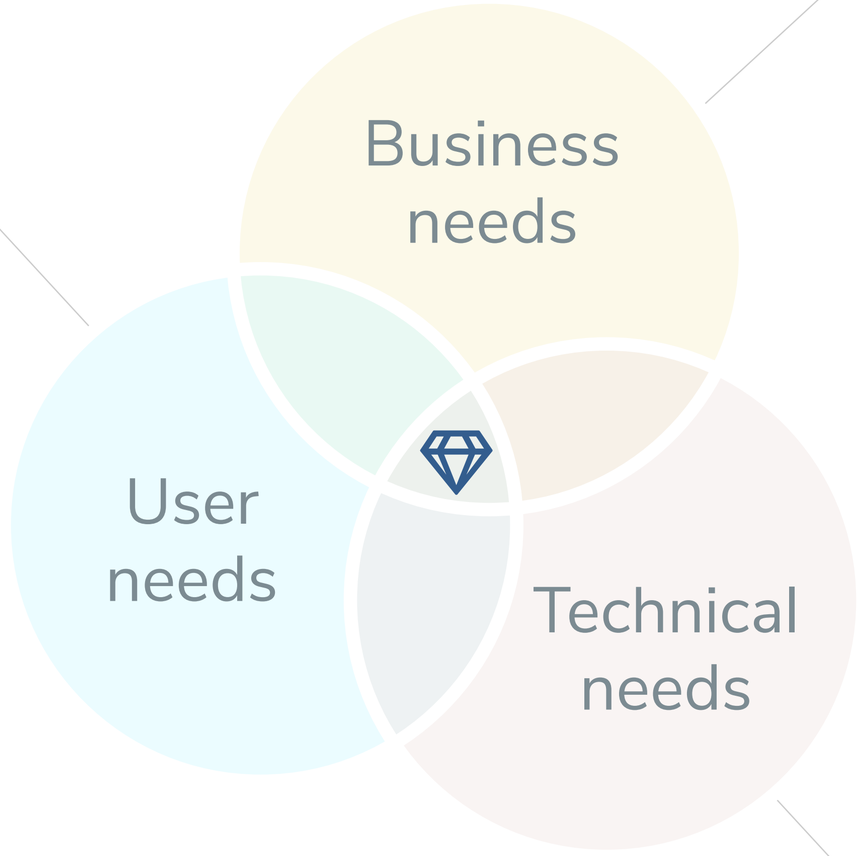
Help-Desk

Krista Lecuyer

2. Needs

- User needs to be able to recover his/her account by himself/herself

- User should be able to get help-desk help if it is impossible for him/her to recover the account

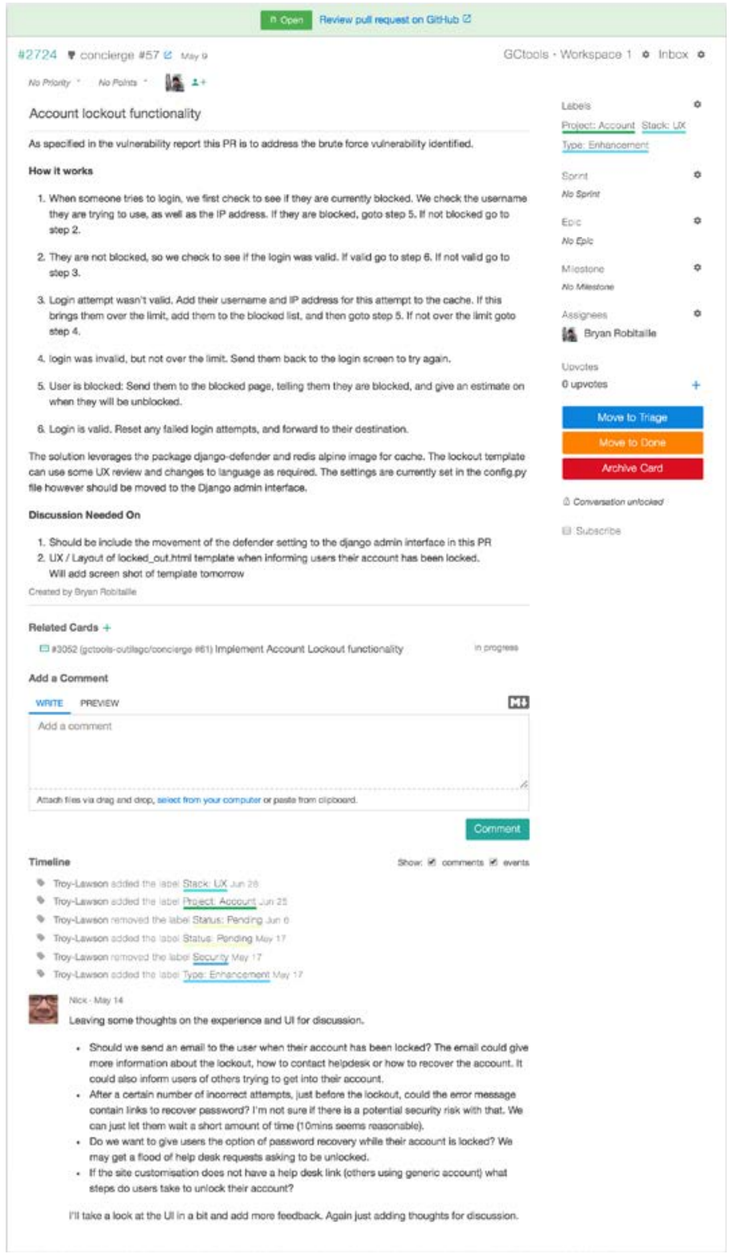


- Time consumed in help-desk on accounts recovery protocols needs to be reduced (currently between 10 ~15 tickets per day)

- Solution has to make use of the default lockout functionality already in the system

3. Initial conditions

Task, containing:



3. Initial conditions

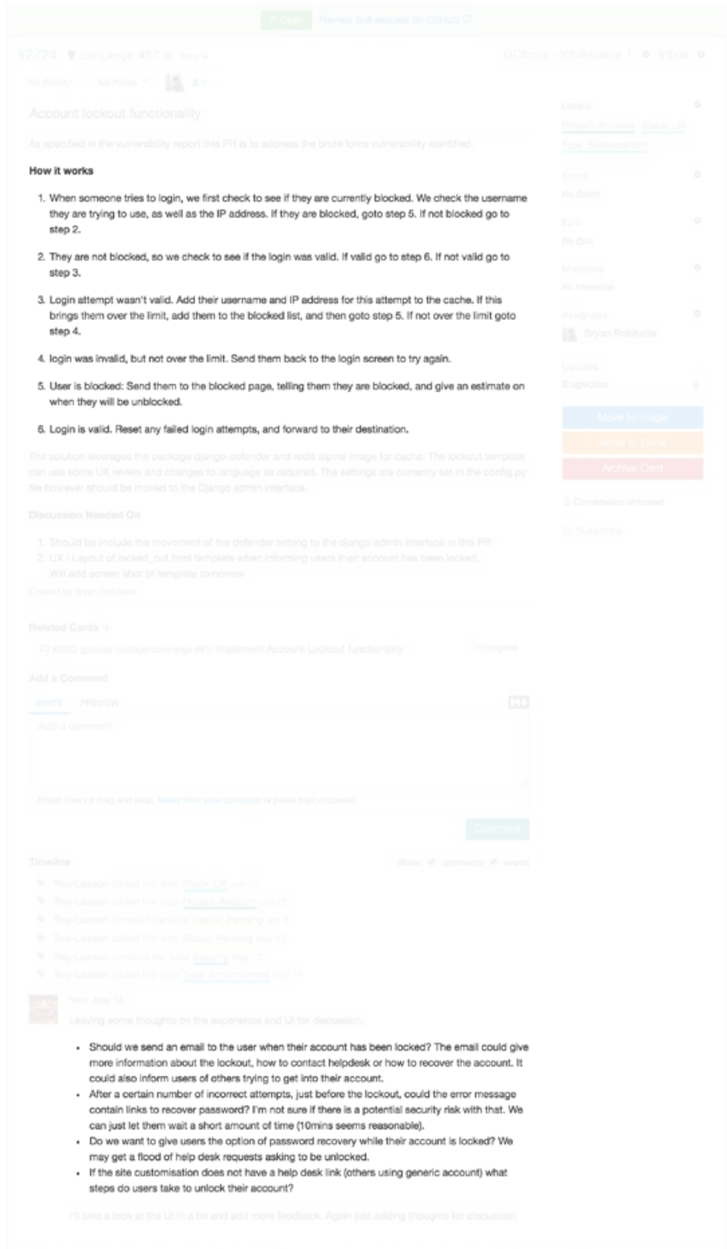
Task, containing:

- Bryan description of default functionality

- Nick comments on how it could be better

Bryan Robitaille

Nick Pietrantonio



Account lockout functionality

As specified in the vulnerability report this PR is to address the brute force vulnerability identified.

How it works

1. When someone tries to login, we first check to see if they are currently blocked. We check the username they are trying to use, as well as the IP address. If they are blocked, goto step 5. If not blocked go to step 2.
2. They are not blocked, so we check to see if the login was valid. If valid go to step 6. If not valid go to step 3.
3. Login attempt wasn't valid. Add their username and IP address for this attempt to the cache. If this brings them over the limit, add them to the blocked list, and then goto step 5. If not over the limit goto step 4.
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5. User is blocked: Send them to the blocked page, telling them they are blocked, and give an estimate on when they will be unblocked.
6. Login is valid. Reset any failed login attempts, and forward to their destination.

- Should we send an email to the user when their account has been locked? The email could give more information about the lockout, how to contact helpdesk or how to recover the account. It could also inform users of others trying to get into their account.
- After a certain number of incorrect attempts, just before the lockout, could the error message contain links to recover password? I'm not sure if there is a potential security risk with that. We can just let them wait a short amount of time (10mins seems reasonable).
- Do we want to give users the option of password recovery while their account is locked? We may get a flood of help desk requests asking to be unlocked.
- If the site customisation does not have a help desk link (others using generic account) what steps do users take to unlock their account?

4. Design process

We took the Bryan’s description of default behavior

Bryan Robitaille

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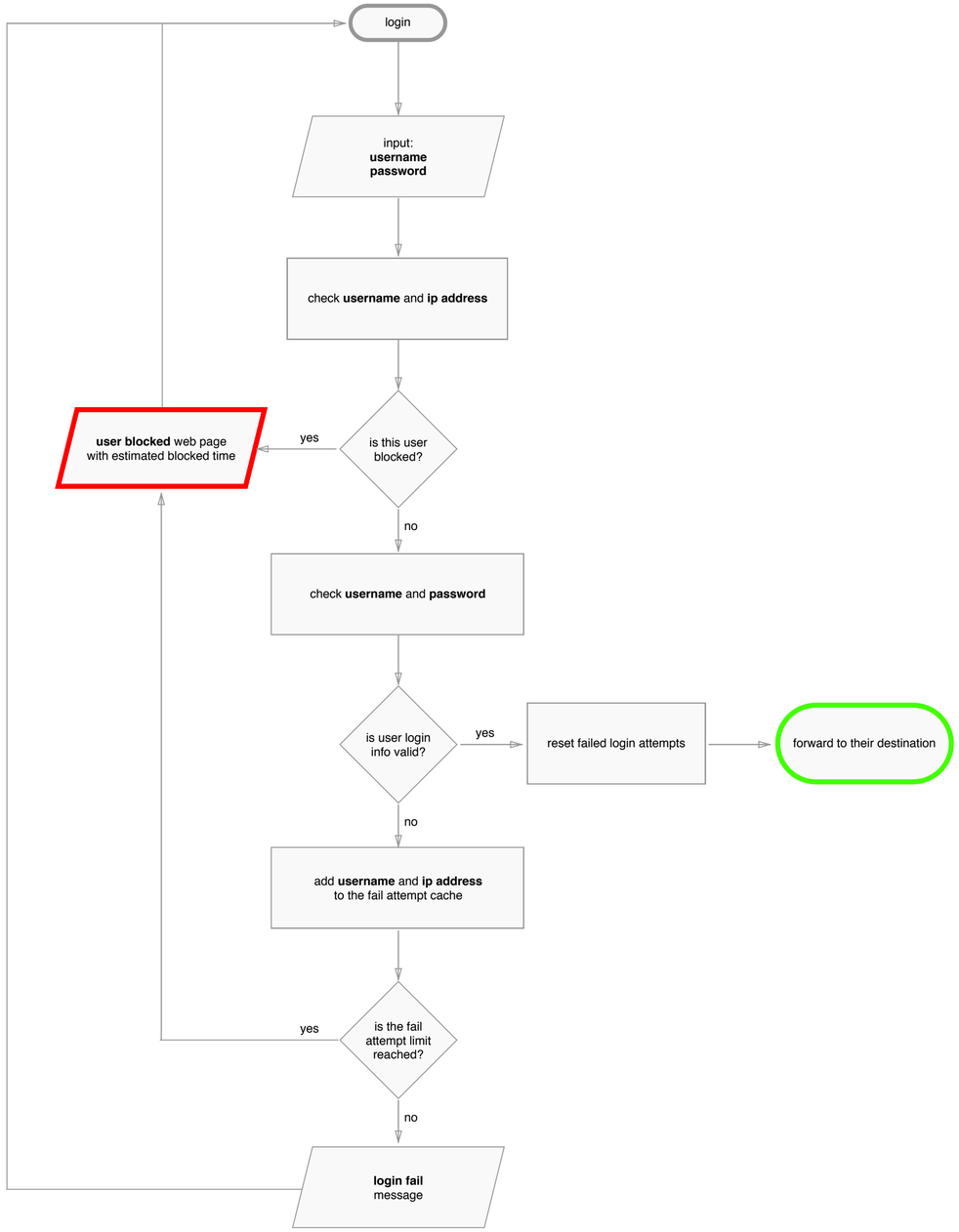

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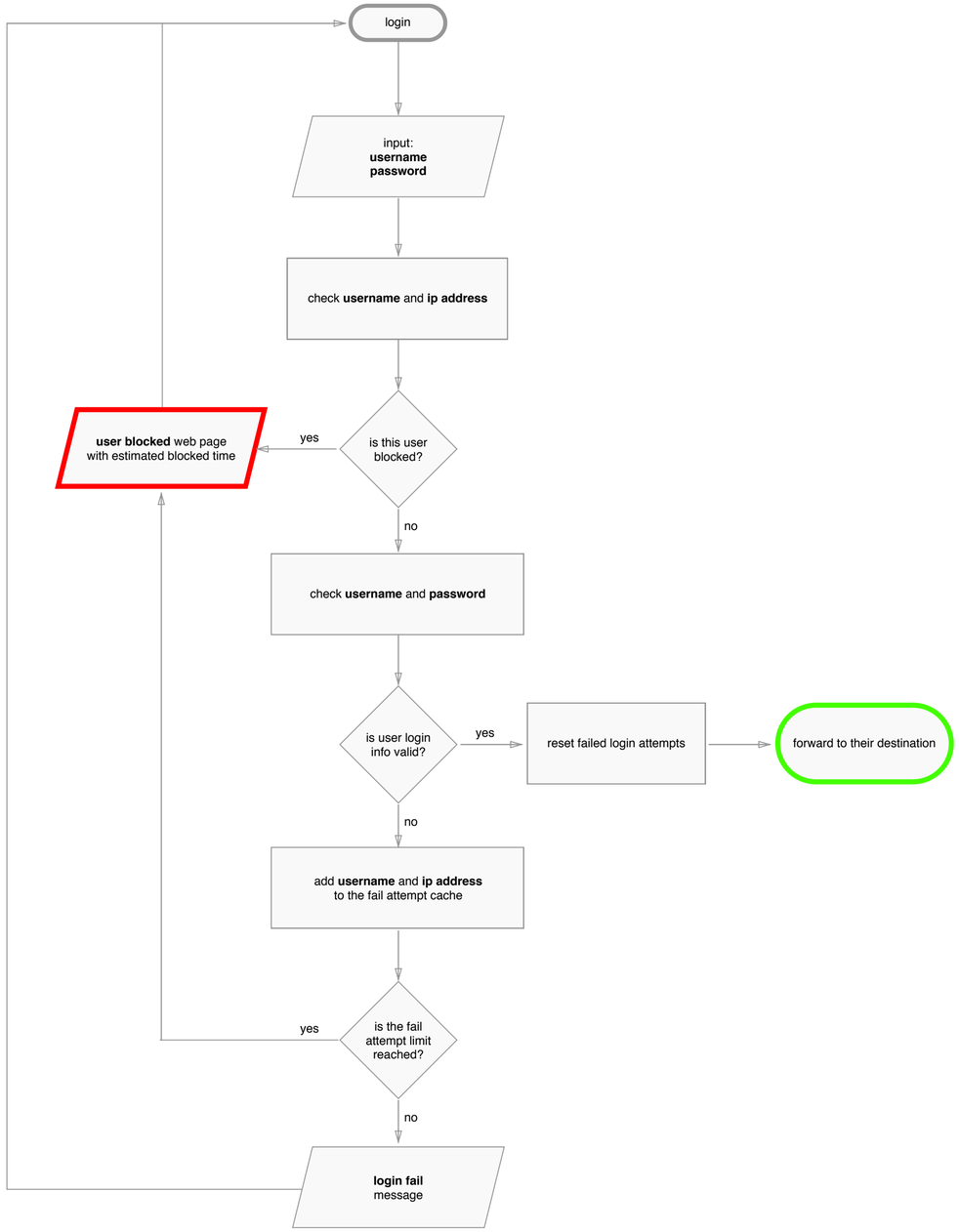
Amable Rodríguez

Stéphanie C.Lefebvre



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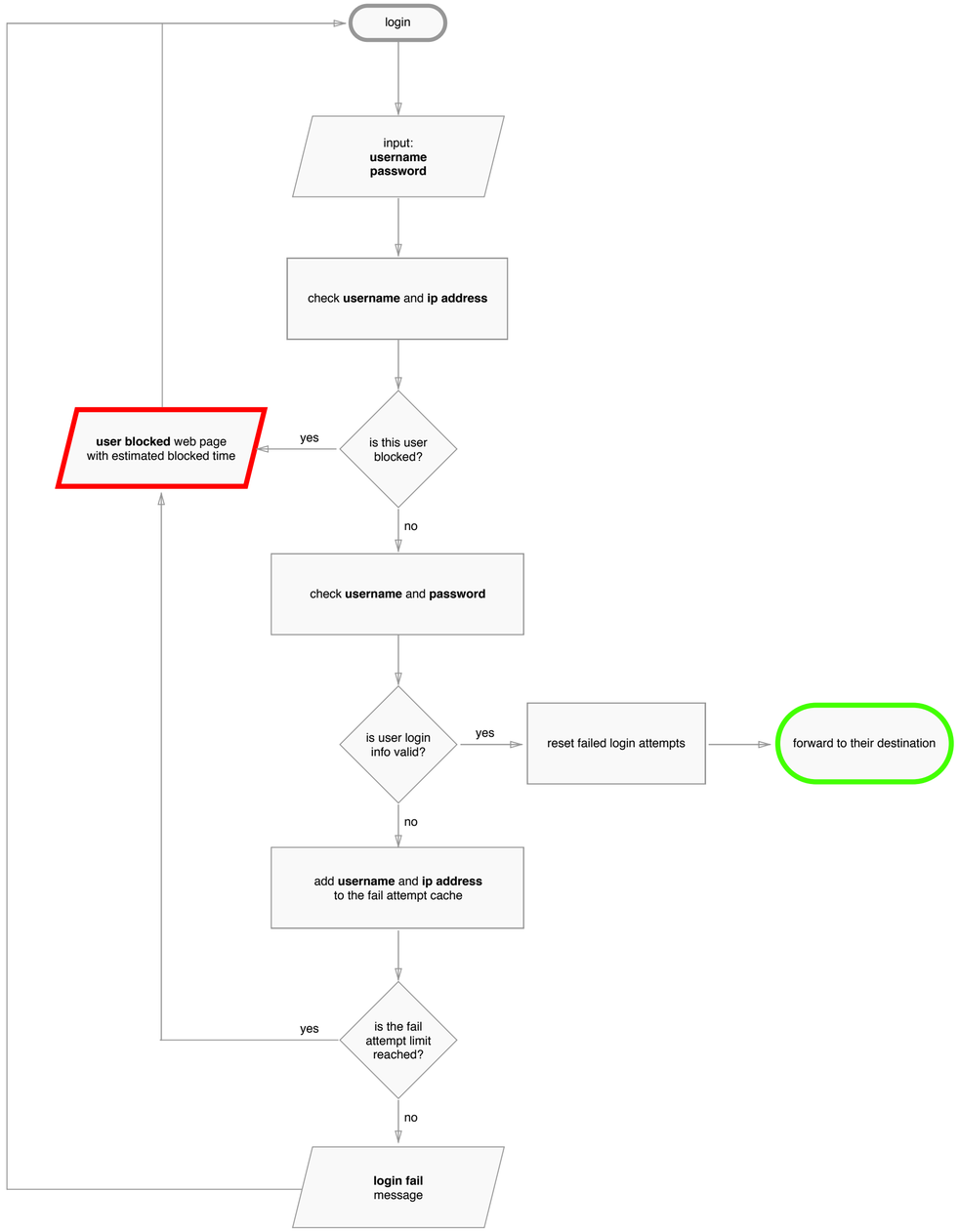

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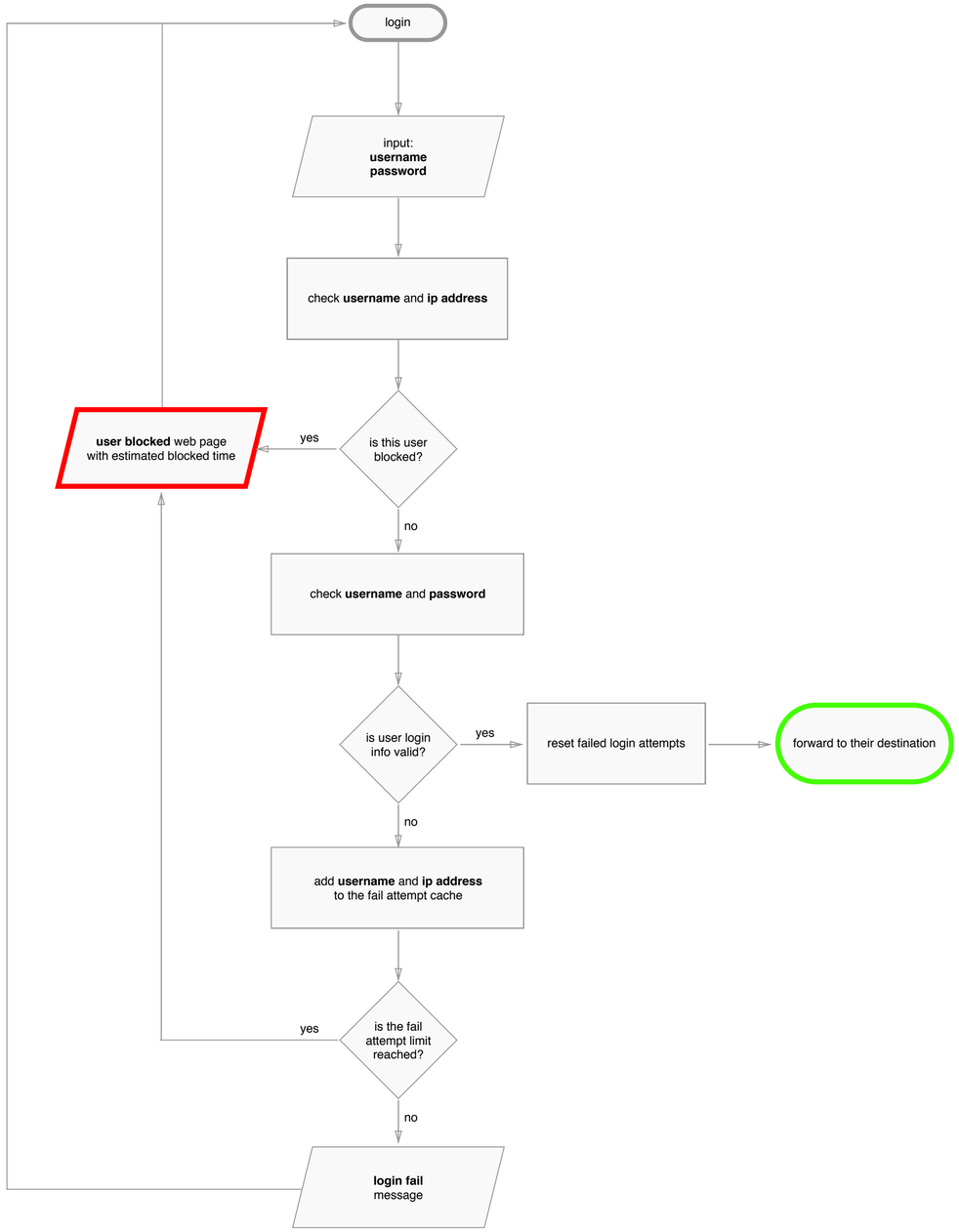
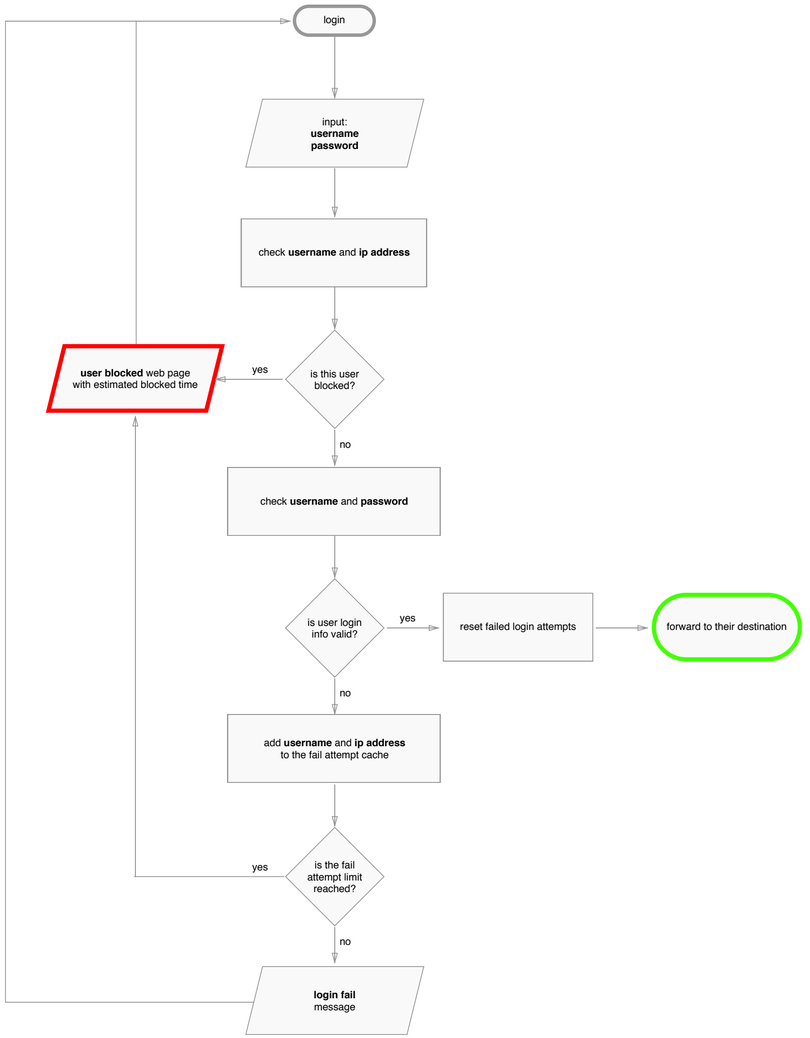


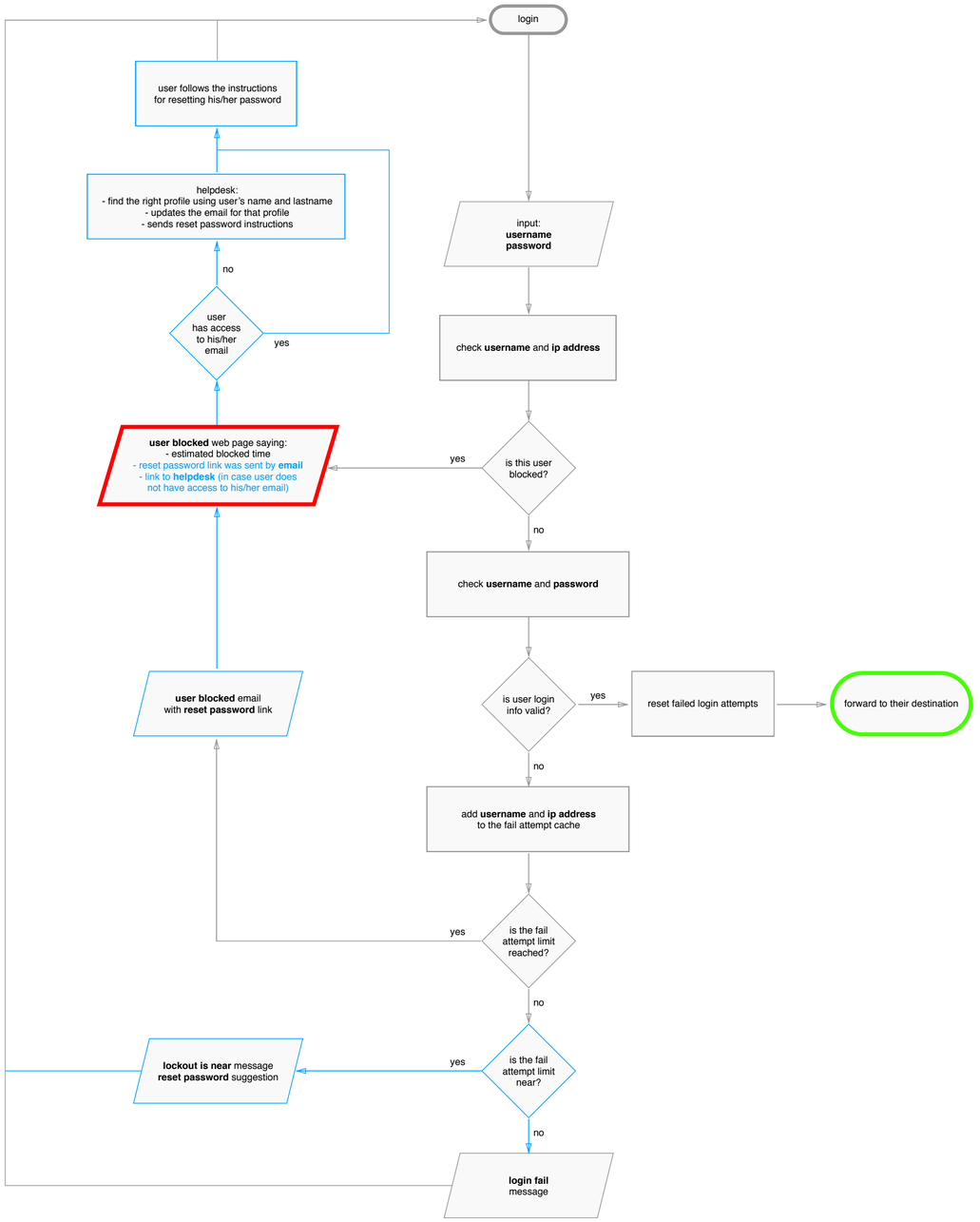
4. Design process

Initial flow-chart



4. Design process

Initial flow-chart got its first upgrade:



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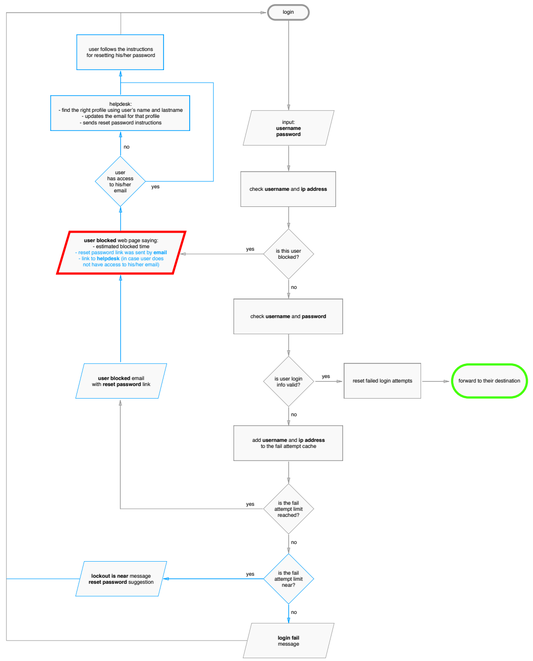
This version became in fact only a first iteration,

Iteration #1
- “lockout is near” warning
- password reset link by email
- link to helpdesk



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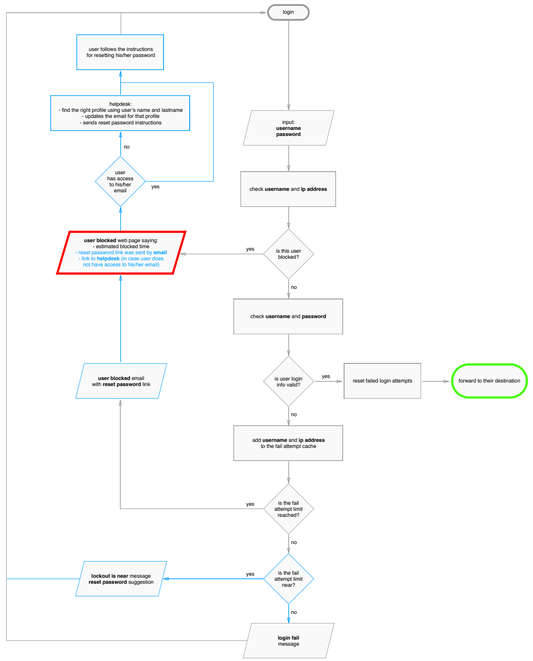
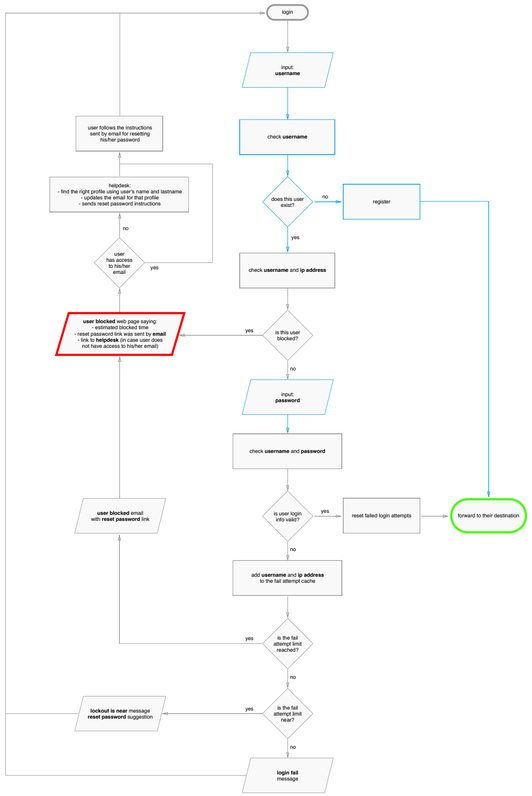


Iteration #2
- username and password separation
- inexisting account easy detection
- register added as natural part of the flow



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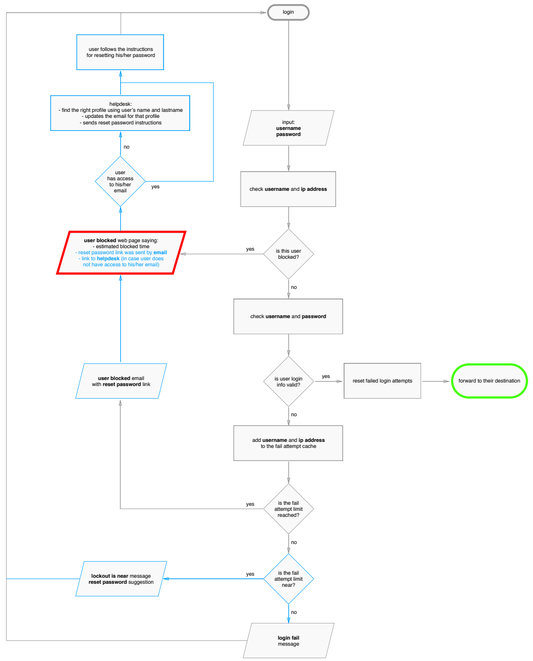

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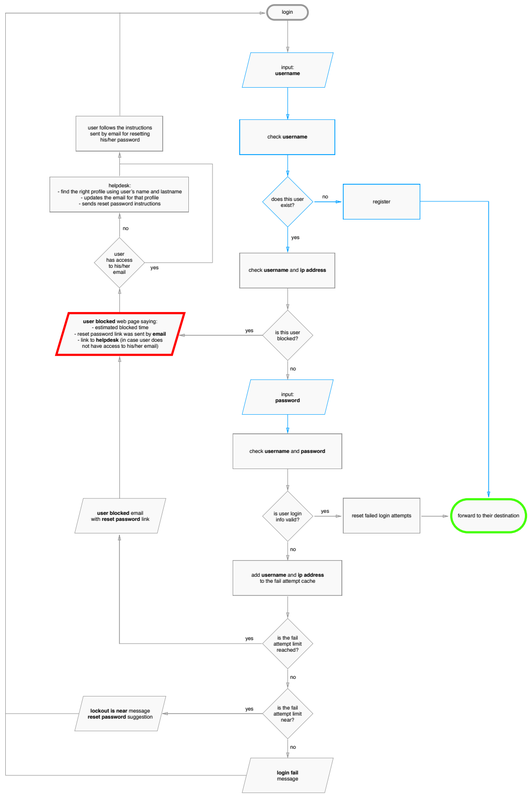
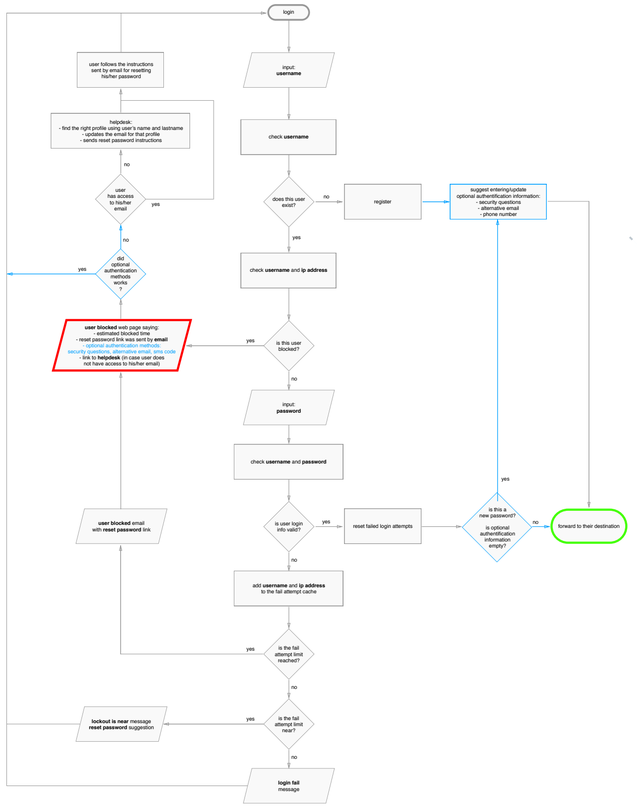


Iteration #3
- added optional authentication information
- increase user power to unlock his/her account by himself/herself



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This version became in fact only a fist iteration, but other two were generated as well.

From this **road-map** to the complete solution

Iteration #1
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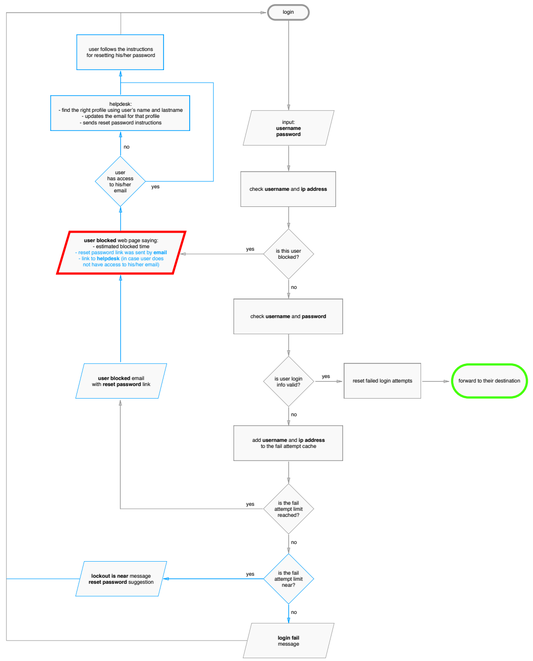

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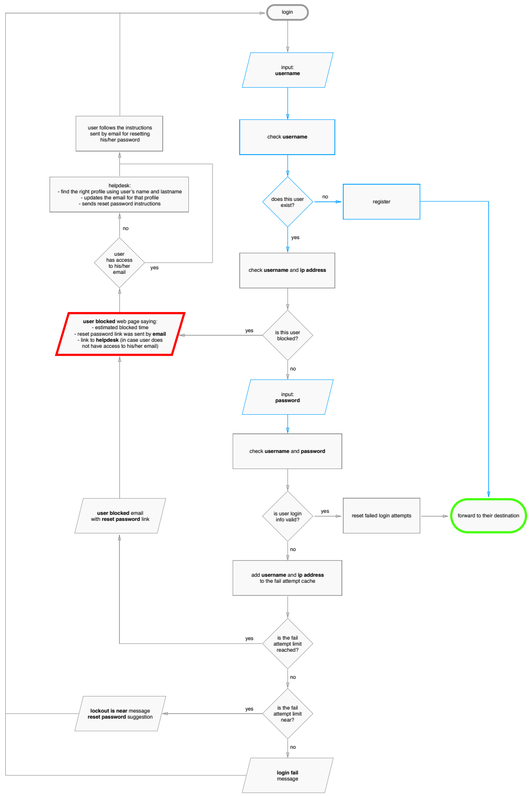

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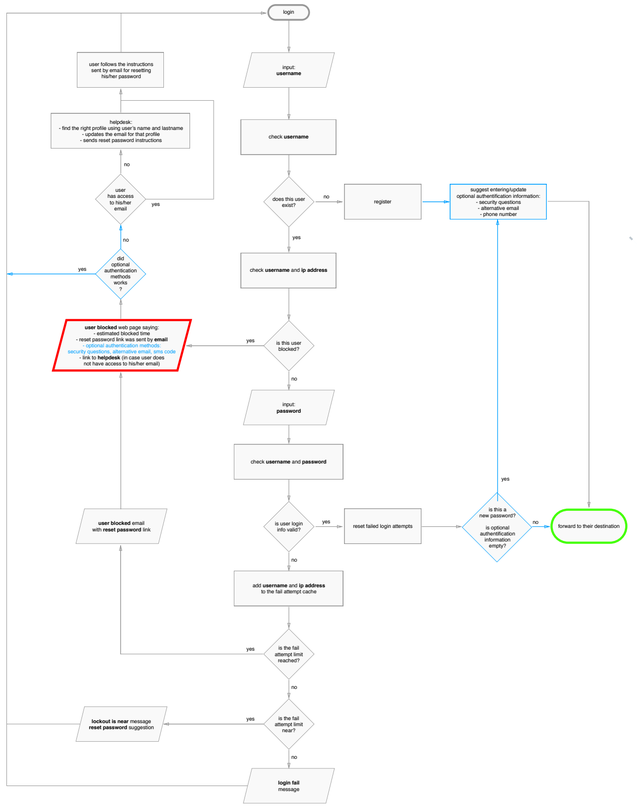

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From this **road-map** to the complete solution, Bryan as Product Owner choose to concentrate efforts on the **first iteration for the current sprint**.

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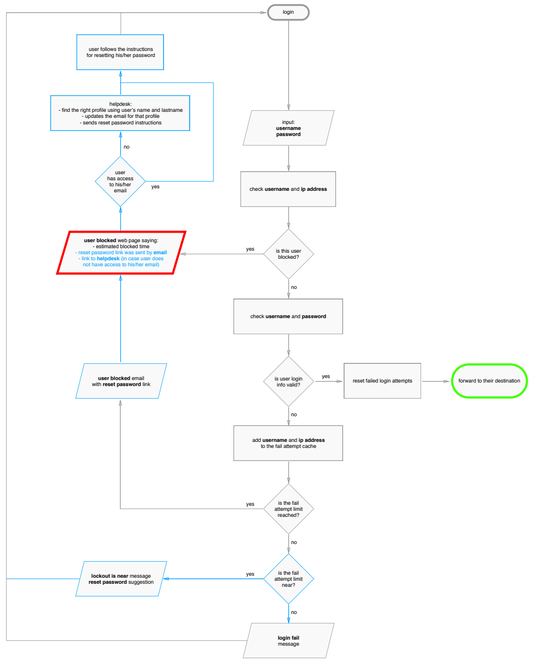
Bryan Robitaille



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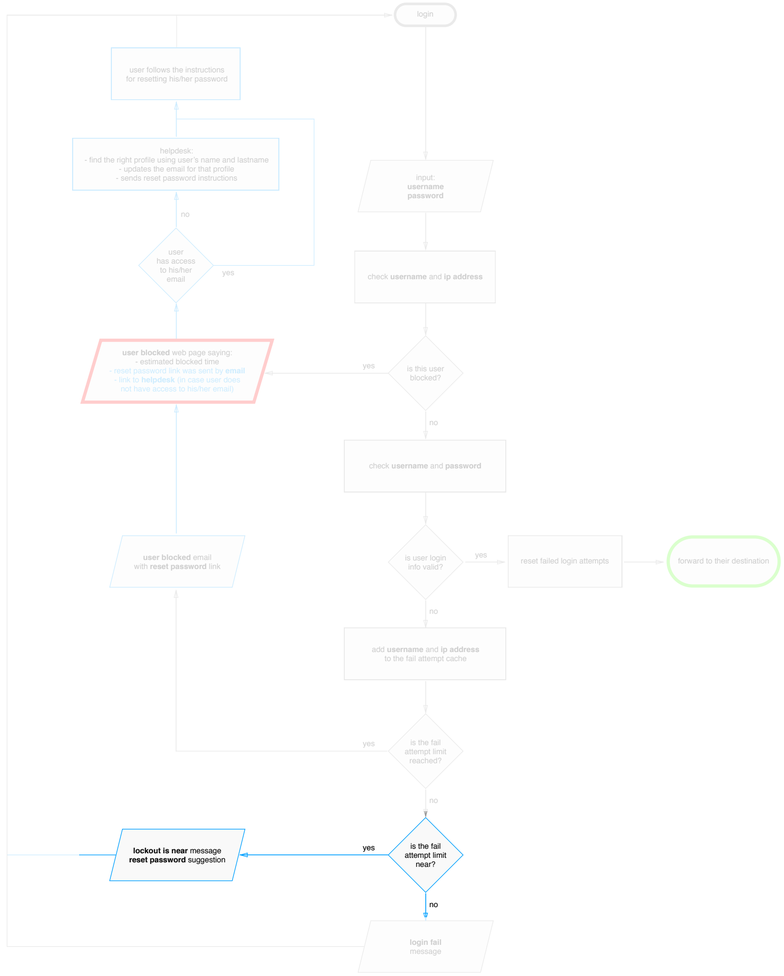
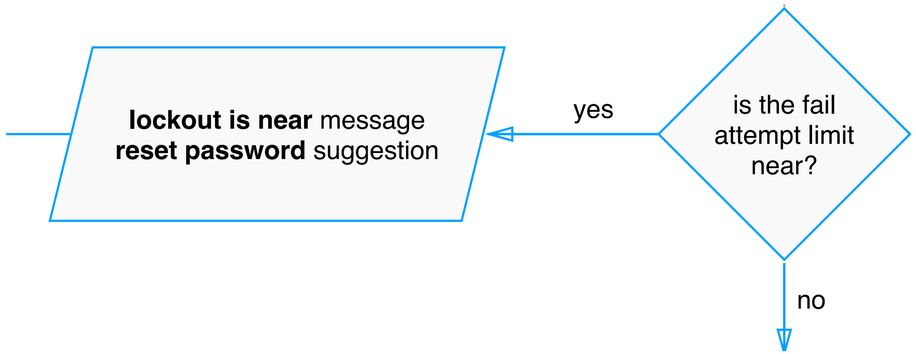
Are we near to lock the account?

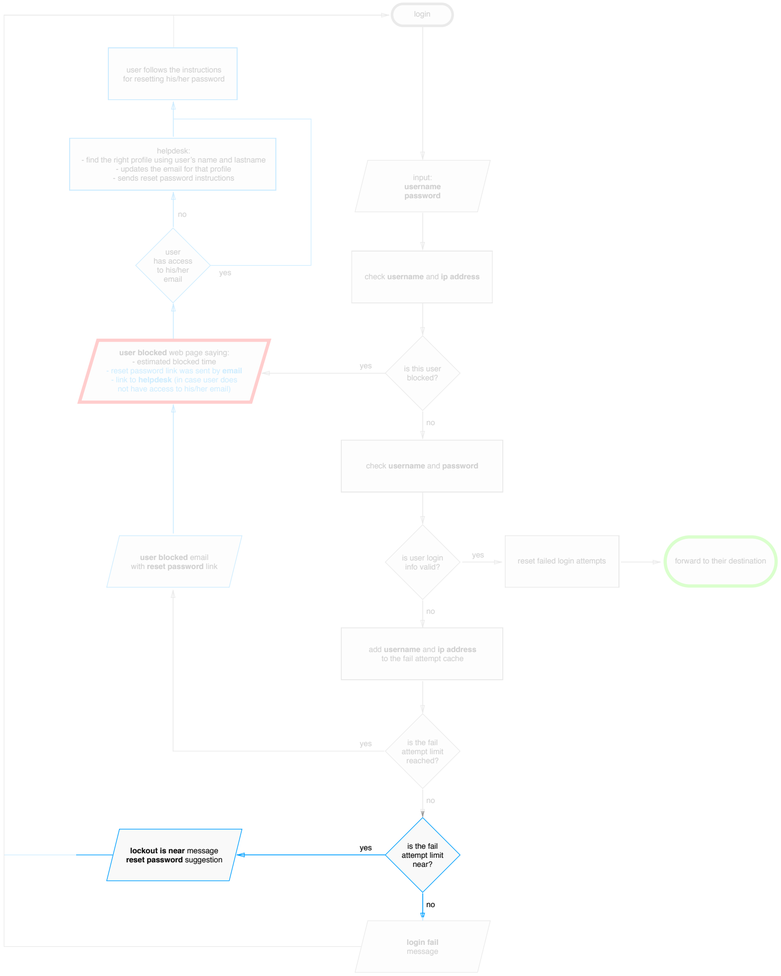


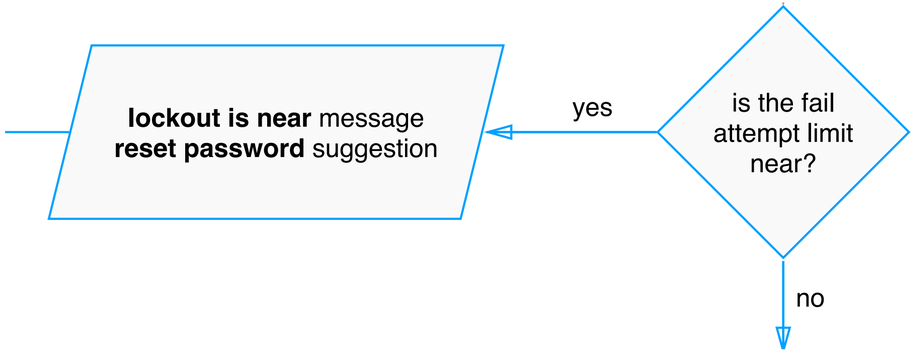


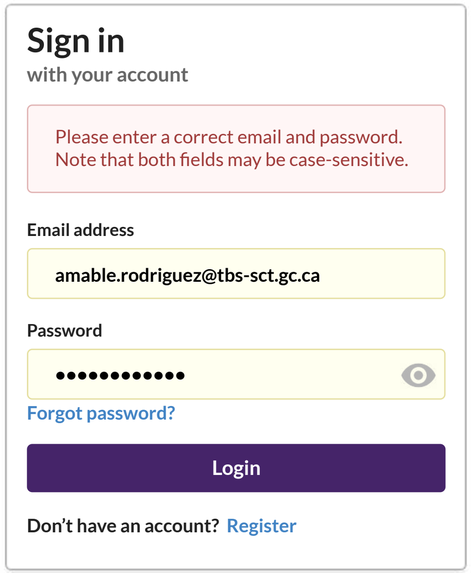
4. Design process

Are we near to lock the account?

Based on current login fail message,





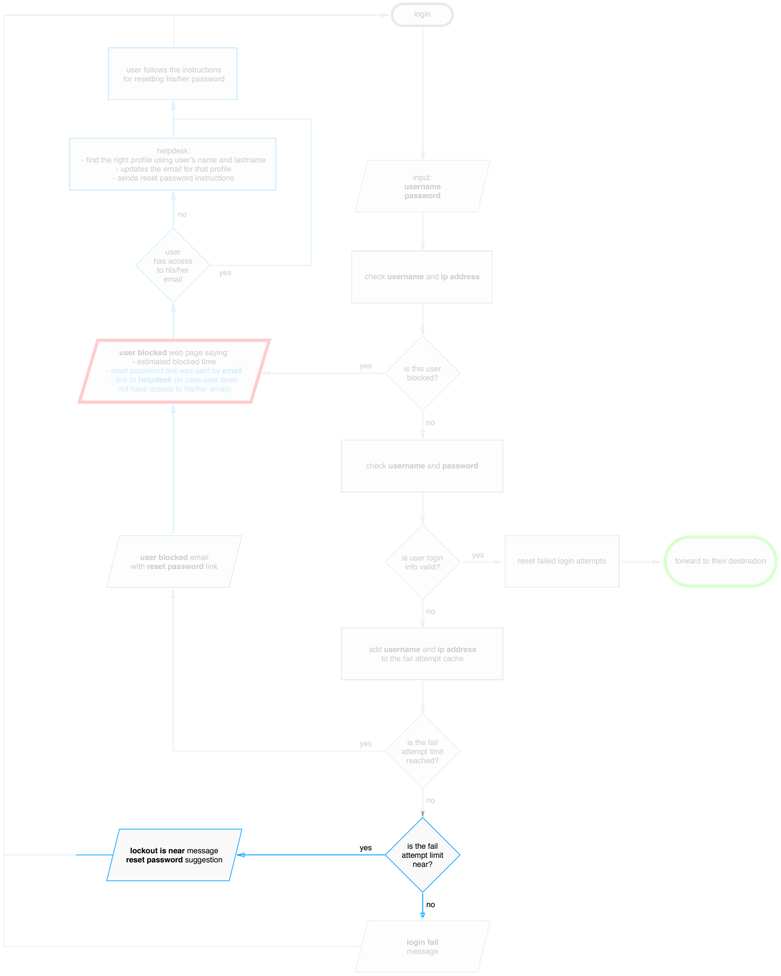


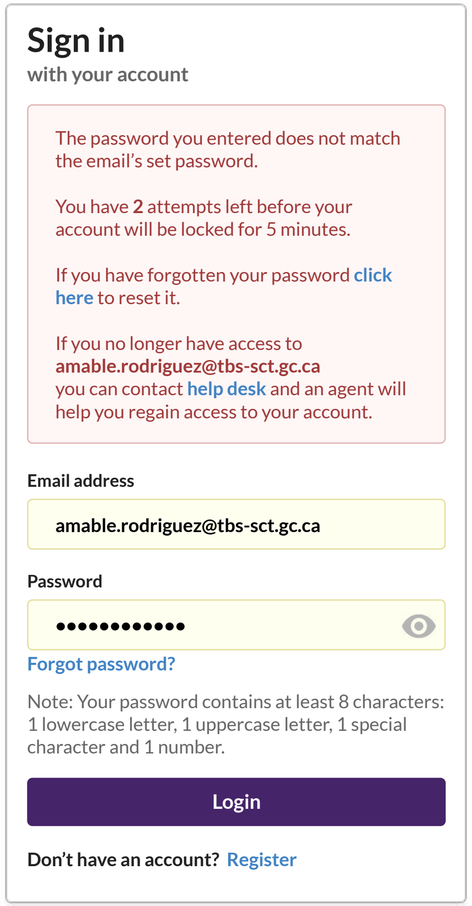
4. Design process

Are we near to lock the account?

Based on current login fail message, we created a warning message indicating the number of attempts left, a reminder to reset the password and a link to help-desk if needed.

Marianne and Donna worked on the texts and details like adding a password structure help reminder.



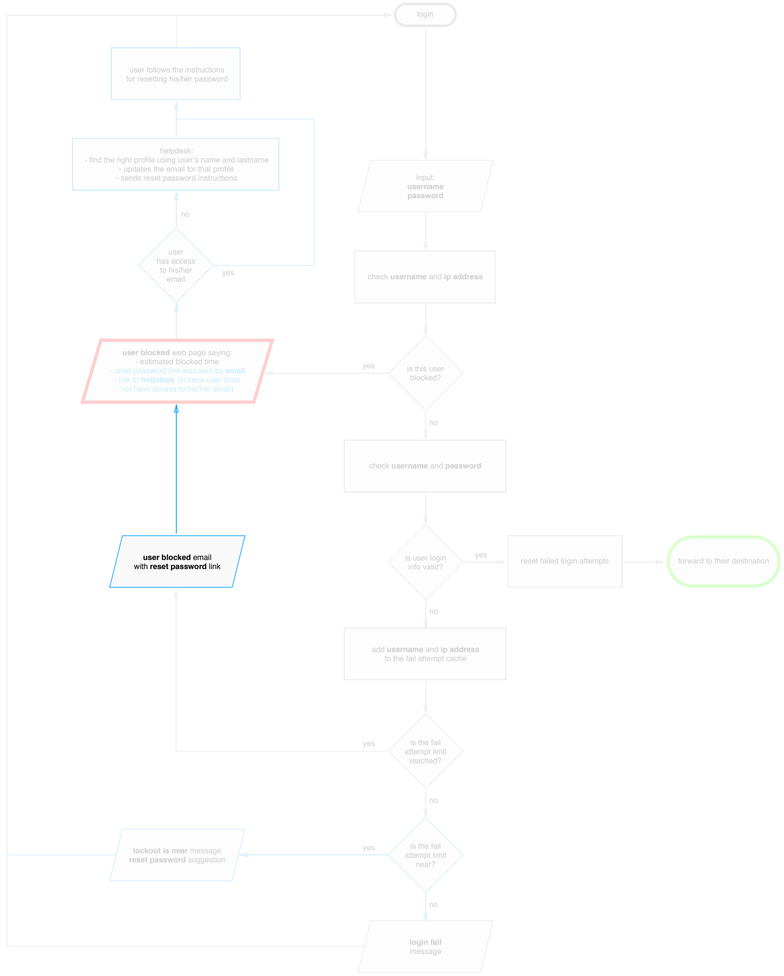


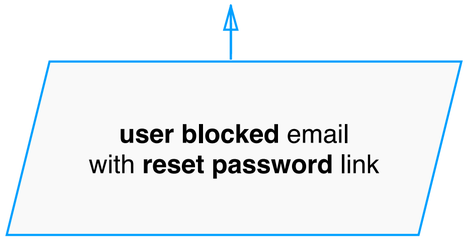
Marianne Aubrey

Donna Monbourquette

4. Design process

Once the user account is locked, a reset password email is automatically sent to his email address.





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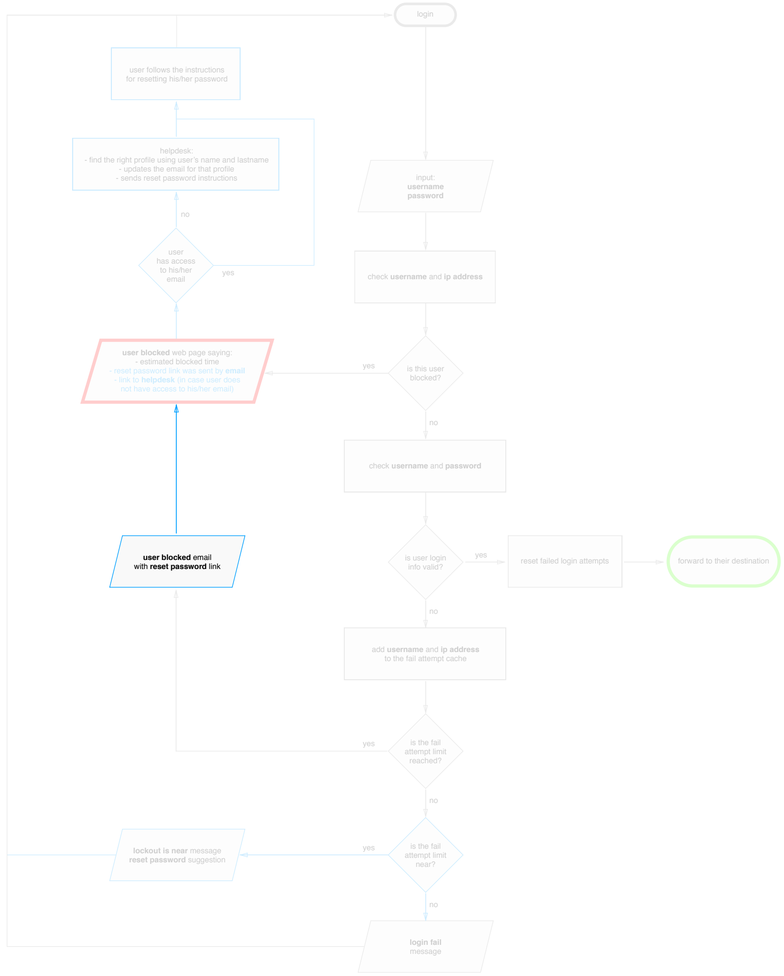
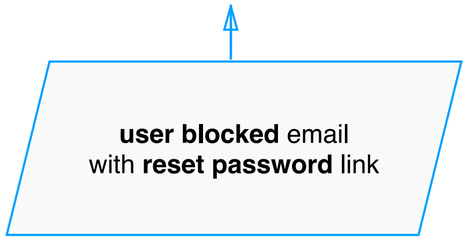
Starting from the current recovery password email,





From: security@server.com
to: amable.rodriguez@tbs-sct.gc.ca

Hi amable.rodriguez,

You asked to change your password. Please follow this link to set a new password.

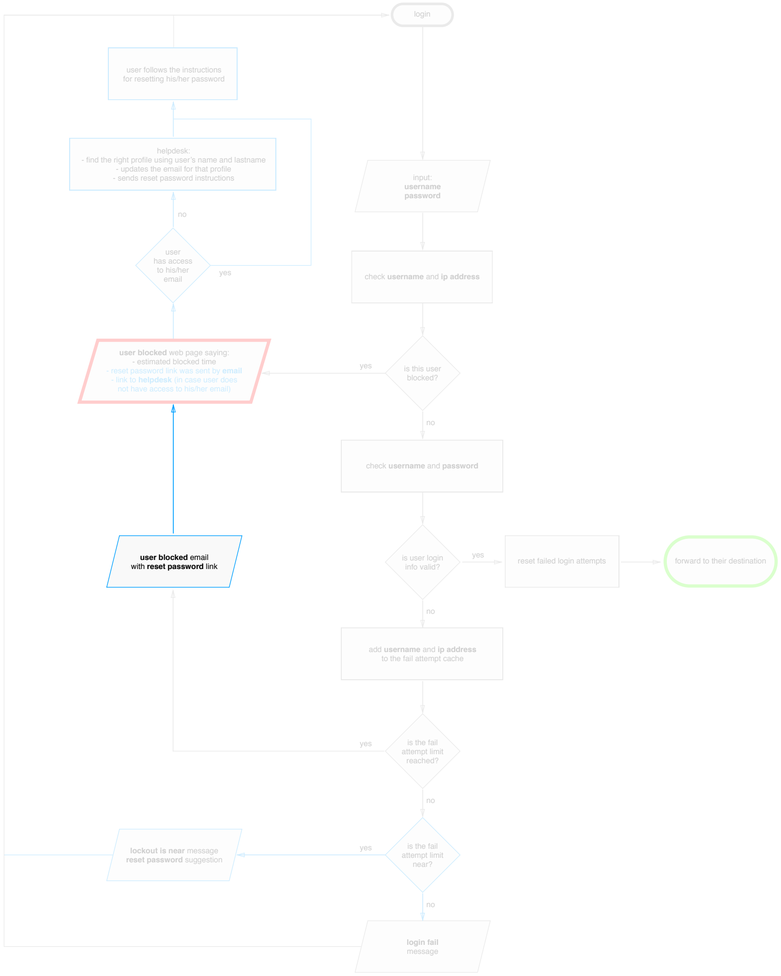
https://security.passwordrecovery.org/
5049847837074073837874038720872 3

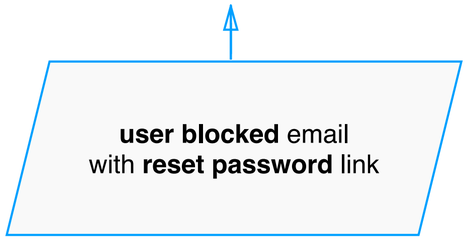
You can ignore this email if you have not requested to change your password.

4. Design process

Once the user account is locked, a reset password email is automatically sent to his email address.

Starting from the current recovery password email, Marianne and Donna contribute to making it better,





From: security@server.com
to: amable.rodriguez@tbs-sct.gc.ca

This is a system-generated message from GCcollab. Please do not reply this message | Ceci est un message généré par le système de GCcollab. Veuillez ne pas répondre à ce message

GCcollab

Hi Amable.

We received a request to change your password. You can click on the link below to reset your password:

https://security.passwordrecovery.org/5049847837074073837874038720872 3

If you didn't request a password reset, you can safely ignore this email. Your password will not change.

If you are still having password or account issues after using the reset link, you can contact the help desk and an agent will help you change your password.

GCCollab - Support
Treasury Board of Canada Secretariat | Secrétariat du Conseil du Trésor du Canada

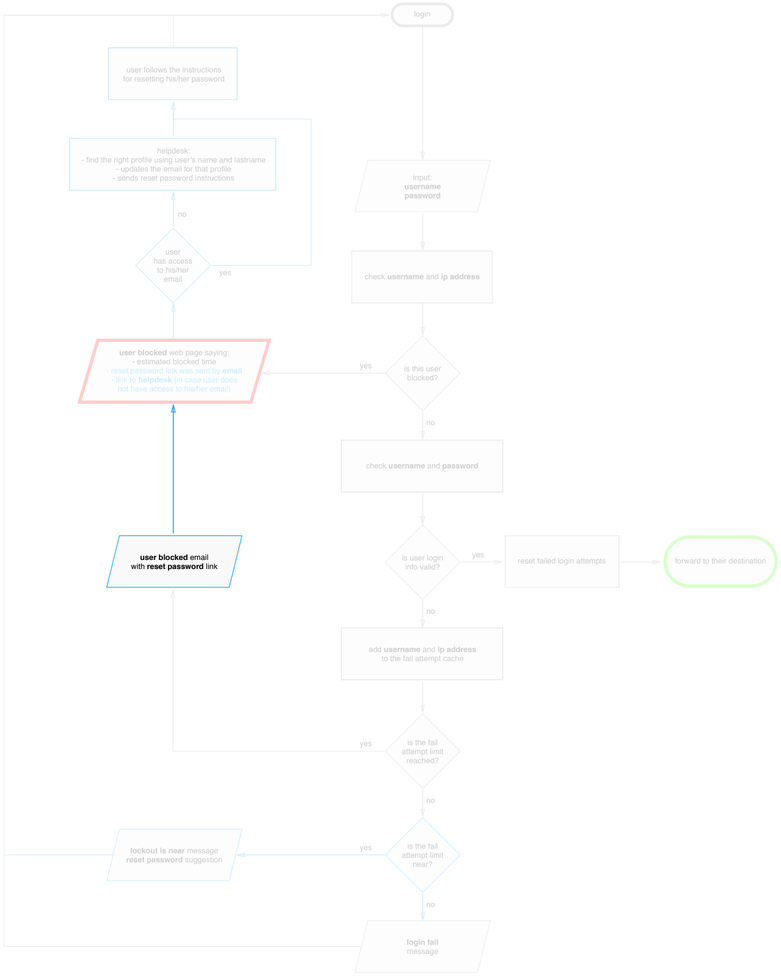
Marianne Aubrey

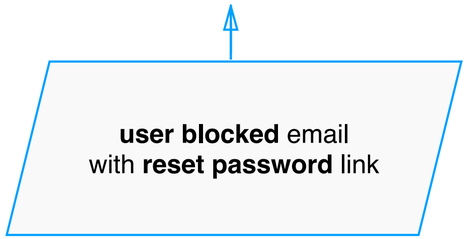
Donna Monbourquette

4. Design process

Once the user account is locked, a reset password email is automatically sent to his email address.

Starting from the current recovery password email, Marianne and Donna contribute to making it better, and we used to create the new account locked email.





From: security@server.com
to: amable.rodriguez@tbs-sct.gc.ca

This is a system-generated message from GCcollab. Please do not reply this message | Ceci est un message généré par le système de GCcollab. Veuillez ne pas répondre à ce message

GCcollab

Hi Amable.

Your account has been locked as the incorrect password had been entered too many times. You will need to reset your password, which you can do by clicking the link below.

https://security.passwordrecovery.org/5049847837074073837874038720 8723

Your account will be unlocked after resetting your password, and you should be able to log in normally.

If you are still having password issues after using the reset link, you can contact the help desk and an agent will help you change your password and get back into your account.

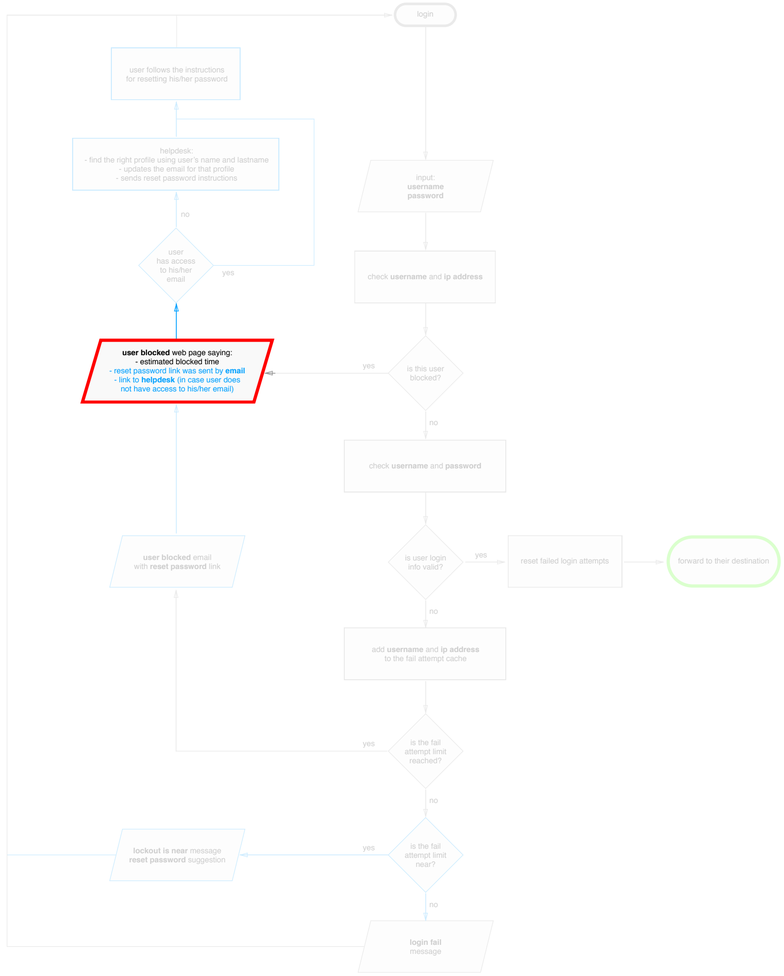
GCCollab - Support
Treasury Board of Canada Secretariat | Secrétariat du Conseil du Trésor du Canada

Marianne Aubrey

Donna Monbourquette

4. Design process

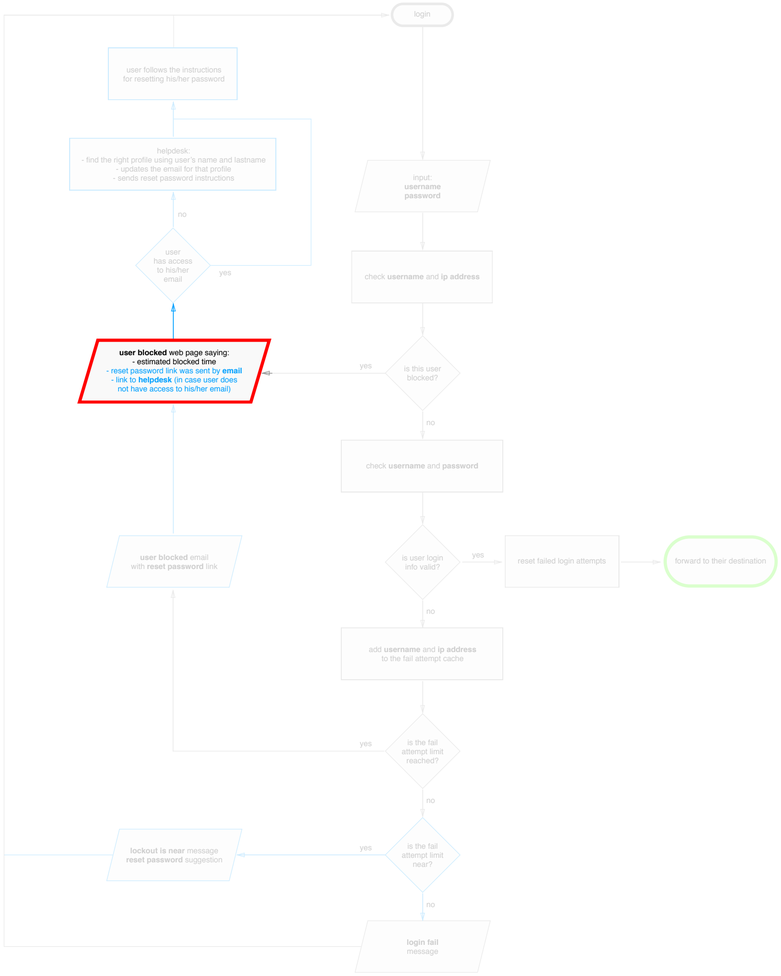
After account is locked, a message showing the possible alternatives the user has is a very important an delicate stage of the process.

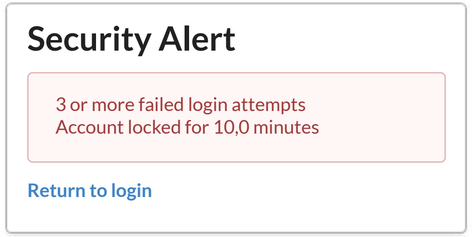


4. Design process

After account is locked, a message showing the possible alternatives the user has is a very important an delicate stage of the process.

Based on the default account locked message,

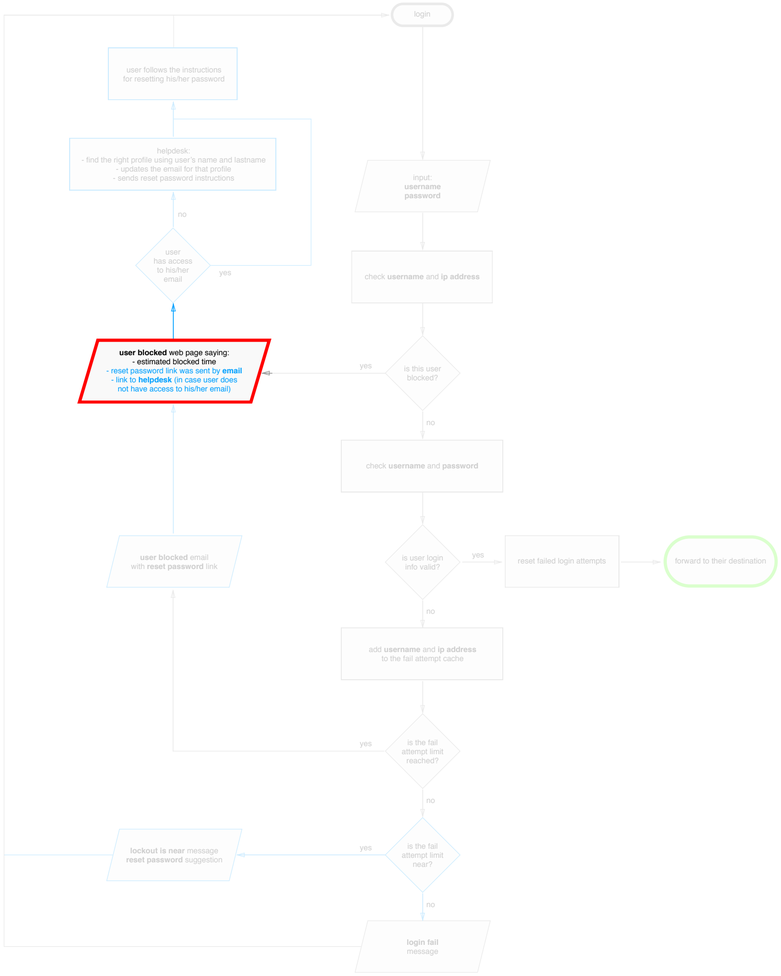




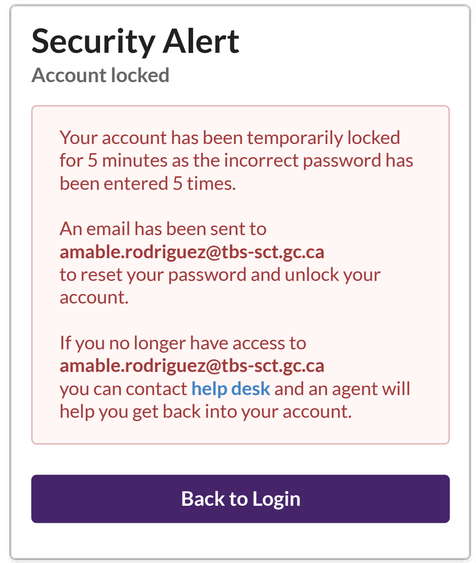
4. Design process

After account is locked, a message showing the possible alternatives the user has is a very important an delicate stage of the process.

Based on the default account locked message, the team came up with a more informative and useful message.



user blocked web page saying:
- estimated blocked time
- reset password link was sent by **email**
- link to **helpdesk** (in case user does not have access to his/her email)

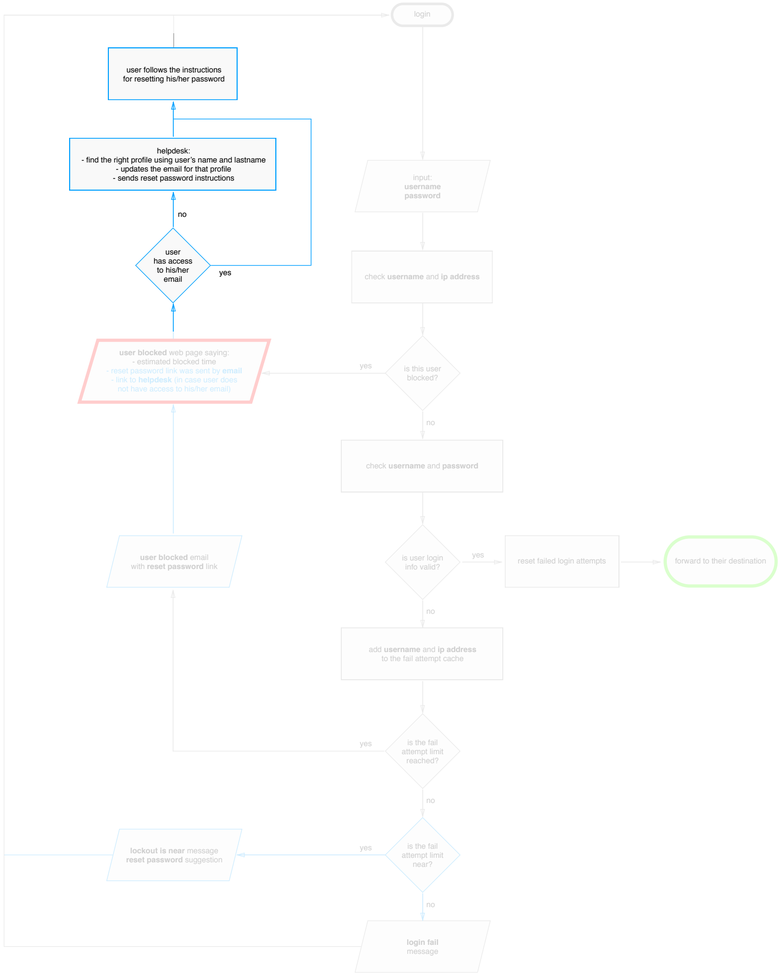


Marianne Aubrey

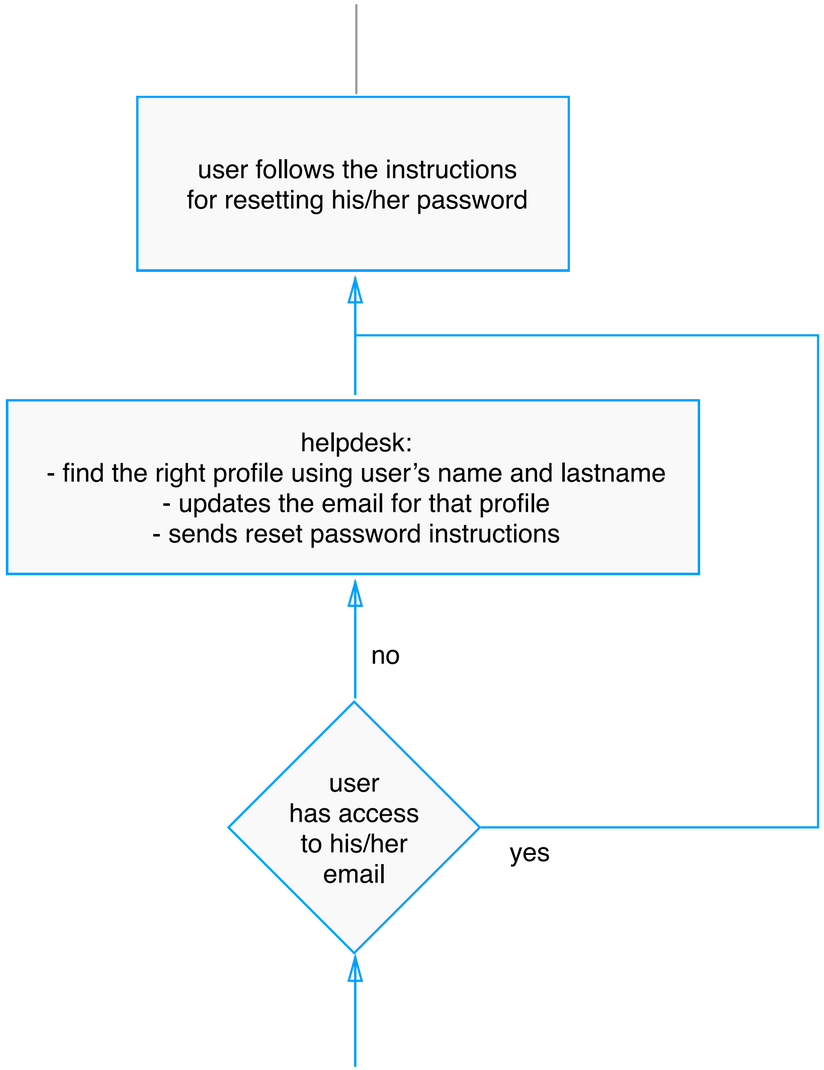
Donna Monbourquette

4. Design process

If the user does not have access to their account, they will contact help-desk in order to manually change the email address of their account and, after receiving the reset password email, follow the steps to re-gain access to their account.



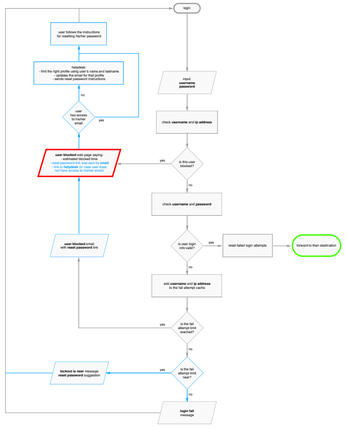
Krista Lecuyer



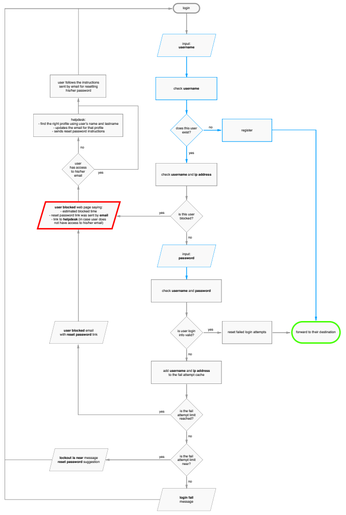
5. Deliverables

For this sprint, a work-flow containing 3 iterations was created.

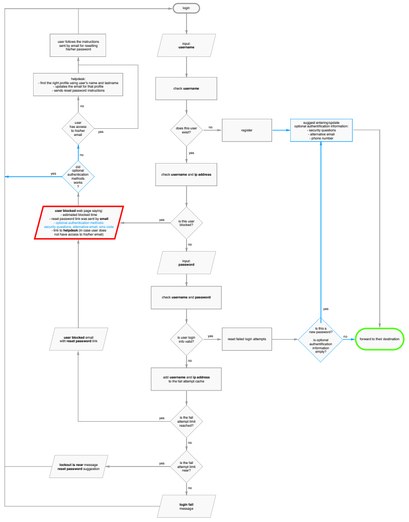
Iteration #1
- “lockout is near” warning
- password reset link by email
- link to helpdesk



Iteration #2
- username and password separation
- inexisting account easy detection
- register added as natural part of the flow



Iteration #3
- added optional authentication information
- increase user power to unlock his/her account by himself/herself

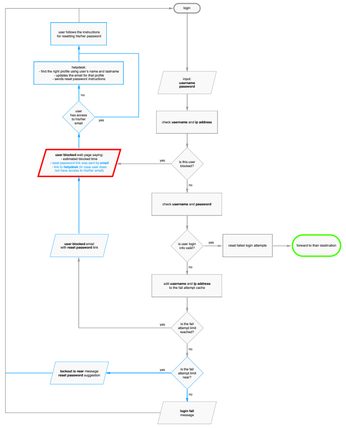


5. Deliverables

For this sprint, a work-flow containing 3 iterations was created.

All the new screens needed to implement the first iteration were created as well.

Iteration #1
- “lockout is near” warning
- password reset link by email
- link to helpdesk



Iteration #2
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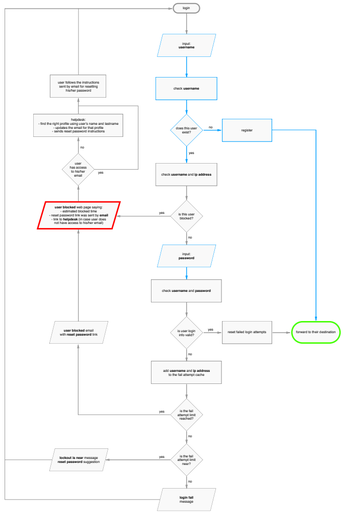

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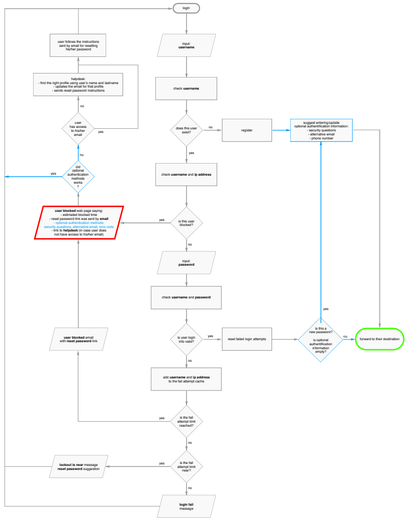

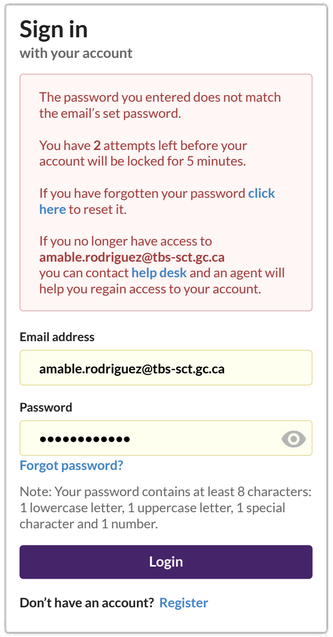

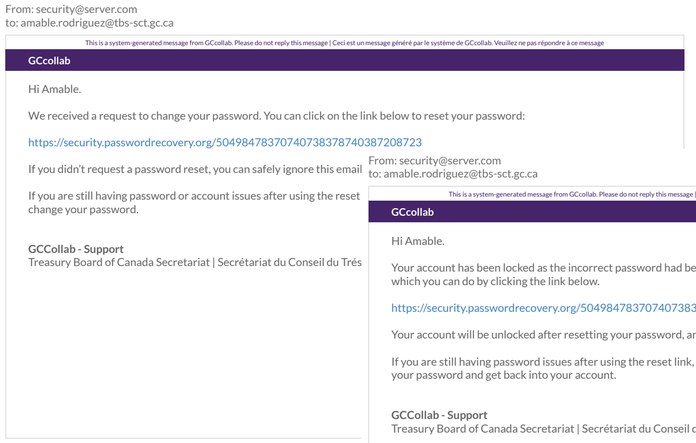

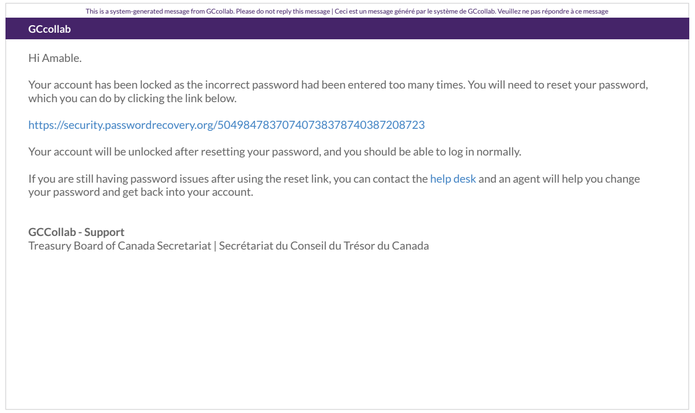

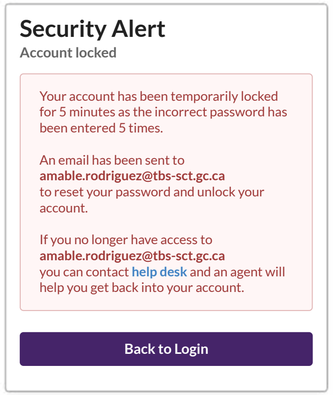

Questions and comments
Questions et commentaires

Thanks
Merci