

CLAIMS

What is claimed is:

1. A computer-implemented system for providing restock notifications, the system comprising:
 - a memory storing instructions; and
 - at least one processor configured to execute the instructions to:
 - receive, from a user interface associated with a user, a first request for a restock notification associated with a product;
 - modify a database to assign a first status to the product;
 - receive, from a second user interface associated with the user, a second request for a restock notification associated with a second product;
 - modify the database to assign the first status to the second product;
 - receive a message indicating that the product is available for purchase;
 - modify the database to assign a second status to the product;
 - receive a second message indicating that the second product is available for purchase;
 - modify the database to assign the second status to the second product;
 - configure a batch framework to periodically analyze the database to
 - identify products with the second status assigned;
 - configure the batch framework to determine whether the first request is related to the second request, wherein the product and the second

product are the same when the first request is related to the second request;

configure the batch framework to determine a notification schedule for sending at least one of the restock notification associated with the product or the restock notification associated with the second product to the user; and

send one restock notification to the user based on the determined notification schedule, in response to the first request and the second request, when the first request is related to the second request~~send the restock notification to the user based on the determined notification schedule.~~

2. The system of claim 1, wherein the user interface comprises at least one of a mobile application programming interface, a web browser, a mobile web browser, or a cart web browser.

3. The system of claim 1, wherein:
the first status is indicative of a pending request for restock notification of an out-of-stock product; and
the second status indicates that at least one of the product or the second product is in-stock and the restock notification is ready to be sent to the user.

4. The system of claim 1, wherein at least one of the message indicating that the product is available for purchase or the second message indicating that the second product is available for purchase comprises at least one of an item ID or a vendor item ID.
5. The system of claim 1, wherein the restock notification comprises at least one of a push notification for a mobile application or an email notification.
6. The system of claim 1, wherein the at least one processor is further configured to execute the instructions to:
 - modify the database to assign a third status to at least one of the product or the second product, wherein the third status is indicative of a failure to send the restock notification to the user; and
 - configure the batch framework to apply a failover logic to resend the restock notification to the user based on the determined notification schedule.
7. The system of claim 1, wherein the at least one processor is further configured to execute the instructions to:
 - determine a quantity of at least one of the product or the second product after restocking; and

send the restock notification to the user when the quantity exceeds a predetermined threshold.

8. The system of claim 1, wherein the at least one processor is further configured to execute the instructions to configure the batch framework to determine the notification schedule based on a time the user interacts with the user interface.

9. The system of claim 1, wherein:

the notification schedule comprises an alert type; and

the at least one processor is further configured to execute the instructions to adjust the alert type based on a scheduled time for sending the restock notification.

~~10. The system of claim 1, wherein the at least one processor is further configured to execute the instructions to:~~

~~receive, from a second user interface associated with the user, a second request for a restock notification associated with a second product;~~

~~modify the database to assign the first status to the second product;~~

~~receive a second message indicating that the second product is available for purchase;~~

~~modify the database to assign the second status to the second product;~~

~~configure the batch framework to determine whether the first request is~~

~~related to the second request, wherein the product and the second~~

~~product are the same when the first request is related to the second request; and~~
~~send one restock notification to the user based on the determined notification schedule, in response to the first request and the second request, when the first request is related to the second request.~~

1110. A computer-implemented method for providing restock notifications, the method comprising:

receiving, from a user interface associated with a user, a first request for a restock notification associated with a product;

modifying a database to assign a first status to the product;

receiving, from a second user interface associated with the user, a second request for a restock notification associated with a second product;

modifying the database to assign the first status to the second product;

receiving a message indicating that the product is available for purchase;

modifying the database to assign a second status to the product;

receiving a second message indicating that the second product is available for purchase;

modifying the database to assign the second status to the second product;

configuring a batch framework to periodically analyze the database to identify products with the second status assigned;

configuring the batch framework to determine whether the first request is related to the second request, wherein the product and the second product are the same when the first request is related to the second request;

configuring the batch framework to determine a notification schedule for sending at least one of the restock notification associated with the product or the restock notification associated with the second product to a the user; and

sending one restock notification to the user based on the determined notification schedule, in response to the first request and the second request, when the first request is related to the second request~~sending the restock notification to the user based on the determined notification schedule.~~

~~12~~11. The method of claim ~~11~~10, wherein the user interface comprises at least one of a mobile application programming interface, a web browser, a mobile web browser, or a cart web browser.

~~13~~12. The method of claim ~~11~~10, wherein the restock notification comprises at least one of a push notification for a mobile application or an email notification.

~~14~~13. The method of claim ~~11~~10, wherein:

the first status is indicative of a pending request for restock notification of an out-of-stock product; and

the second status indicates that at least one of the product or the second product is in-stock and the restock notification is ready to be sent to the user.

~~15~~14. The method of claim ~~11~~10, further comprising:

modifying the database to assign a third status to at least one of the product or the second product, wherein the third status is indicative of a failure to send the restock notification to the user; and
configuring the batch framework to apply a failover logic to resend the restock notification to the user based on the determined notification schedule.

~~16~~15. The method of claim ~~11~~10, further comprising:

determining a quantity of at least one of the product or the second product after restocking; and
sending the restock notification to the user when the quantity exceeds a predetermined threshold.

~~17~~16. The method of claim ~~11~~10, further comprising configuring the batch framework to determine the notification schedule based on a time the user interacts with the user interface.

~~18~~17. The method of claim ~~11~~10, wherein the notification schedule comprises an alert type, and further comprising adjusting the alert type based on a scheduled time for sending the restock notification.

~~19.~~ The method of claim 11, further comprising:

~~receiving, from a second user interface associated with the user, a second request for a restock notification associated with a second product;~~
~~modifying the database to assign the first status to the second product;~~
~~receiving a second message indicating that the second product is available for purchase;~~
~~modifying the database to assign the second status to the second product;~~
~~configuring the batch framework to determine whether the first request is related to the second request, wherein the product and the second product are the same when the first request is related to the second request; and~~
~~sending one restock notification to the user based on the determined notification schedule, in response to the first request and the second request, when the first request is related to the second request.~~

~~20~~18. A computer-implemented system for providing restock notifications, the system comprising:

a memory storing instructions; and

at least one processor configured to execute the instructions to:

- receive, from a first user interface associated with a user, a first request for a restock notification associated with a first product;

- receive, from a second user interface associated with the user, a second request for a restock notification associated with a second product;

- modify a database to assign a first status to the first product and the second product, wherein the first status is indicative of a pending request for restock notification of an out-of-stock product;

- receive a first message indicating that the first product is available for purchase and a second message indicating that the second product is available for purchase;

- modify the database to assign a second status to the first product and the second product, wherein:

 - the second status indicates that a product is in-stock and the restock notification is ready to be sent to the user;

- configure a batch framework to periodically analyze the database to identify products with the second status assigned;

- configure the batch framework to determine a notification schedule for sending the restock notification to the user;

- configure the batch framework to determine whether the first request is related to the second request, wherein the first product and the

second product are the same when the first request is related to the second request;

determine a quantity of the first product and the second product after restocking;

send one restock notification for the first product and the second product to the user based on the determined notification schedule, when:

the first request is related to the second request; and

when the quantity of the first product and the second product exceeds a predetermined threshold; and

send a first restock notification for the first product and a second restock notification for the second product based on the determined notification schedule, when:

the first request is not related to the second request; and

when the quantity of the first product and the second product exceeds a predetermined threshold.