

Design

Figure 1: Website layout - Flowchart for website navigation.

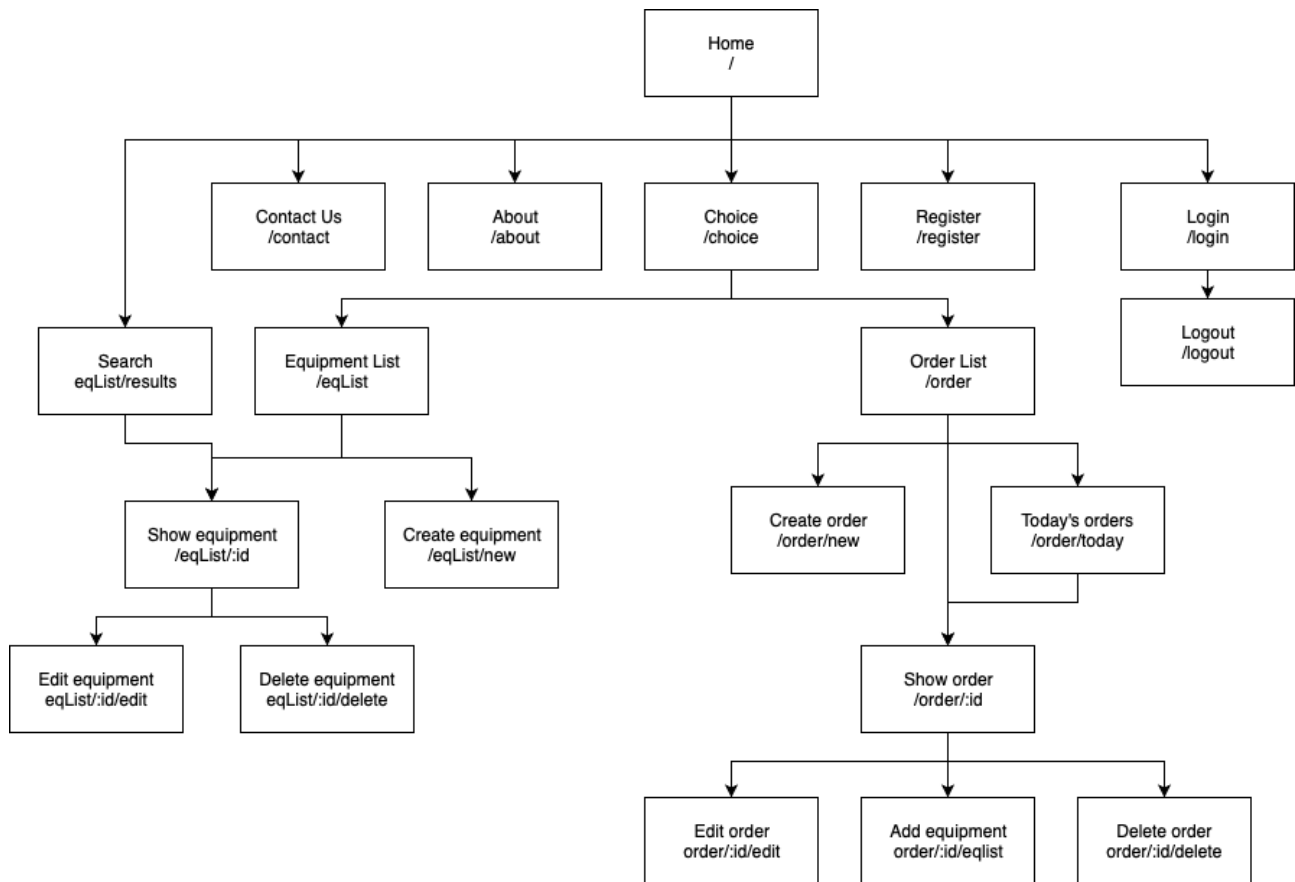


Figure 2: Entity relationship diagram - Details relationship between objects.

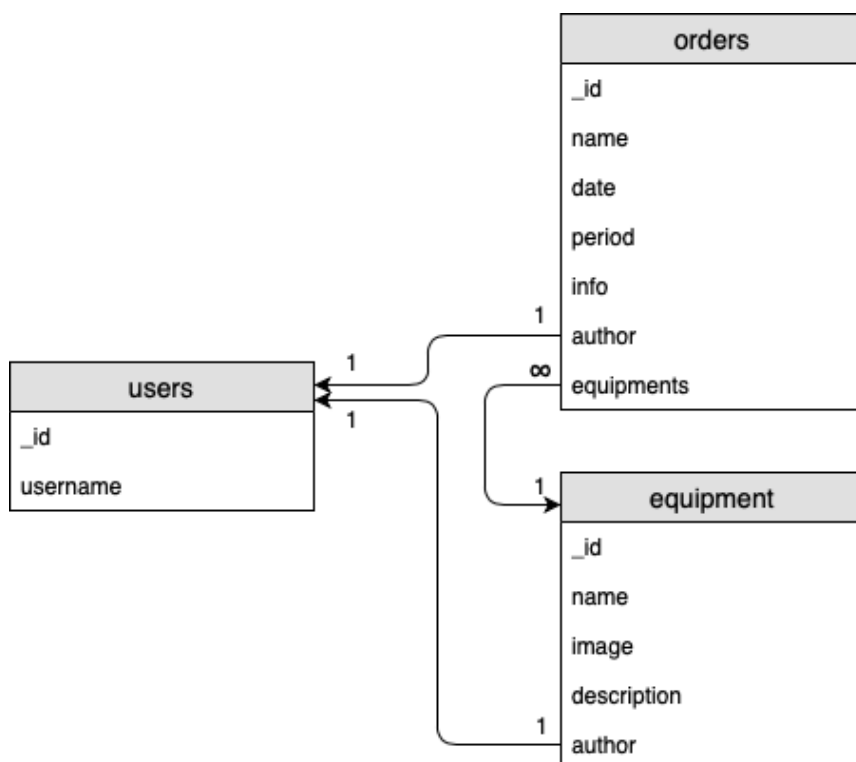


Figure 3: Register flowchart - Demonstrates how a new account is registered. (Success Criteria 8)

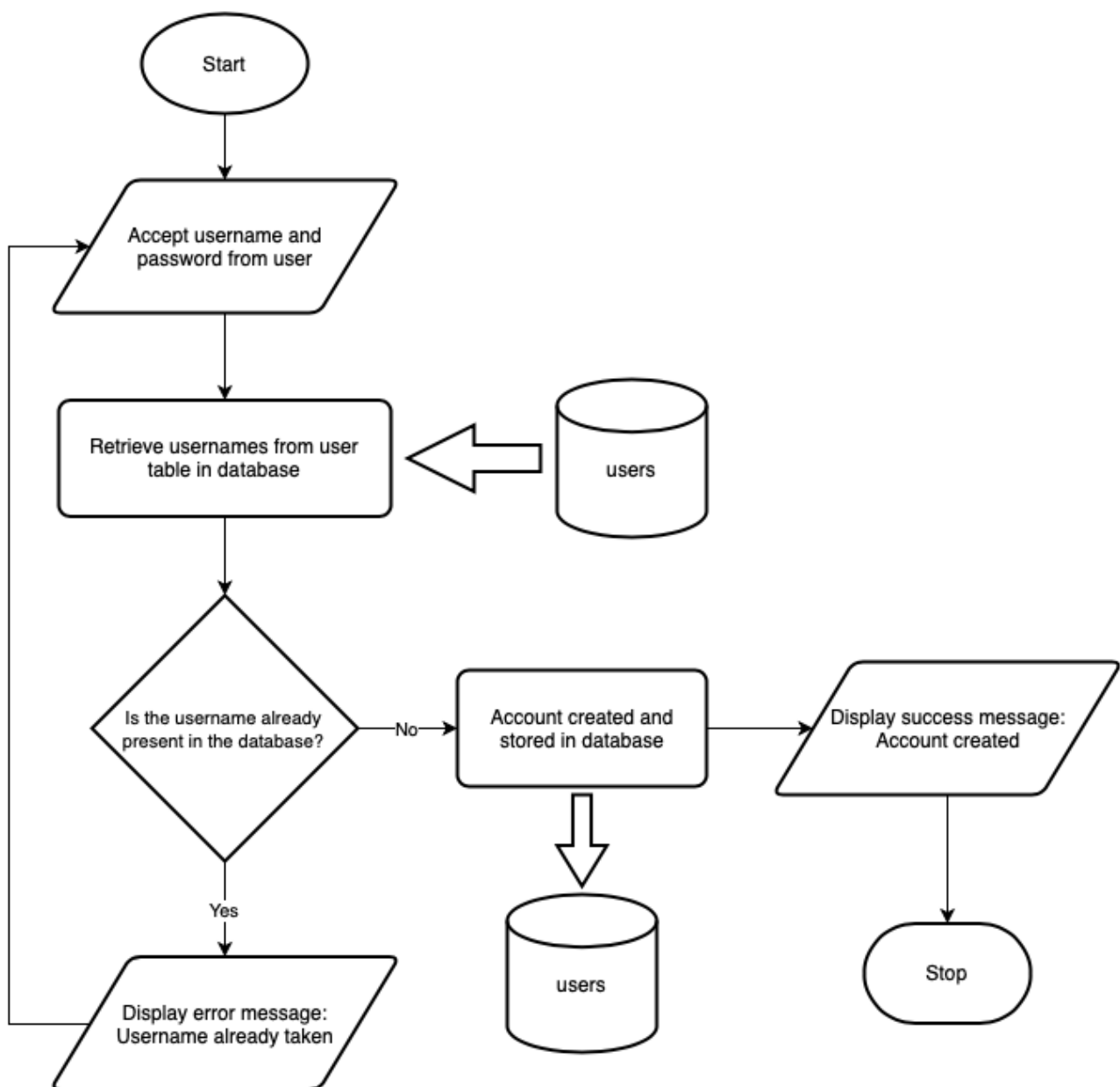


Figure 4: Login flowchart - Demonstrates how a user logs in using their account details. (Success Criteria 8)

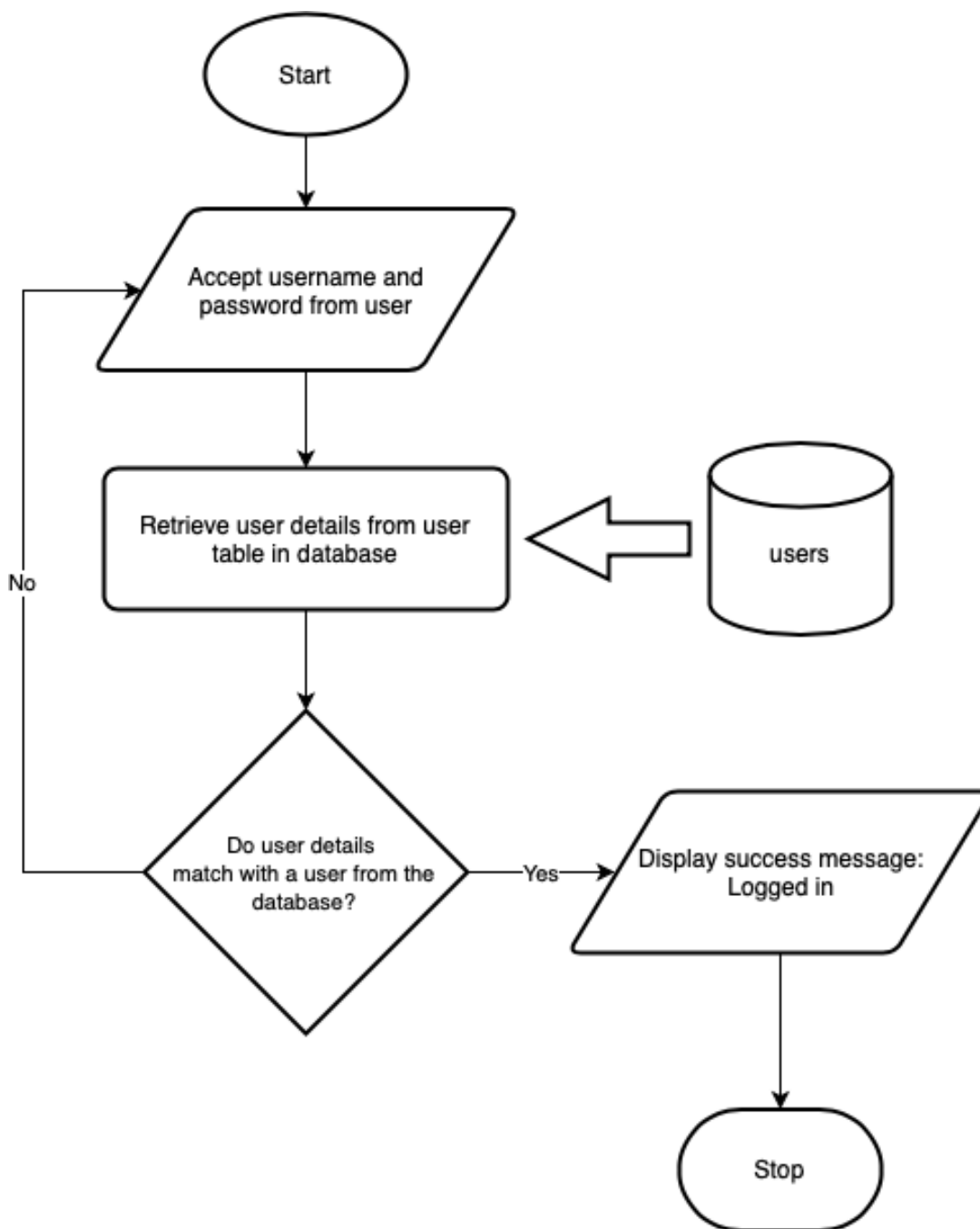


Figure 5: Creating equipment flowchart - Demonstrates how the admin can create new equipment and add it to the database. (Success Criteria 1)

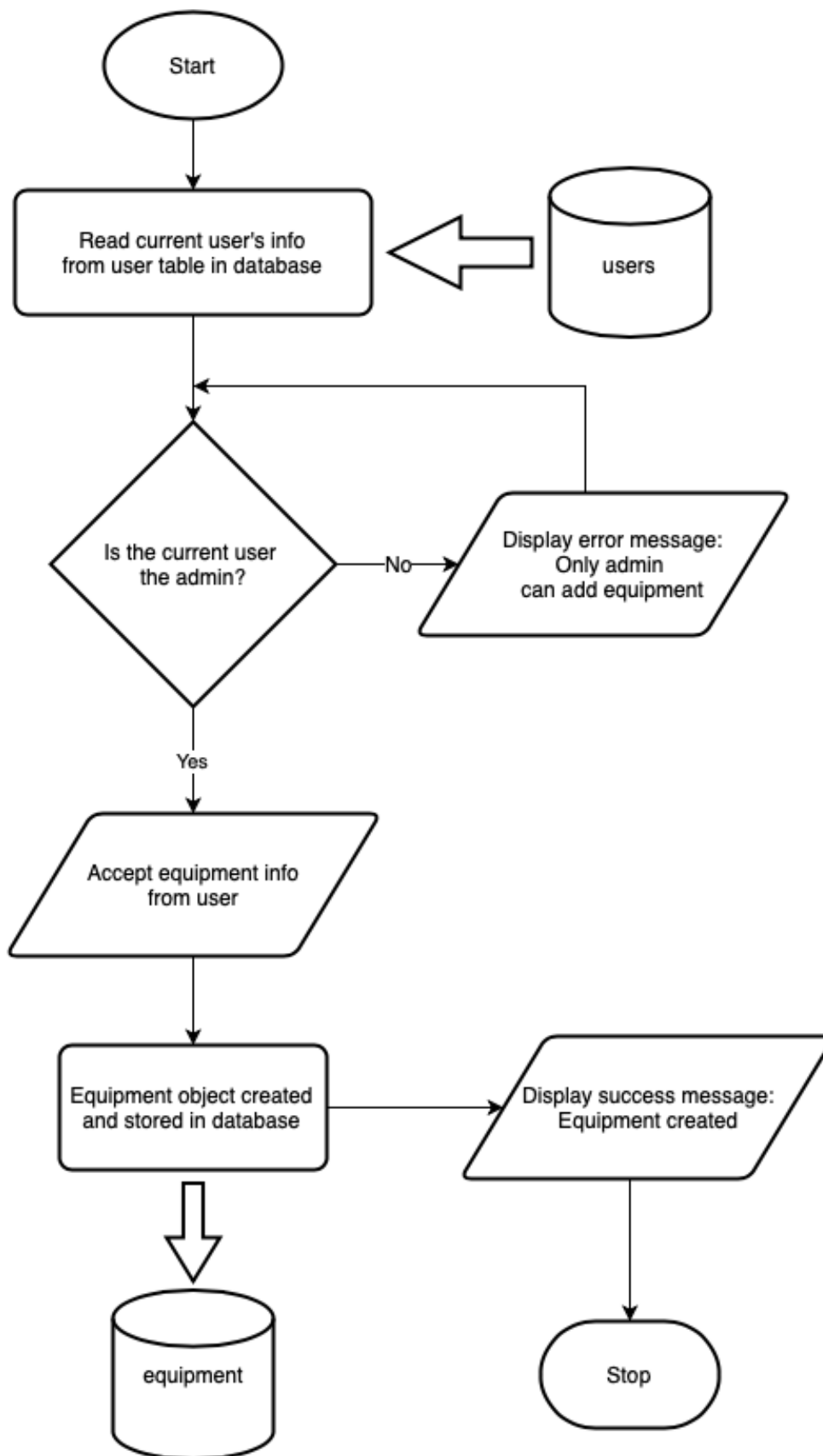


Figure 6: Editing equipment flowchart - Demonstrates how the admin can edit the details of already-existing equipment. (Success Criteria 2)

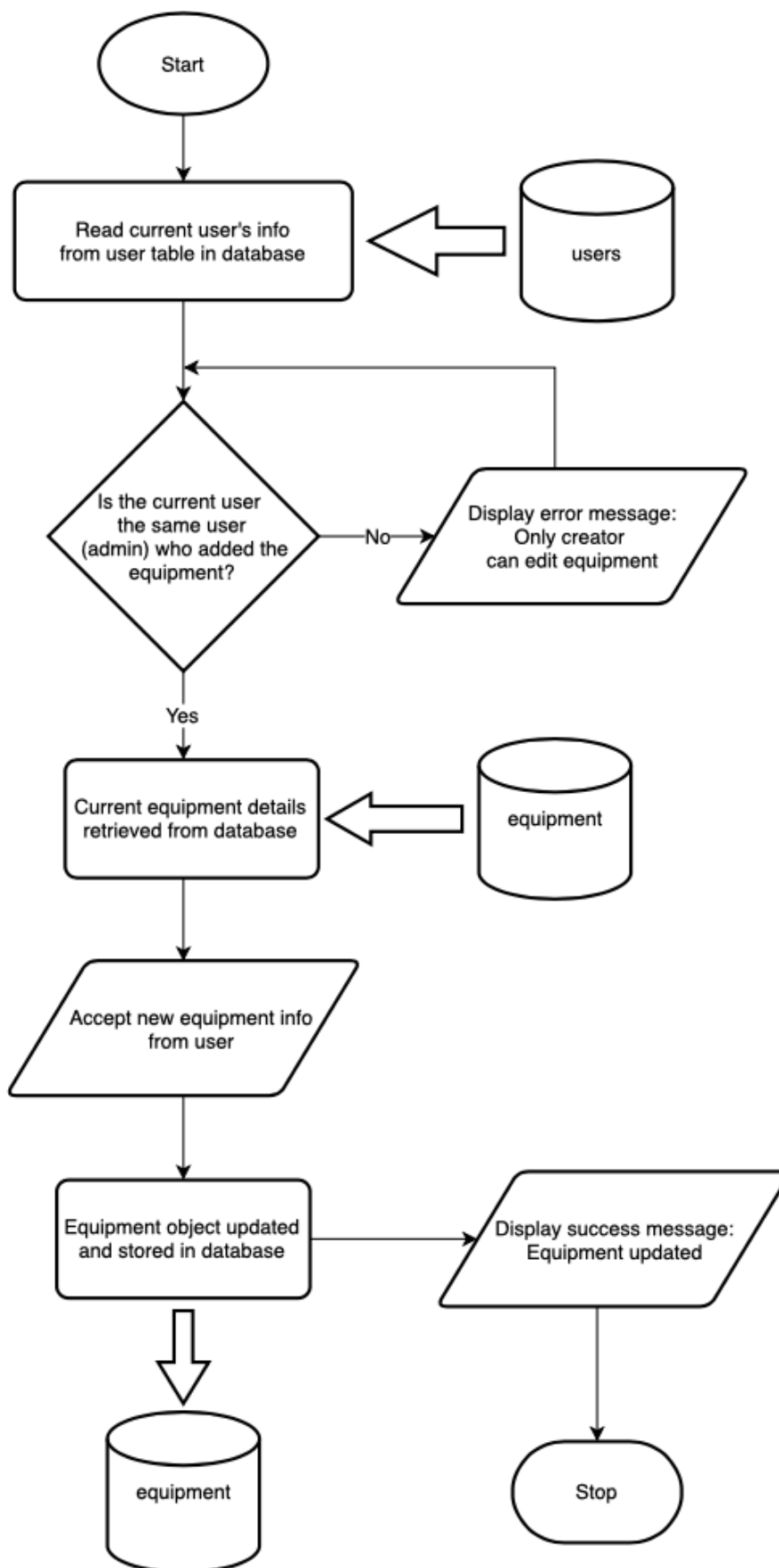


Figure 7: Deleting equipment flowchart - Demonstrates how the admin can delete equipment from the database. (Success Criteria 3)

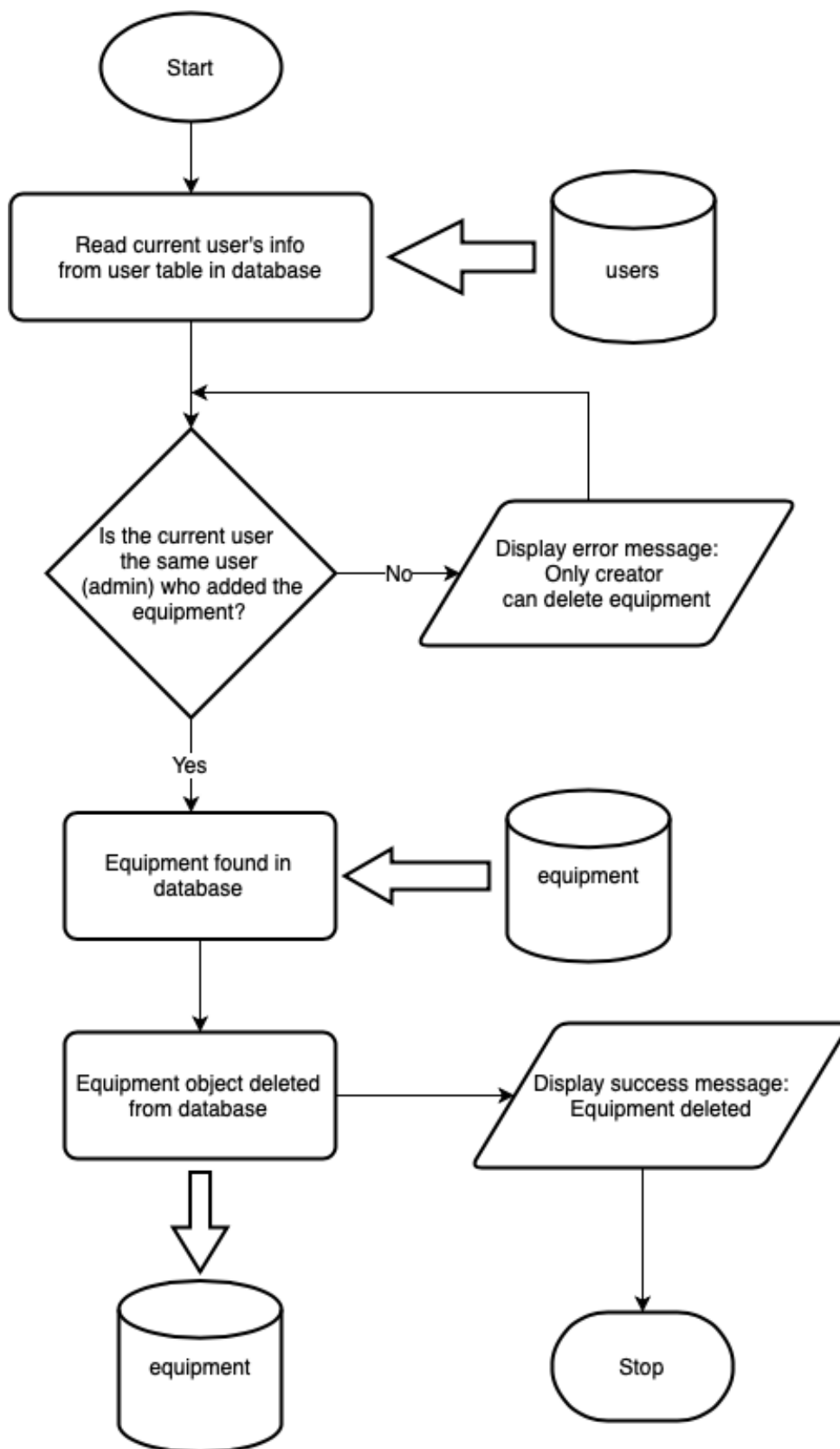


Figure 8: Search equipment flowchart - Demonstrates how a user may search for and retrieve a piece of equipment from the database. (Success Criteria 10)

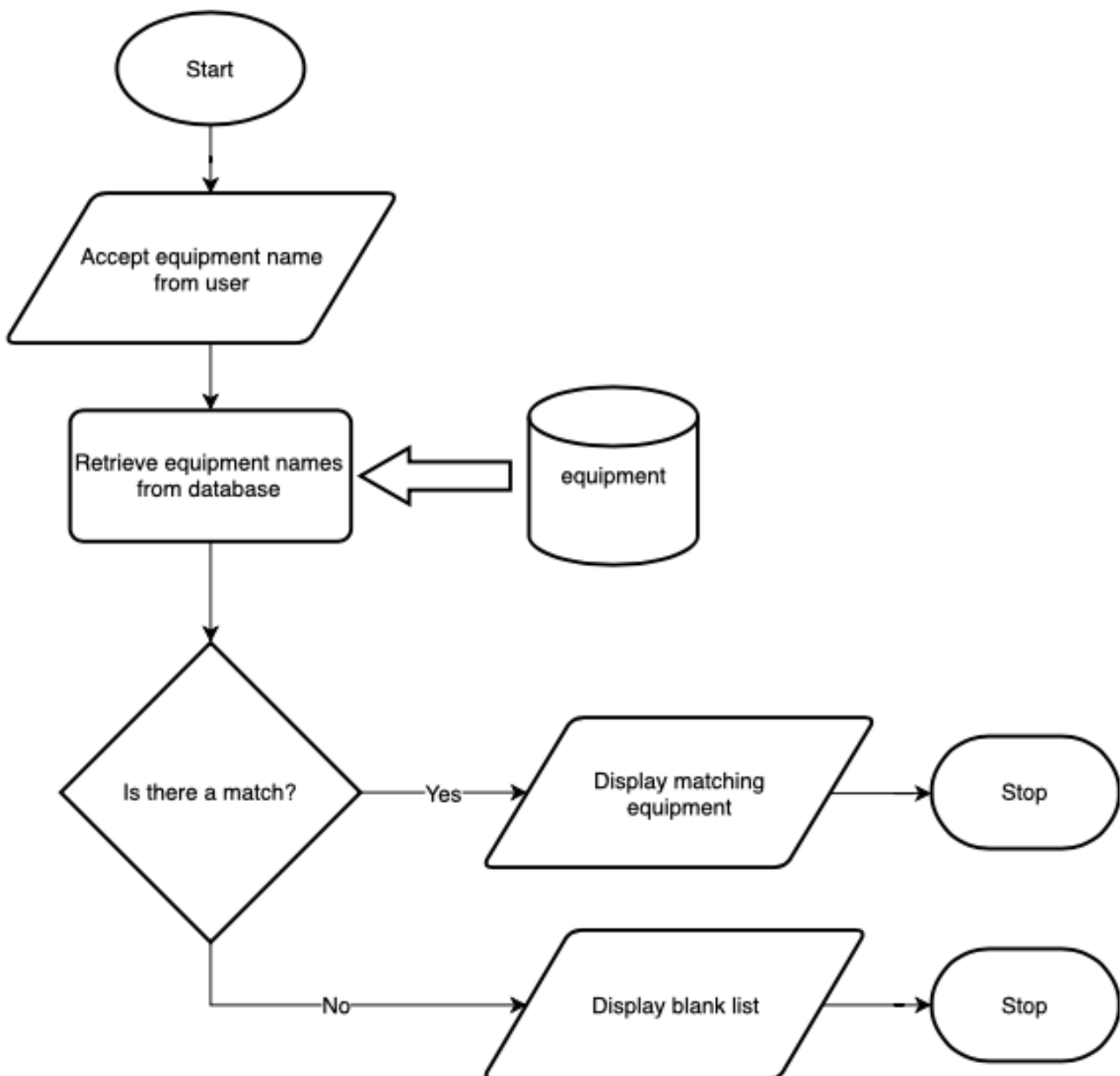


Figure 9: Creating order flowchart - Demonstrates how students can create new orders and add them to the database. (Success Criteria 4)

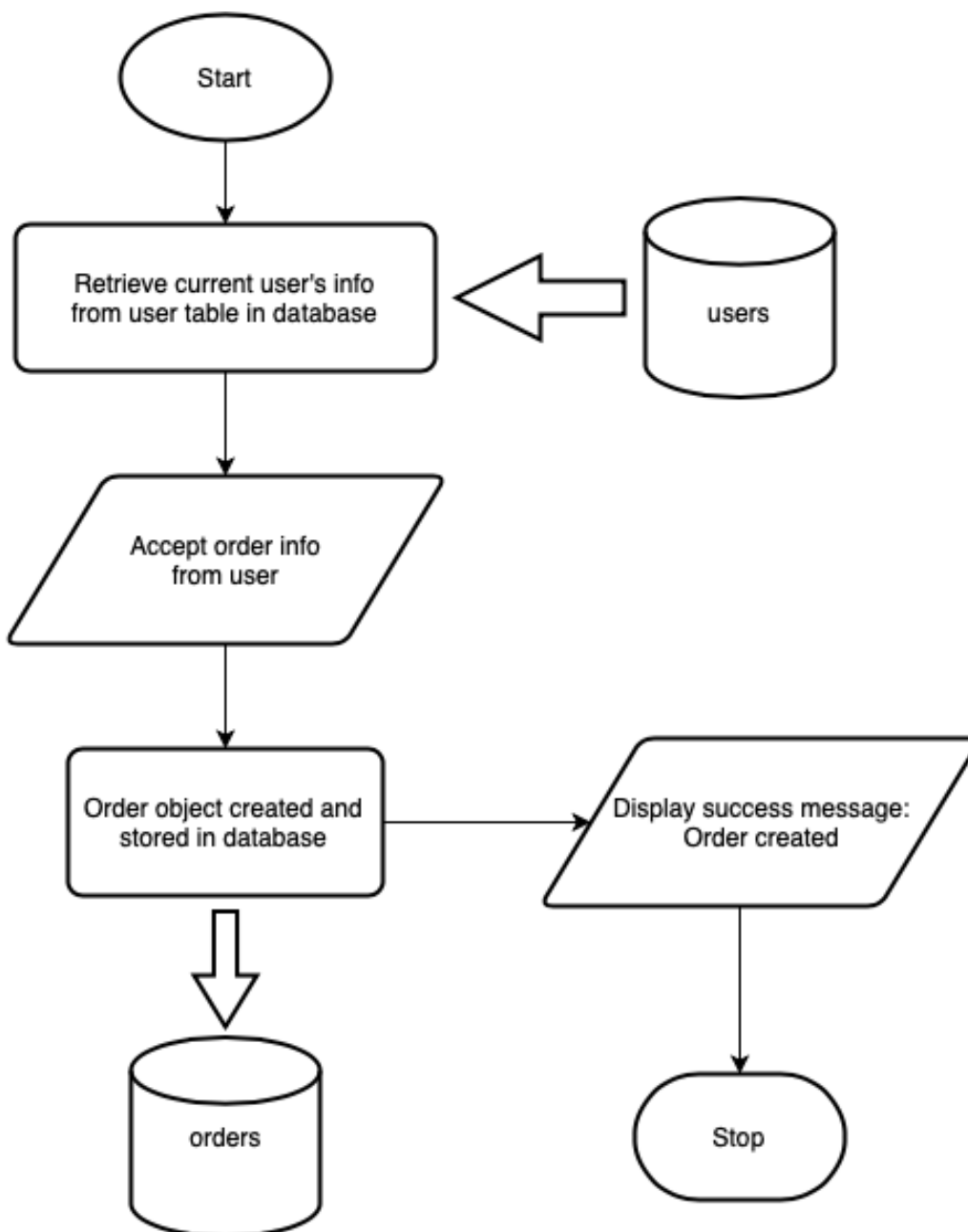


Figure 10: Adding equipment to order flowchart - Demonstrates how students add equipment to existing orders. (Success Criteria 7)

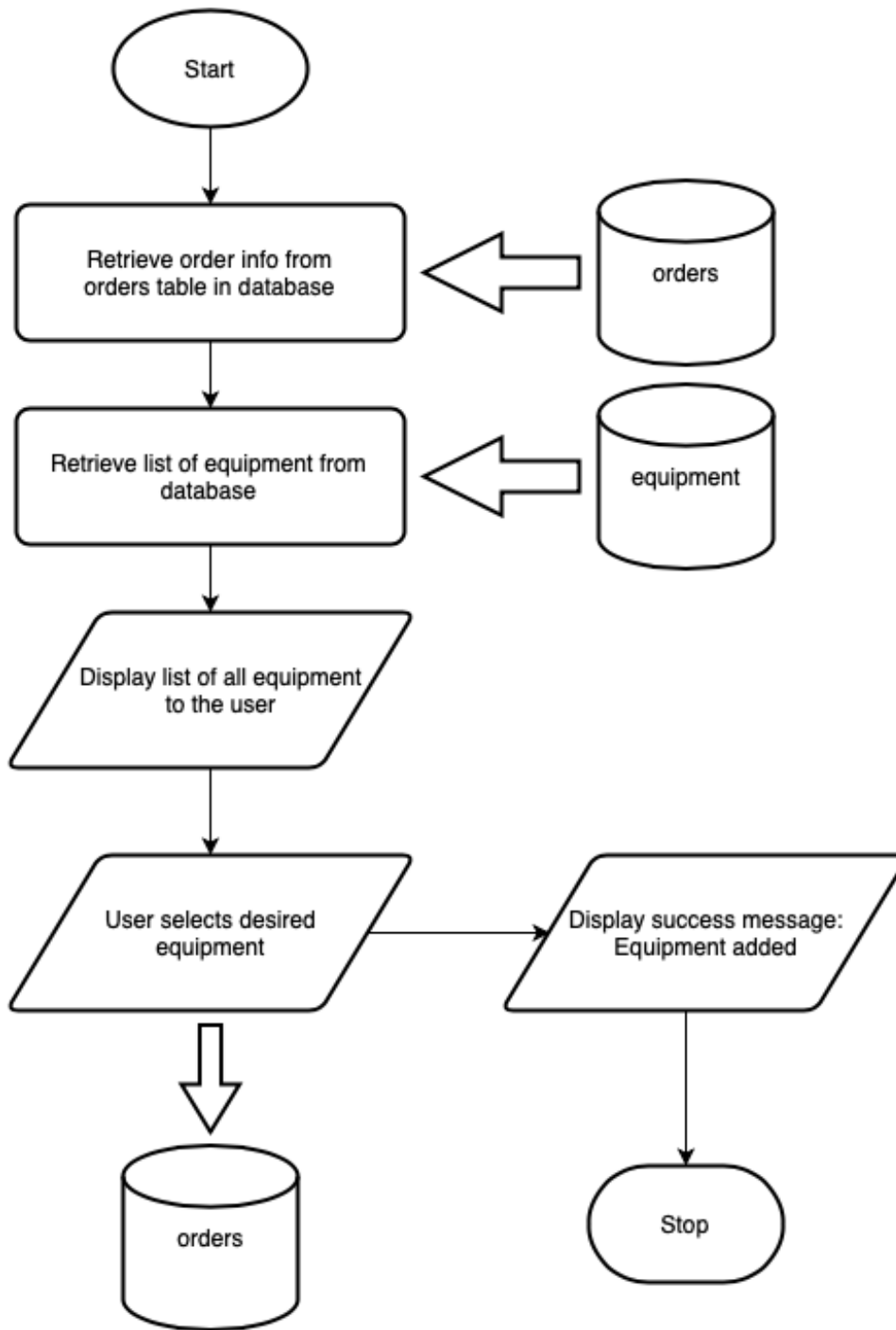


Figure 11: Editing order flowchart - Demonstrates how students can edit the name and description of already-existing orders. (Success Criteria 5)

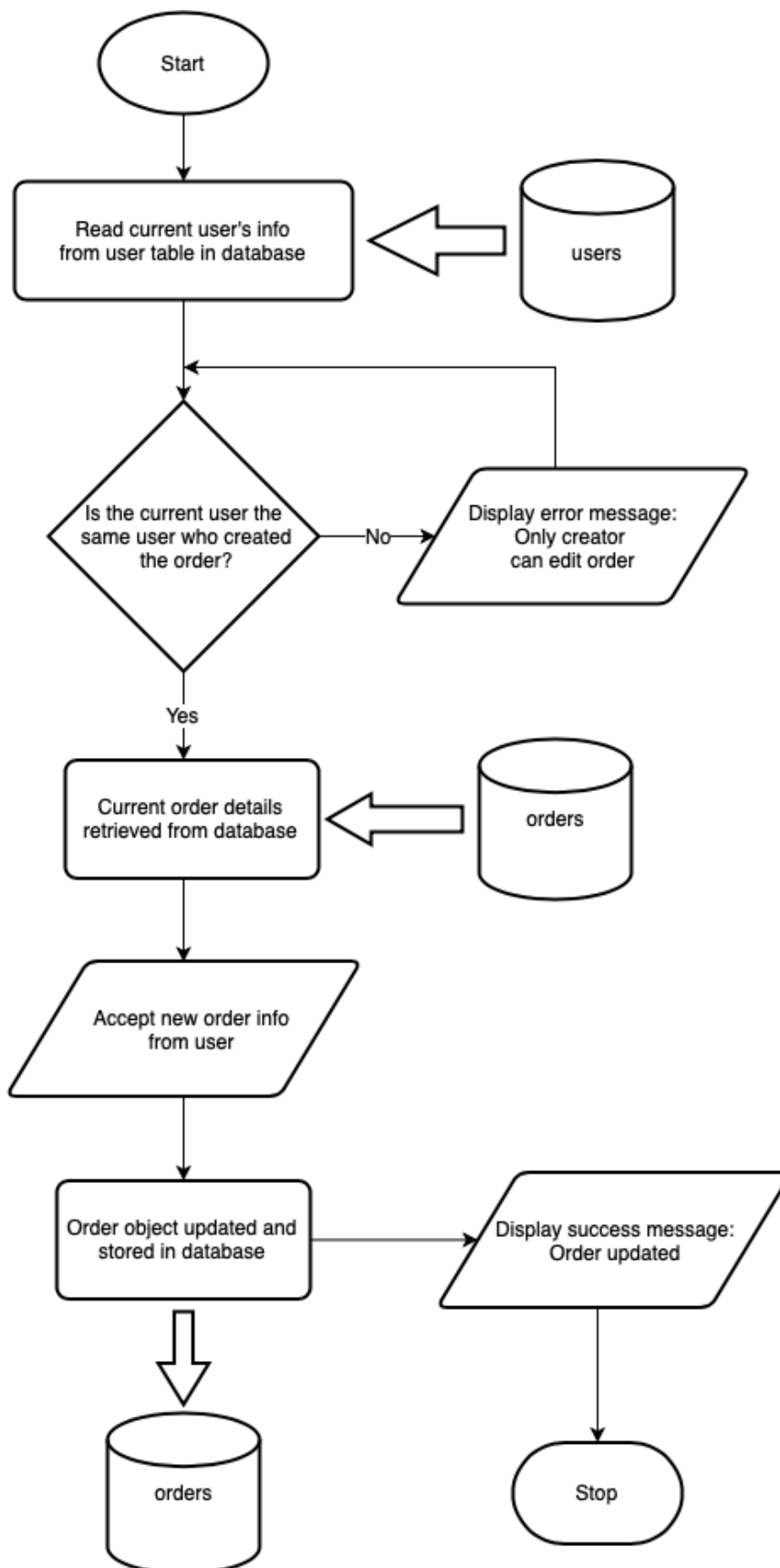


Figure 12: Deleting order flowchart - Demonstrates how students can delete orders from the database. (Success Criteria 6)

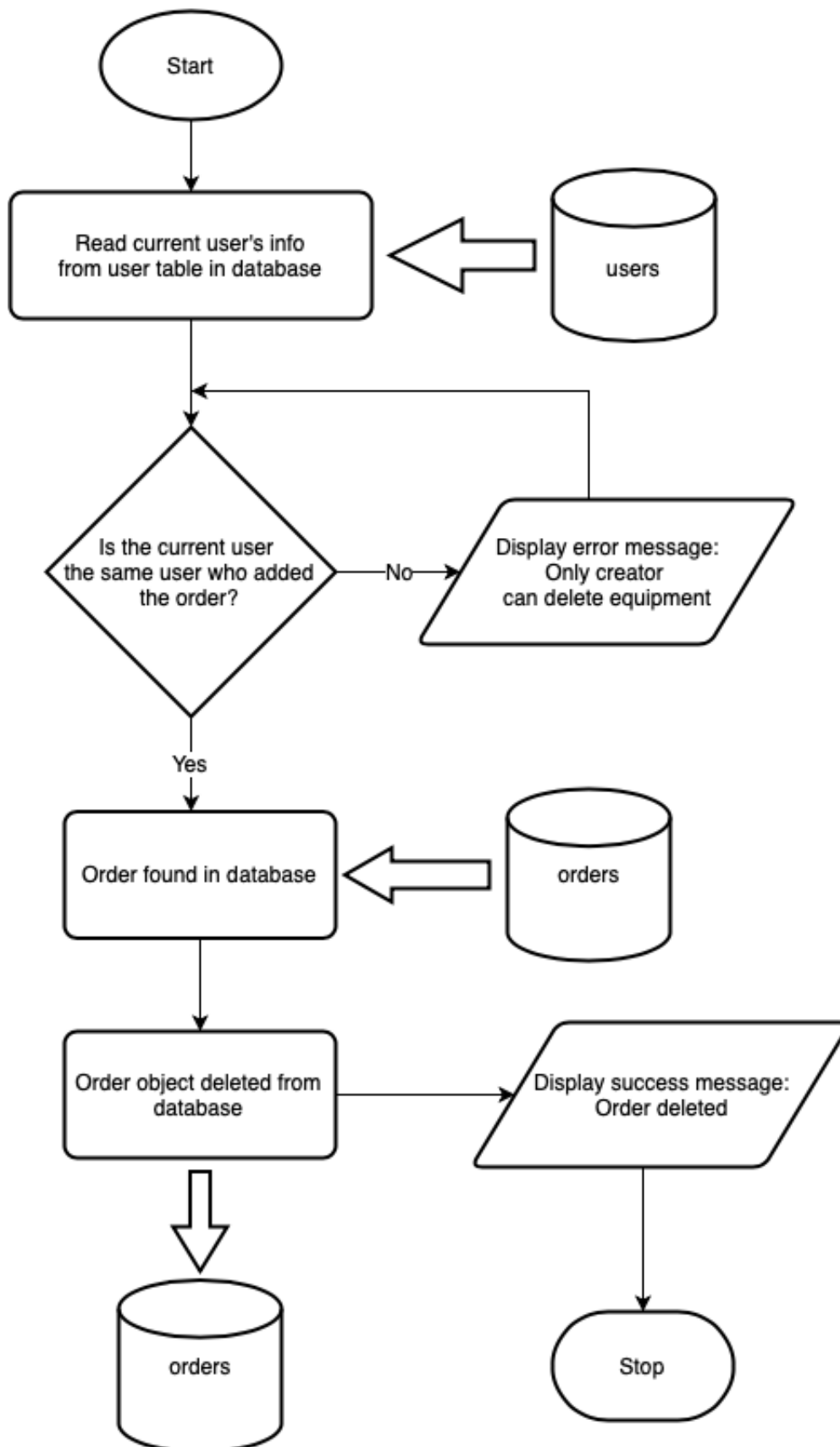
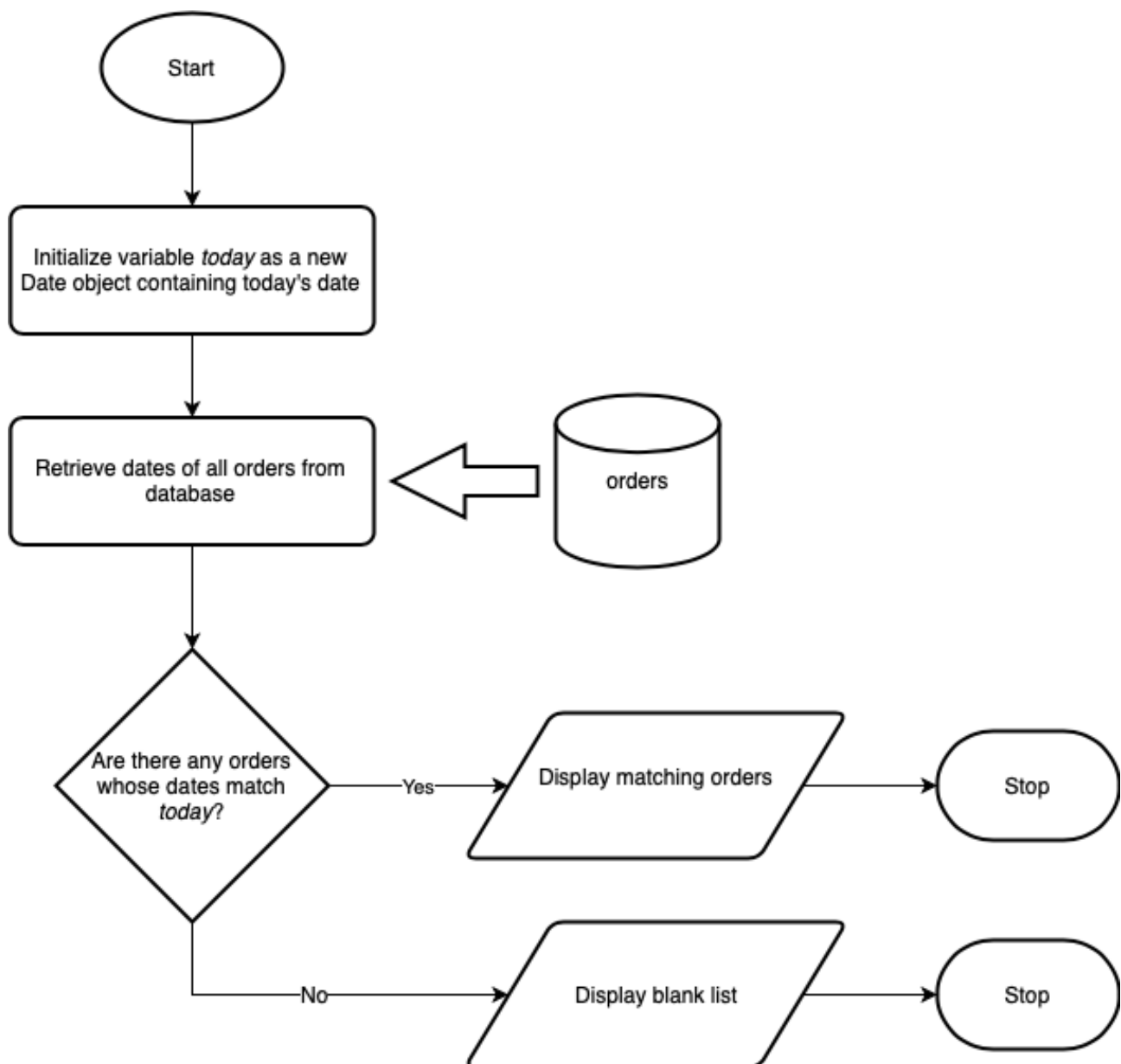


Figure 13: Today's orders flowchart - Demonstrates how users can access a list of all orders due on a given day. (Success Criteria 13)



Test Plan:

Test Type	Nature of Test	Example
Account Registration	The user clicks the register button at the top of the page, and then enters a username and password for their account. There are no restrictions on either of these, except that the username cannot be the same as one already in use. If so, the user should be notified through an error notification. Else, they should be logged in and a success notification should appear. (Refer to figure 3)	Username: John Doe Password: abc123
Account Login	The user clicks the login button at the top of the page, and then enters their username and password. If these details match with those of an existing account in the database, the user is logged in. All entries are case-sensitive. (Refer to figure 4)	Success: Username: John Doe Password: abc123 Failure: Username: John Doe Password: ABC123
Add Equipment	The user clicks the add equipment button at the bottom of the equipment list page. If the user is not an admin, they should receive an error notification informing them that only the admin can access this feature. If the admin clicks this button, they should be able to add a new piece of equipment by entering its name, image, and description. (Refer to figure 5)	Name: Flask Image: www.imageurl.jpg Description: Size - 250 mL
Edit Equipment	The user should only be able to see the edit button if they are an admin. Upon clicking the button, they should be able to change the equipment's details. The current details should be loaded in so that they may be altered. (Refer to figure 6)	Name: Flask Image: www.imageurl.jpg Description: Sizes - 250, 500 mL
Delete Equipment	The user should only be able to see the delete button if they are an admin. Upon clicking the button, the equipment should be removed. (Refer to figure 7)	<i>Flask removed from equipment list.</i>

Search for Equipment	The user should be able to search for equipment by name using the search bar at the top of the page. If an existing piece of equipment matches the search query, it should be displayed to the user. If multiple pieces of equipment exist with the same name, all of them should be displayed. (Refer to figure 8)	Search Query: Flask
Create Orders	The user clicks the new order button at the bottom of the order list page. If the user is not logged in, they shall receive an error notification asking them to log in. Else, they may place their order by filling in the name, date, period, and additional information for the order. (Refer to figure 9)	Order Name: Physics IA Date: 6/12/18 Period: ACE 2 Additional Information: Setup - Falling Ball Viscometer
Edit Orders	The user should only be able to see the edit button if they are the same user that created the order. Upon clicking the button, the user should only be able to edit the name and description of the order. The date and period of the order may not be changed. (Refer to figure 11)	Order Name: Physics IA Additional Information: Setup - Commercial Viscometer
Delete Orders	The user should only be able to see the delete button if they are the same user that created the order. Upon clicking the button, the order should be removed. (Refer to figure 12)	<i>Physics IA removed from order list</i>
Add Equipment to Orders	The user should only be able to see the add equipment button if they are the same user that created the order. Upon clicking the button, they should be redirected to a modified equipment list with buttons to add the equipment to their order. Upon clicking the button, the equipment will be added to the order, and a success notification will appear to confirm this. The user can then continue to add more equipment. Once satisfied, the user may return to their order by clicking the return button. (Refer to figure 10)	<i>Flask added to Physics IA</i>