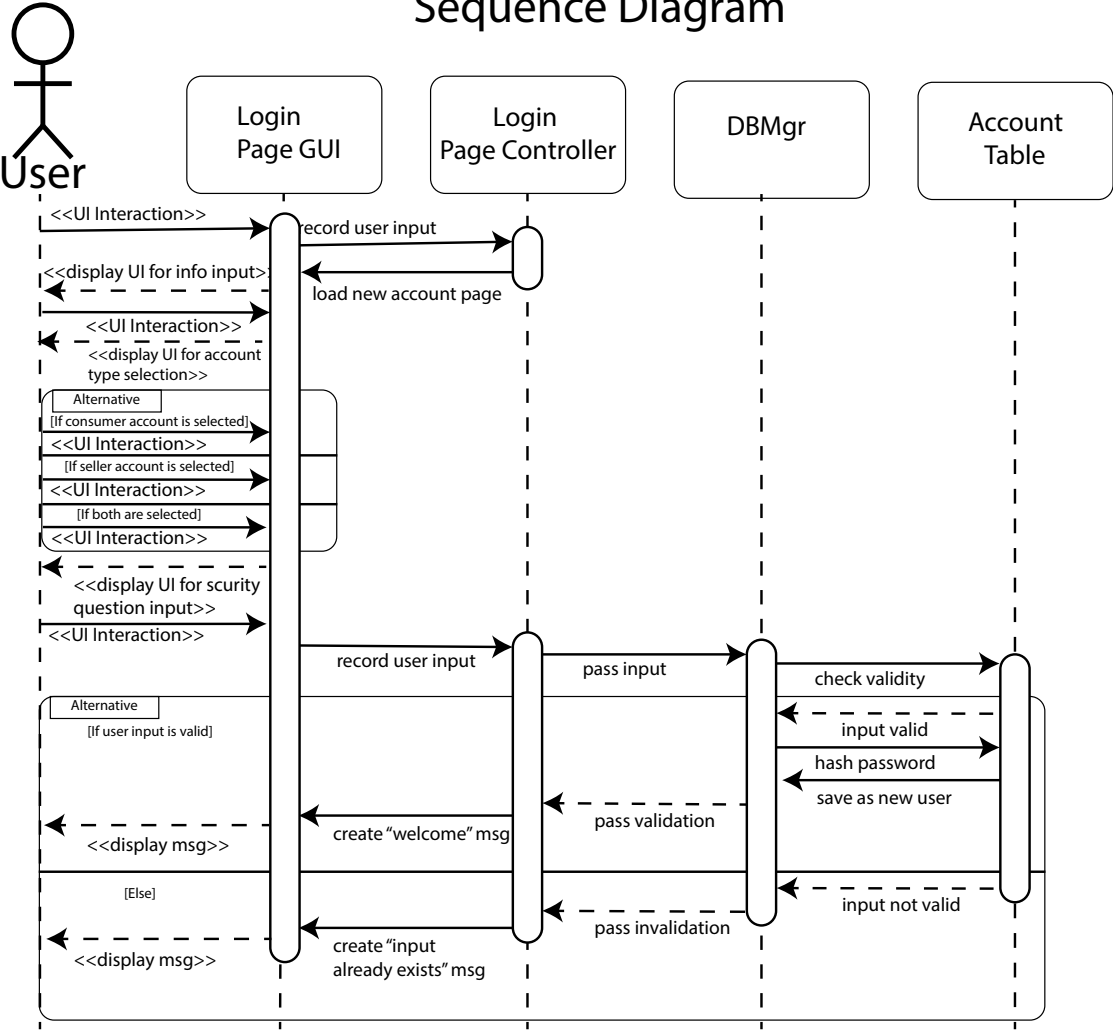


## SepTech Account Creation

- 1.1 User clicks a UI element to create account.
- 1.2 Login page GUI passes user input to login page controller.
- 1.3 Login page controller loads account creation page.
- 1.4 Login page GUI displays input text-boxes for account creation information.
- 1.5 User enters information in UI elements.
- 1.6 Login page GUI requests user choose between consumer account, seller account, or both.
- 11.1 If user selects consumer account.
  - 11.1.1 Login page GUI records user input.
- 11.2 If user selects seller account.
  - 11.2.1 Login page GUI records user input.
- 11.3 If user selects both.
  - 11.3.1 Login page GUI records user input.
- 46.1 Login page GUI requests user submit a security question for multi-factor authentication.
- 46.2 User fills out UI element.
- 1.7 Login page controller passes all user input to DBMgr.
- 1.8 DBMgr checks User input against existing items the account table.
- 1.9 Account table returns true or false depending on if there is a match.
- 1.10 If true is returned, then
  - 1.10.1 DBMgr hashes inputted password.
  - 1.10.2 Account table saves information as a new authorized user.
  - 1.10.3 DBMgr passes successful creation.
  - 1.10.4 Login page controller creates "welcome to Centauri" msg.
  - 1.10.5 Login page GUI displays msg.
- 1.14 Else
  - 1.14.1 DBMgr passes failed creation
  - 1.14.2 Login page controller creates "input already exists" msg.
  - 1.14.3 Login page GUI displays msg.

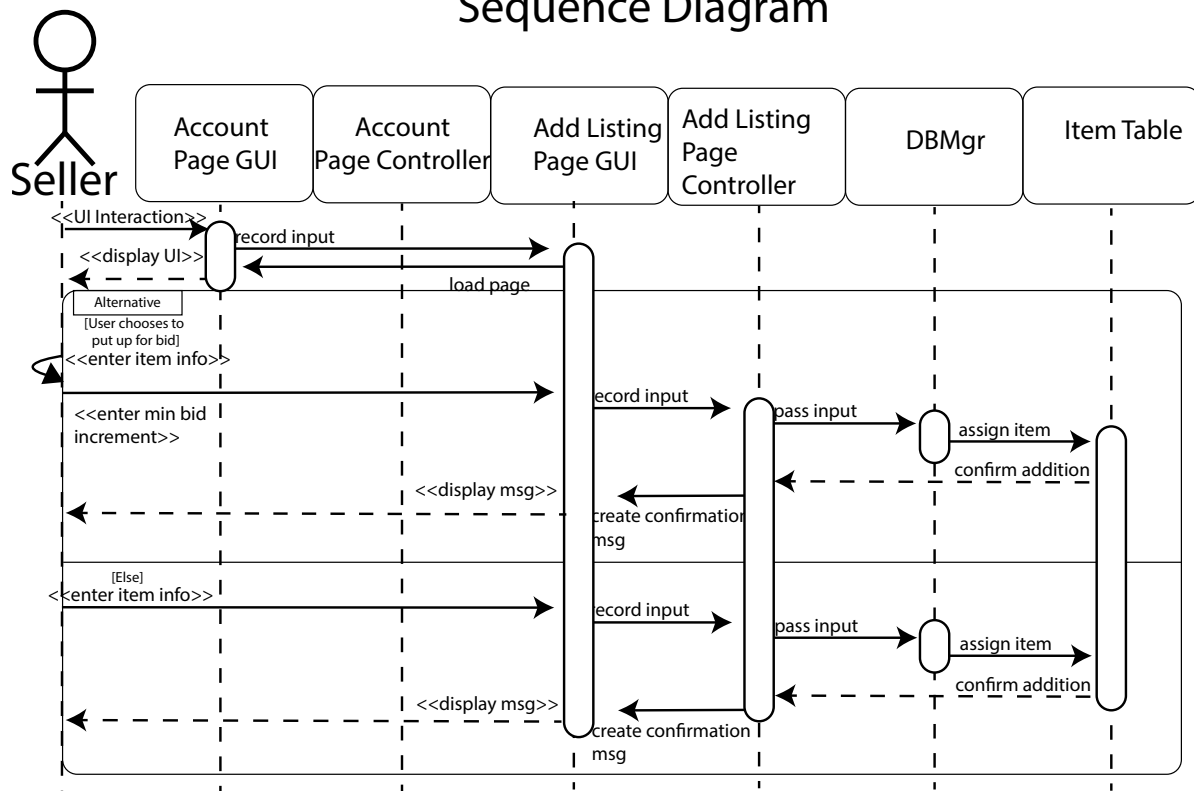
# SepTech/Account Creation Sequence Diagram



## Add bidding Item

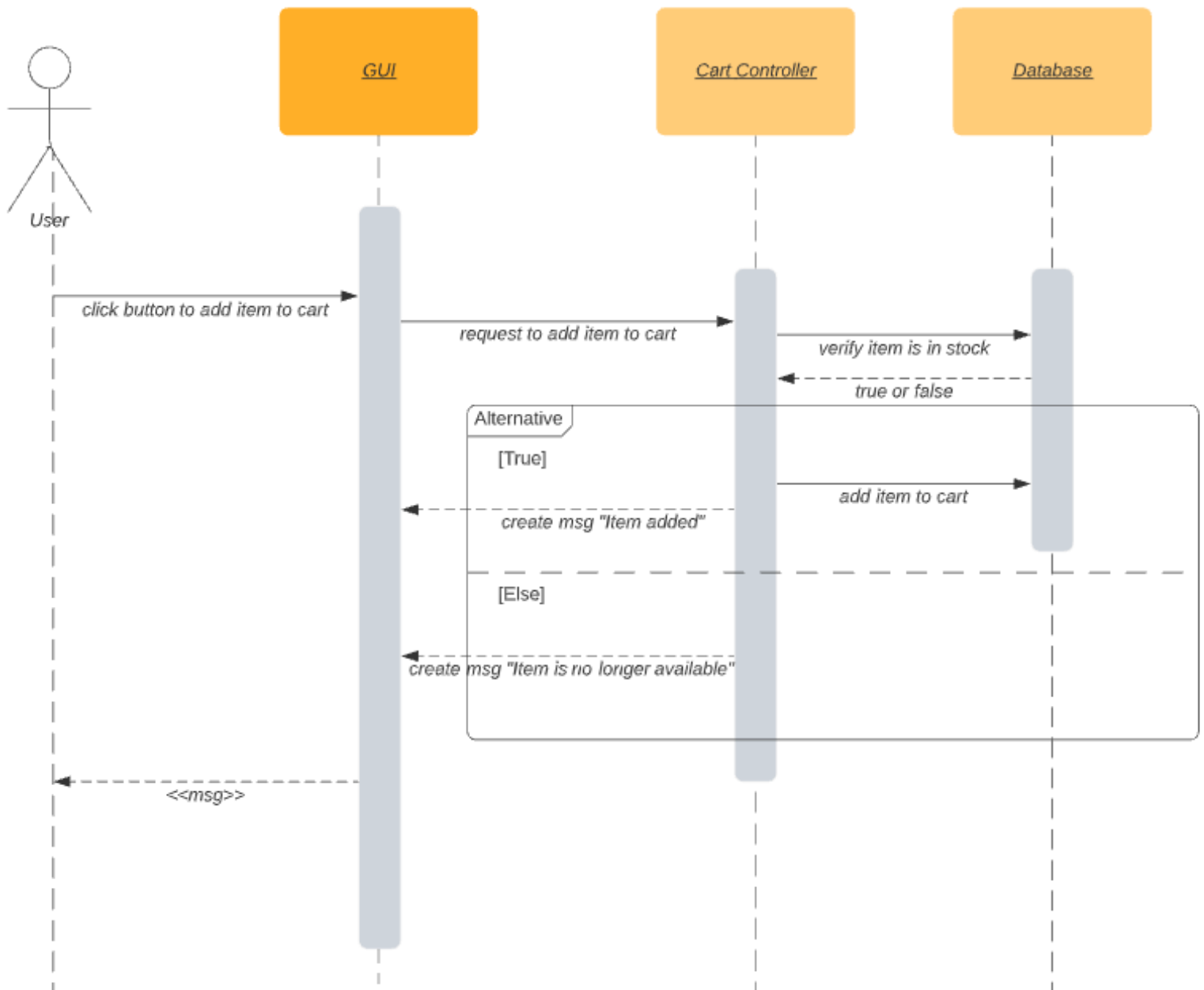
- 22.1 Seller selects UI button for “Add Listing”
- 22.2 Account page GUI records input.
- 22.3 Account page controller loads add listing page.
- 22.4 Add listing page GUI displays user input boxes.
- 22.5 Seller chooses whether or not to put item up for bidding.
- 22.6 If Seller puts item up for bidding,
  - 22.6.1 Seller enters item information.
  - 23.1 Seller selects minimum bid increment.
  - 22.6.2 Add listing page GUI records seller information.
  - 22.6.3 Add listing page controller passes seller info.
  - 22.6.4 DBMgr assigns item listing to item table.
  - 22.6.5 Add listing page controller creates “Item added” msg.
  - 22.6.6 Add listing page GUI displays msg.
- 22.7 Else
  - 22.7.1 Seller enters item information.
  - 22.7.2 Add listing page GUI records seller information.
  - 22.7.3 Add listing page controller passes seller info.
  - 22.7.4 DBMgr assigns item listing to item table.
  - 22.7.5 Add listing page controller creates “Item added” msg.
  - 22.7.6 Add listing page GUI displays msg.

## SepTech/Add Bidding Item Sequence Diagram

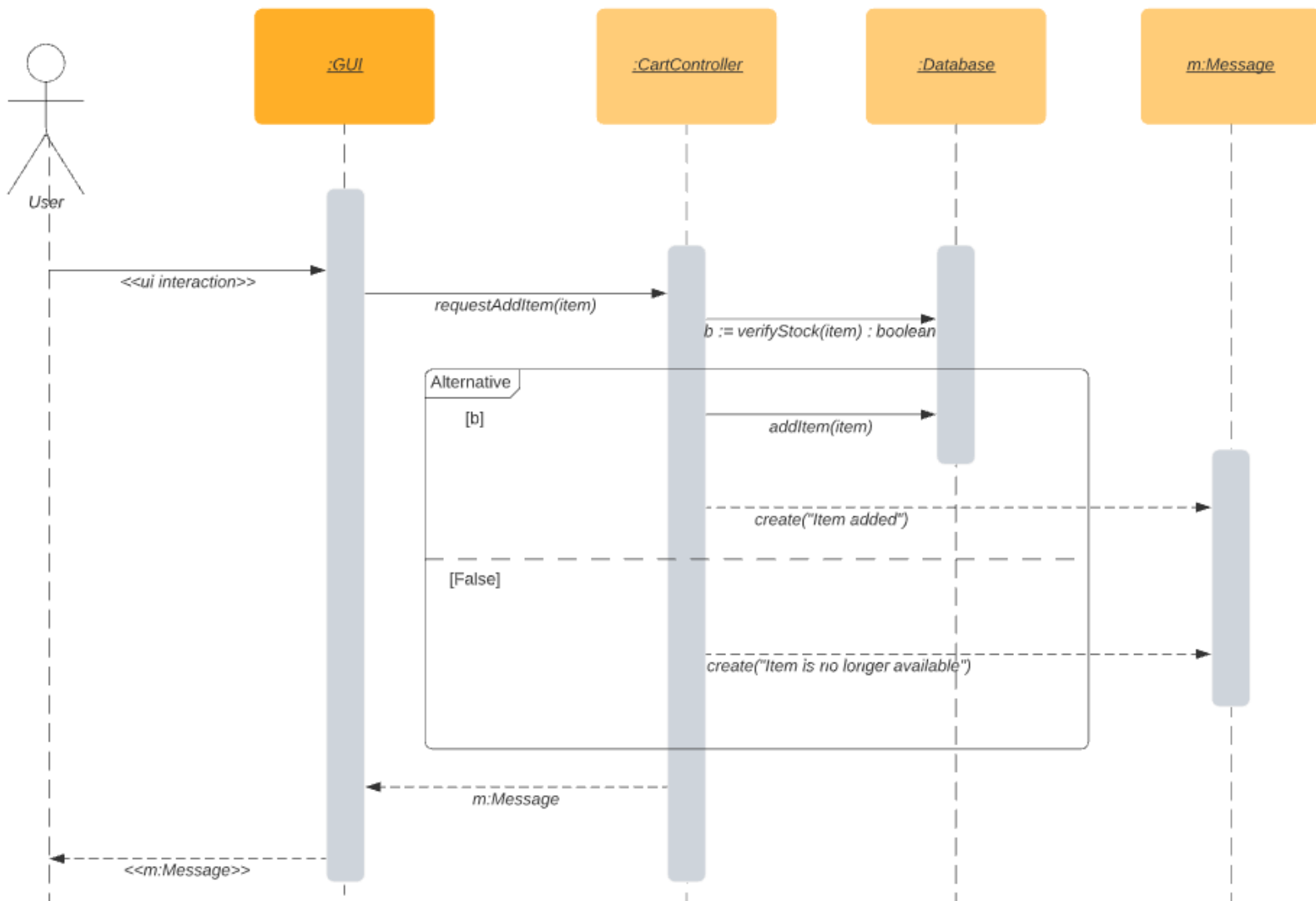


## 17. Add To Cart

- 17.1. The user clicks on a button to add an item to the cart.
- 17.2. The Cart controller receives a request to add an item to the cart.
- 17.3. The Cart controller returns true or false if the item is in stock in the database.
- 17.4. If true:
  - 17.4.1. The Cart controller adds the item to the cart.
  - 17.4.2. The Cart controller returns a message stating the item was successfully added to the cart.
- 17.5. Else:
  - 17.5.1. The Cart controller returns a message that the item is no longer available

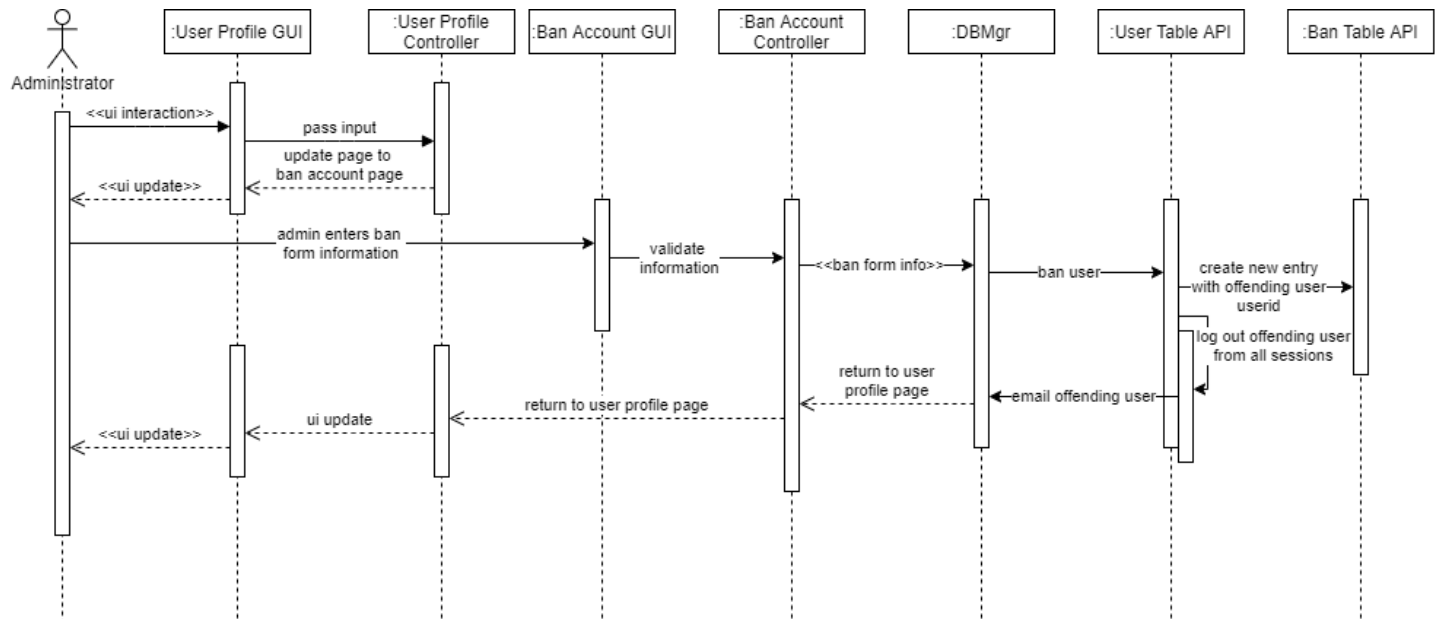


## Add to Cart Design Sequence Diagram



## SepTech Admin Ban Account

- 5.1 Administrator clicks on ban account button in user profile
- 5.2 System updates GUI to ban form GUI
- 5.3 Administrator enters information regarding the ban
- 5.4 System validates information
- 5.5 Controller contacts DBMgr and inserts a new ban entry for offending user
- 5.6 DBMgr sends an email to the offending user's email indicating the ban
- 5.7 DBMgr logs the user out of all current sessions
- 5.8 Ban Account Controller returns admin back to user profile page



## SepTech Admin Remove Items

5.1 Admin clicks button to remove products on business page

5.2 System updates page to display all seller products

5.3 Admin clicks all products to remove

5.4 Admin clicks on button to proceed with removal

5.6 If items clicked

5.6.1 Controller update UI to ban form GUI

5.6.2 Admin fills out form

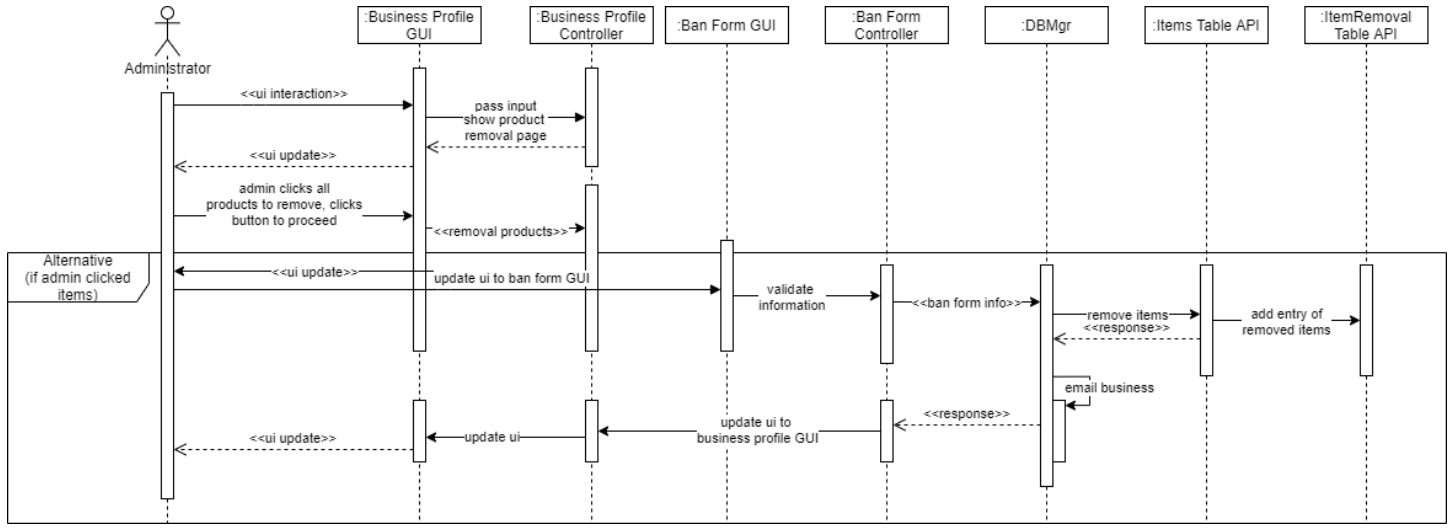
5.6.3 Controller validates form

5.6.4 Controller sends form input to DBMgr along with items to remove

5.6.5 DBMgr removes items from Items Table, adds removal form to Item Removals Table

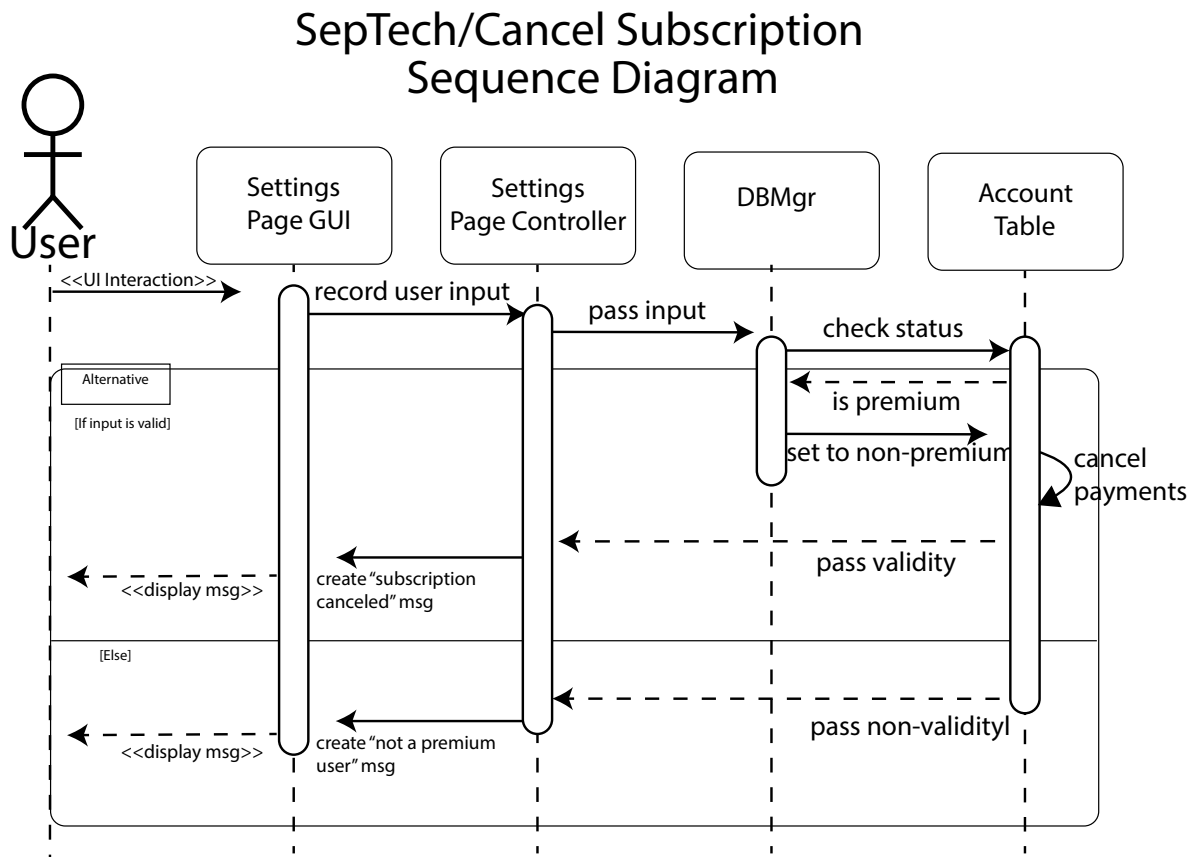
5.6.6 Controller updates GUI back to business profile with removed items no longer there



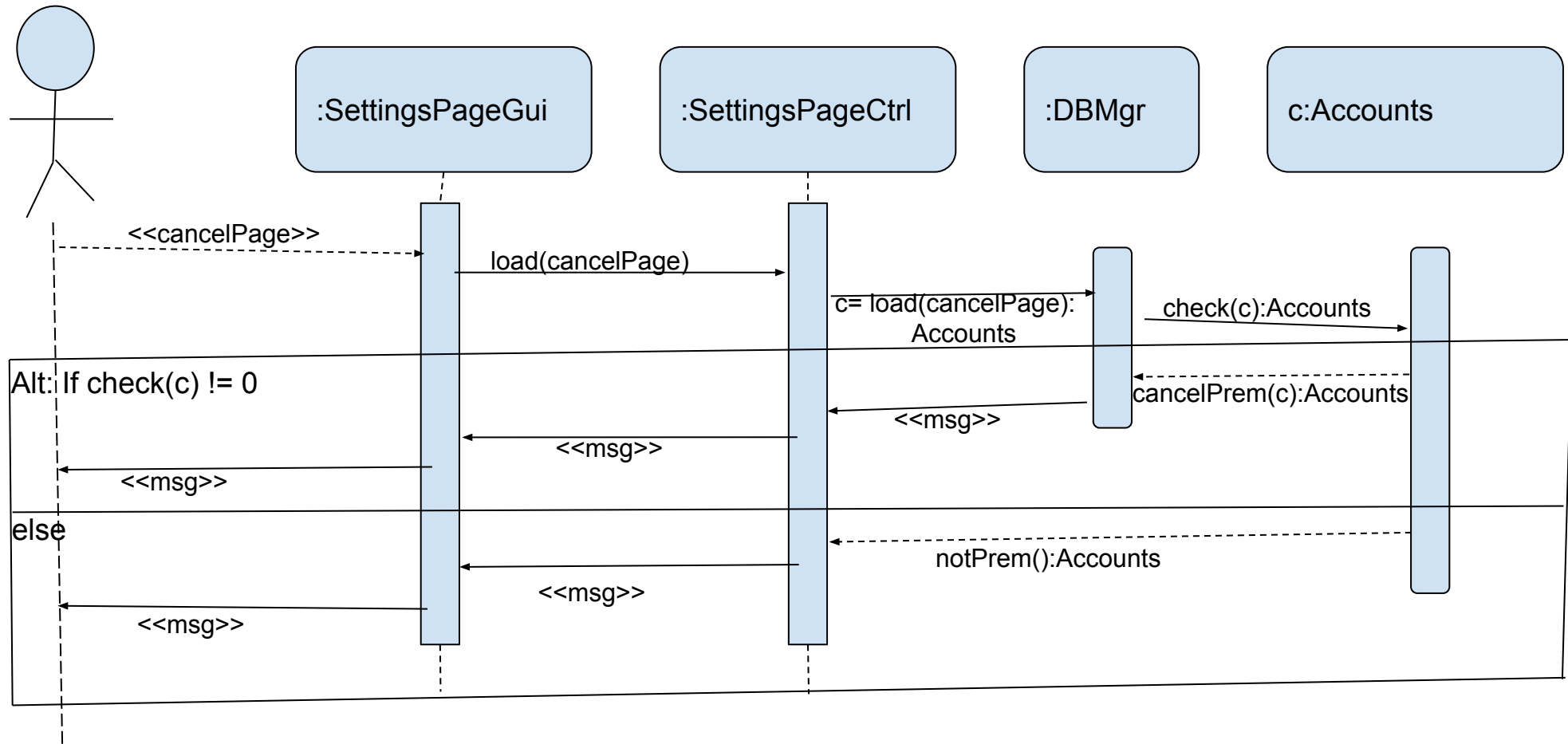


## SepTech Cancel Subscription

- 35.1 User clicks a UI element to cancel premium subscription.
- 35.2 Settings page GUI passes user input to settings page controller.
- 35.3 Settings page controller sends request to DBMgr for reference to user's account status (already premium or not).
- 35.4 DBMgr searches the account table to verify if the user account is premium.
- 35.5 Account table returns true or false depending on the user's account status.
- 35.5 If true is returned, then
  - 35.5.1 Account table sets user to non-premium.
  - 35.5.2 Account table cancels monthly billing statements.
  - 35.5.3 Settings page controller creates a "membership canceled" msg.
  - 35.5.4 Settings page GUI displays msg to user.
- 35.6 Else
  - 35.6.1 Settings page controller creates a "user is not premium" msg.
  - 35.6.2 Settings page GUI displays msg to user.



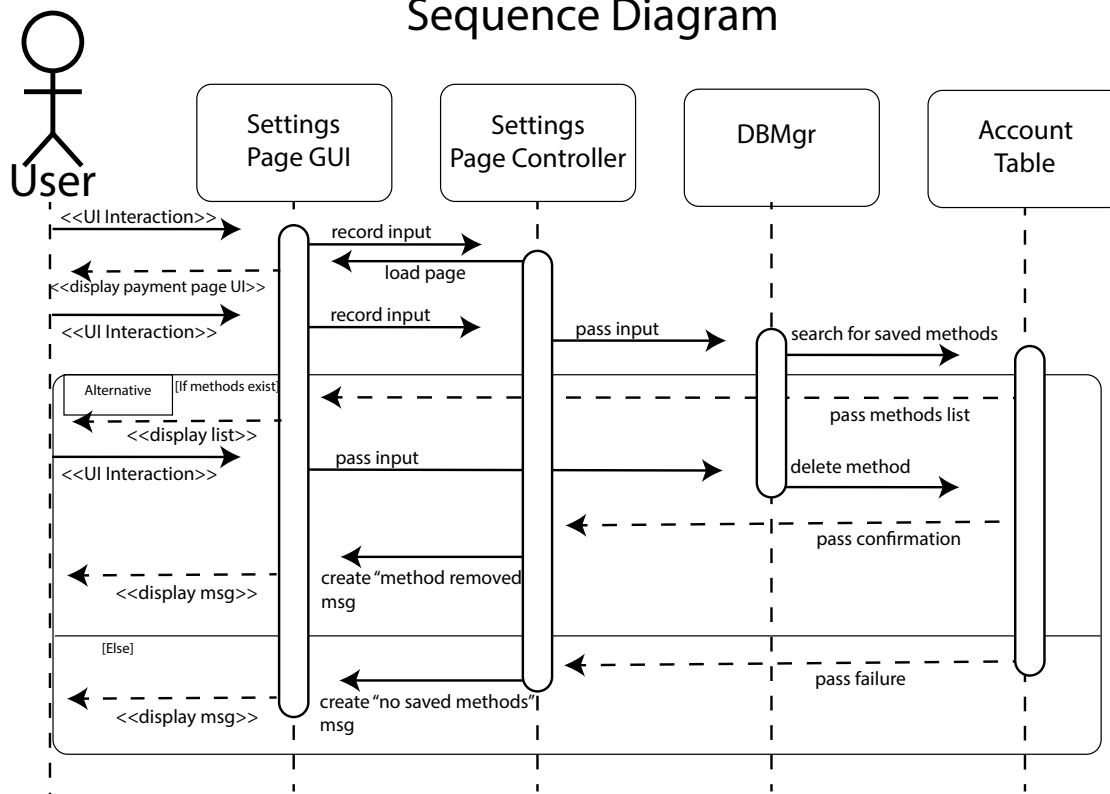
# SepTech/Cancel Subscription Design Diagram



## SepTech Delete Payment Method

- 12.1 User clicks UI element for “manage payment methods”.
- 12.2 Settings page GUI records user input.
- 12.3 Settings page controller loads manage payment methods page.
- 12.4 Settings page GUI displays payment method page UI.
- 12.5 User clicks UI element for “delete payment method”.
- 12.6 Settings page GUI records user input.
- 12.7 Settings page controller passes input.
- 12.8 DBMgr searches account table for payment methods associated with user account.
- 12.9 If the account table has methods saved, then
  - 12.9.1 DBMgr passes list of currently saved payment methods
  - 12.9.2 Settings page GUI displays list of currently saved payment methods.
  - 12.9.3 User selects method to delete.
  - 12.9.4 Account table removes payment method from table.
  - 12.9.5 Settings page controller creates “payment deleted” msg.
  - 12.9.6 Settings page GUI displays msg.
- 12.10 Else
  - 12.10.1 Settings page controller creates “no saved payment methods” msg.
  - 12.11.1 Settings page GUI displays msg.

## SepTech/Delete Payment Method Sequence Diagram



## **SepTech Forgot Password**

7.1 User selects “Forgot your password/account details” button

7.2 Login controller loads forgot password page

7.3 User enters email into forgot password GUI

7.4 User clicks “Submit” button

7.5 Forgot password controller sends information to DBMgr

7.6 If email exists in Users table

7.6.1 Return user to Forgot Password Controller

7.6.2 Update password\_reset\_code and password\_reset\_timeout in Users table for User

7.6.3 Email to user’s email their password reset code

7.7 System updates to enter confirmation code page

7.8 User enters code

7.9 If code matches user’s password\_reset\_code

7.9.1 Forgot Password Controller updates to password update page

7.9.2 User enters new password and confirmation password

7.9.3 If password matches old password

7.9.3.1 Display password matches old password

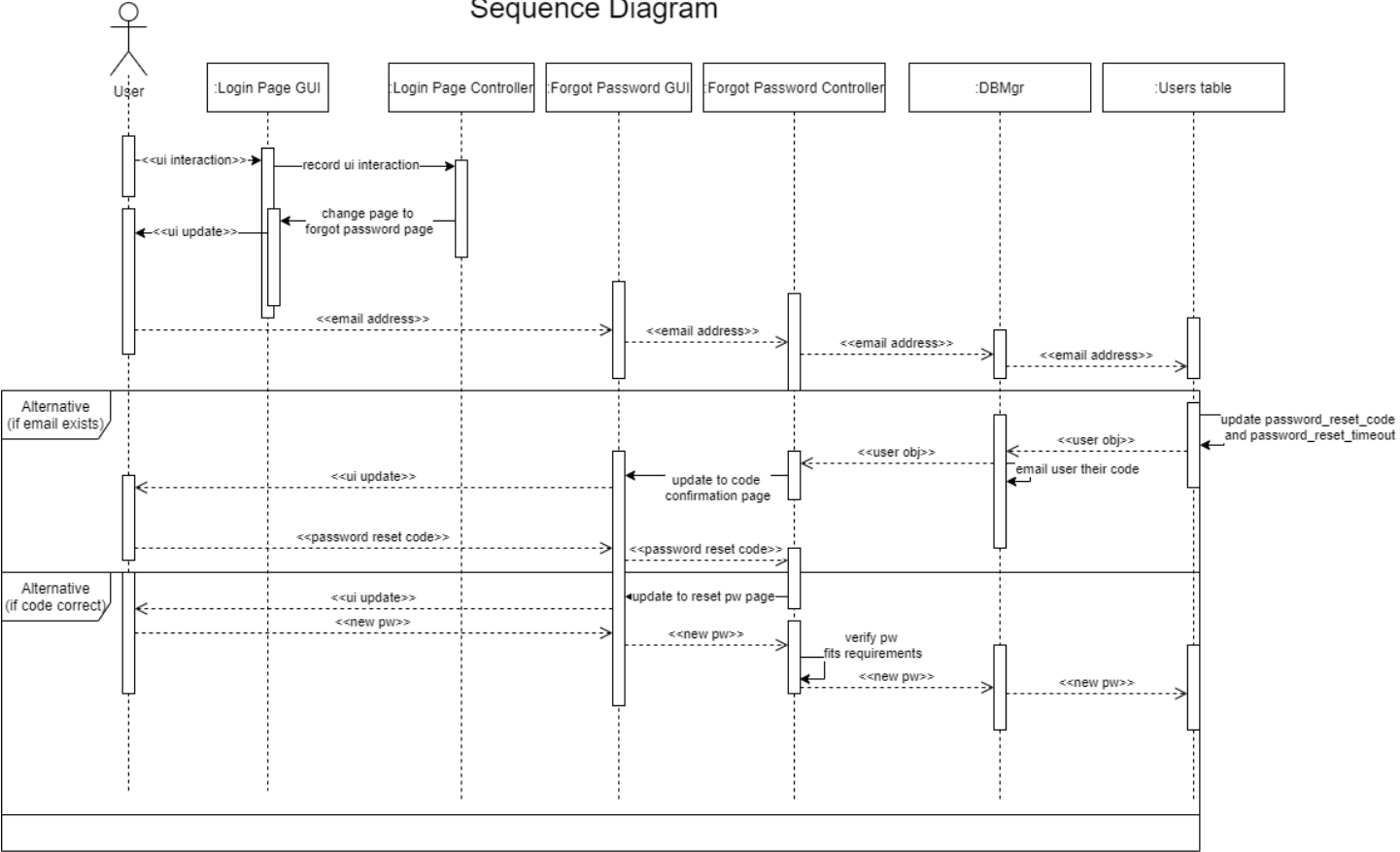
7.9.4 System passes information to DBMgr to update User password

7.9.5 If successful

7.9.4.1 Display password was updated successfully

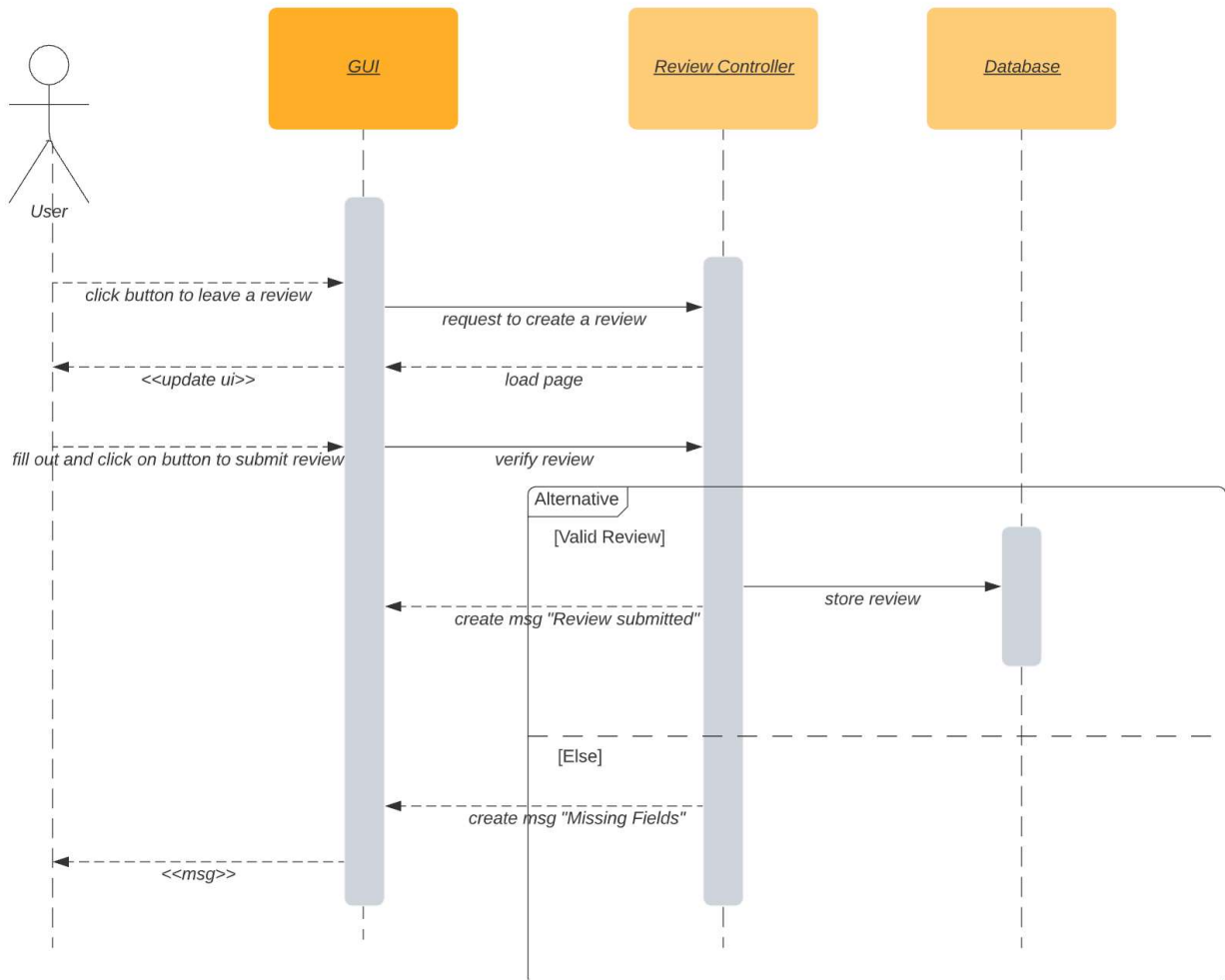
7.10 Else display error message

Forgot Password  
Sequence Diagram



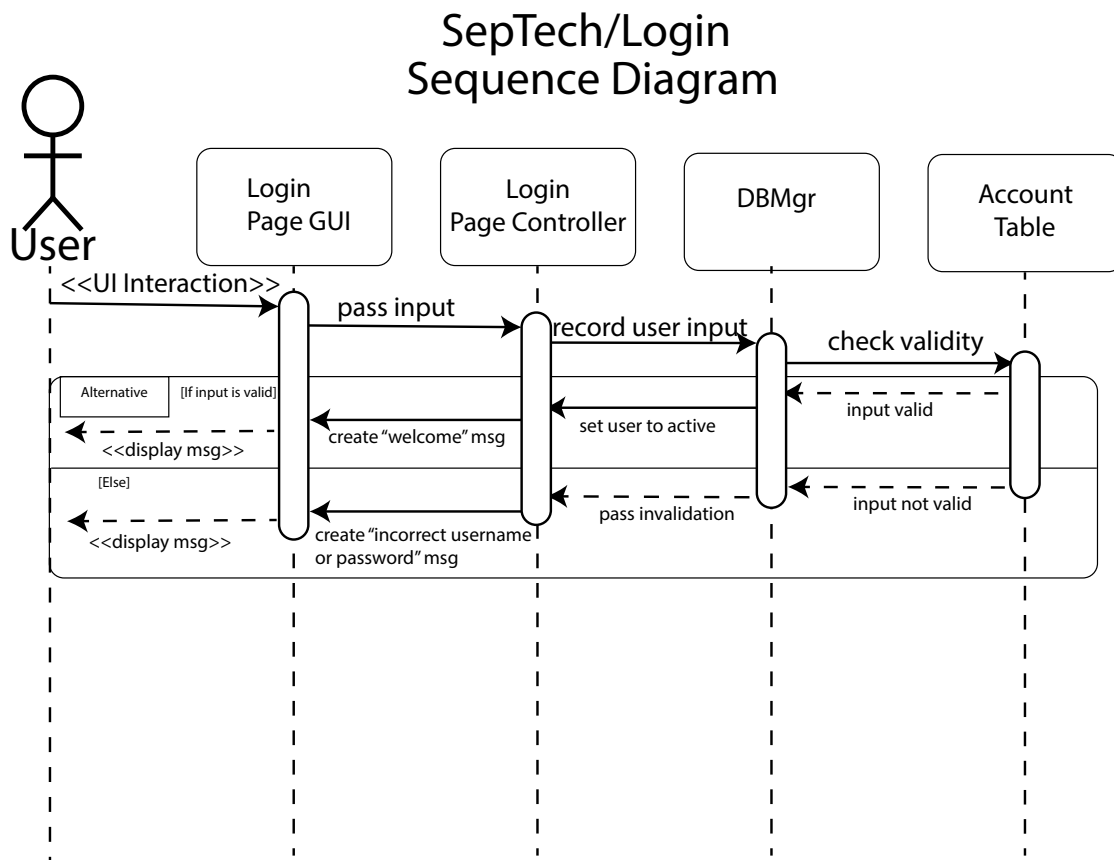
### 37. Leave Review

- 37.1. The user clicks on a button to leave a review on an item.
- 37.2. The Review controller receives a request to create a review.
- 37.3. The Review controller loads the page for the user to write their review.
- 37.4. The GUI displays UI elements for the user to leave a rating and review.
- 37.5. The user fills out the UI elements.
- 37.6. The user clicks on a button to submit the review.
- 37.7. The Review controller returns true or false if the review is valid.
- 37.8. If true:
  - 37.8.1. The Review controller stores the review into the database.
  - 37.8.2. The Review controller returns a message stating that the review was successfully submitted.
- 37.9. Else:
  - 37.9.1. The Review controller returns a message stating that there are missing fields.



## SepTech Login

- 2.1 User fills out UI elements to login.
- 2.2 Login page GUI passes user input to login page controller.
- 2.3 Login page controller records user input.
- 2.4 DBMgr checks account table for input validation.
- 2.5 Account table returns true or false depending on if the user input is valid.
- 2.6 If true is returned, then
  - 2.6.1 DBMgr sets user to active.
  - 2.6.2 Login page controller creates a “welcome” msg.
  - 2.6.3 Login page GUI displays msg.
- 2.7 Else
  - 2.7.1 Login page controller creates msg stating “incorrect username or password.”
  - 2.7.2 Login page GUI displays msg.





## **SepTech Logout**

3.1 User clicks logout button

3.2 System prompts user to log out of current device or all devices

3.3 If user clicks “all connected devices”

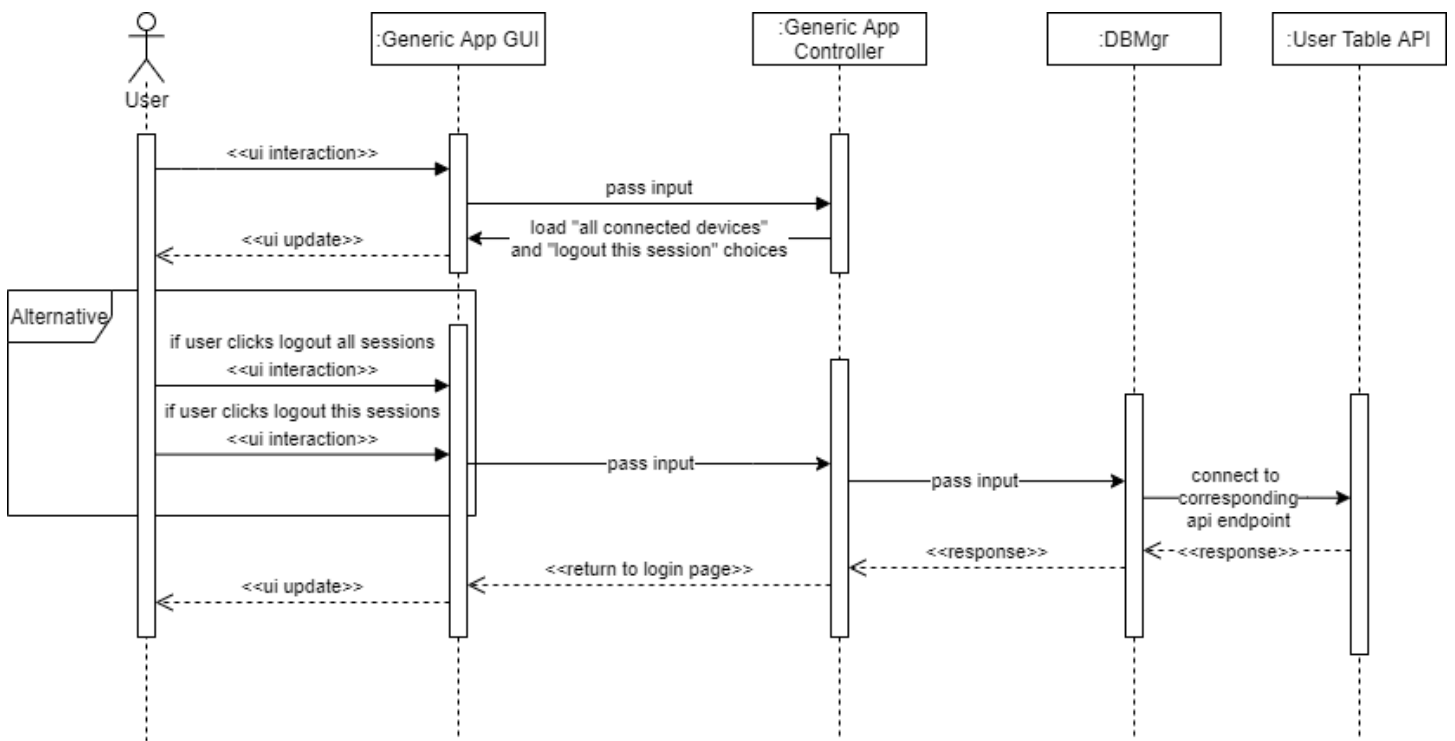
3.3.1 Connect to “logout all sessions” API endpoint for user

3.4 If user clicks “this device”

3.4.1. Connects to “logout this session” API endpoint for user

3.5 System logs user out of their current session

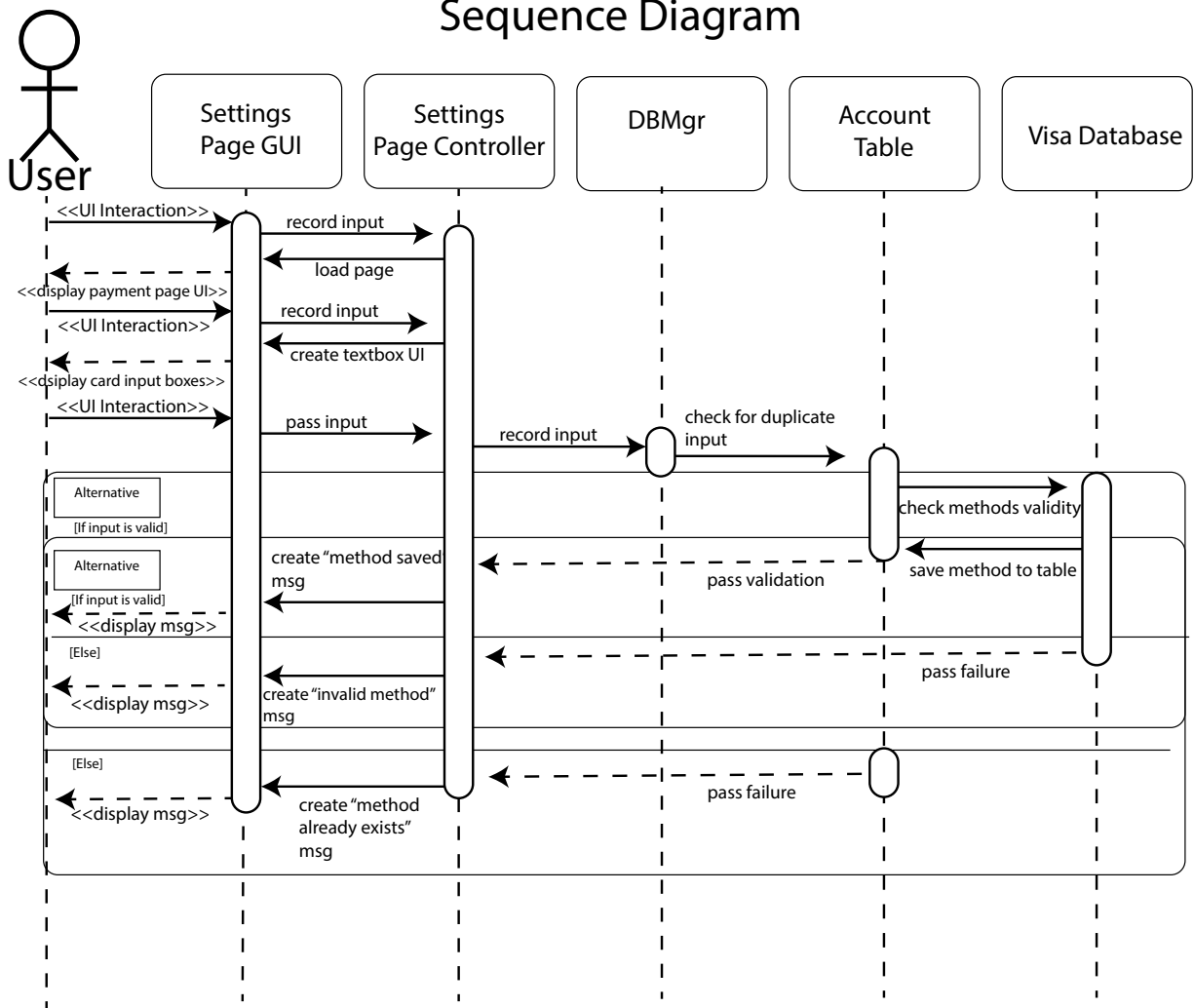
3.6 System updates user back to login page.



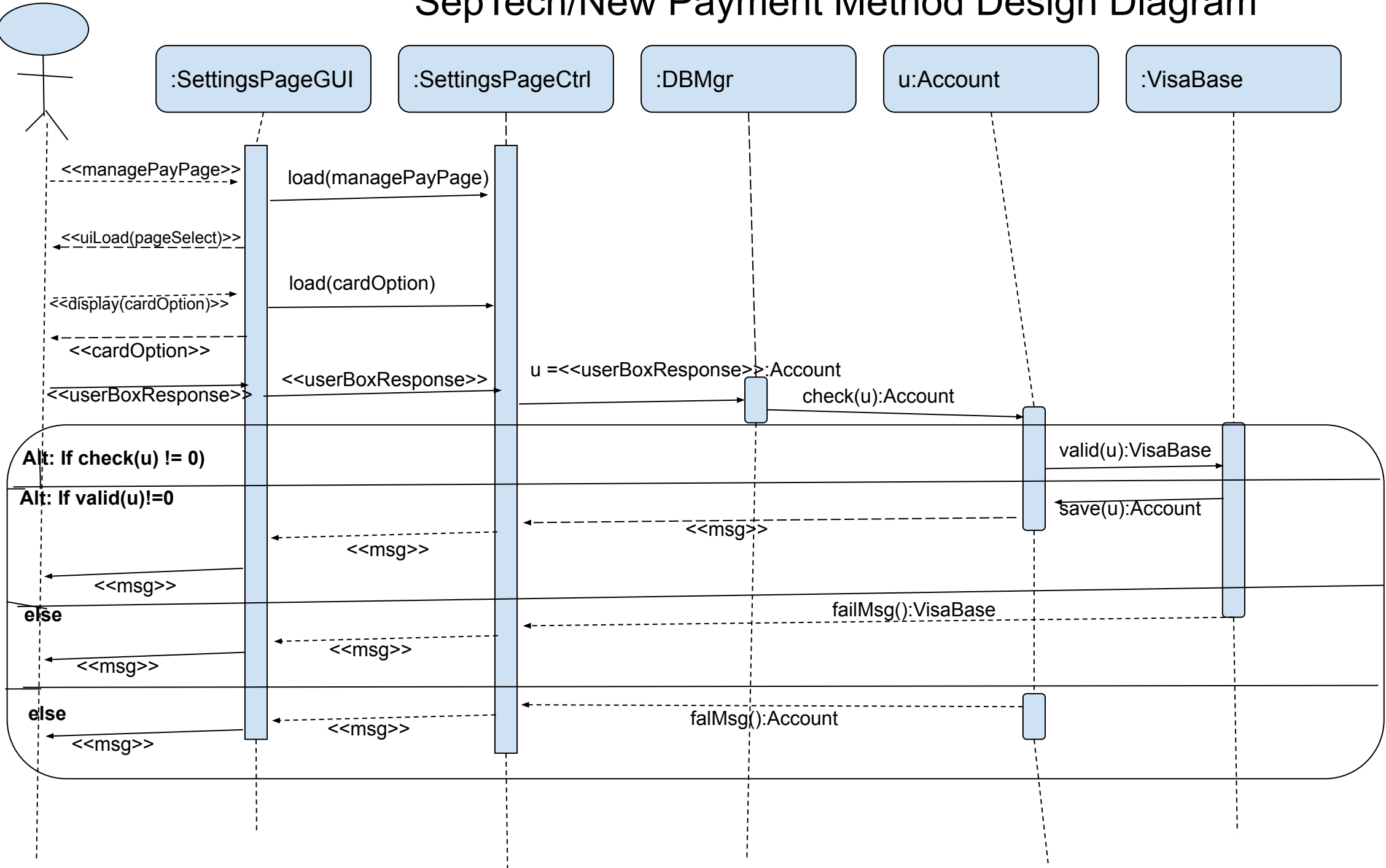
## **SepTech New Payment Method**

- 20.1 User clicks UI element for “manage payment methods”.
- 20.2 Settings page GUI records user input.
- 20.3 Settings page controller loads manage payment methods page.
- 20.4 Settings page GUI displays payment method page UI.
- 20.5 User clicks UI element for “new payment method”.
- 20.6 Settings page GUI records user input.
- 20.7 Settings page controller creates text-boxes for payment information.
- 20.8 Settings page GUI displays payment info text-boxes.
- 20.9 User fills out UI elements.
- 20.10 Settings page GUI passes input.
- 20.11 Settings page controller records input.
- 20.12 DBMgr checks if payment method is already in the system.
- 20.13 Account table returns true or false depending on if the payment method is valid.
- 20.14 If true is returned, then
  - 20.14.1 DBMgr checks if payment method is credible.
  - 20.14.2 Visa database returns true or false depending on if the payment method is valid.
  - 20.14.3 If true is returned, then
    - 20.14.3.1 Account table saves payment method.
    - 20.14.3.2 Settings page controller creates a “successfully saved” msg.
    - 20.14.3.3 Settings page GUI displays msg.
  - 20.14.4 Else
    - 20.14.4.1 Account table passes method save failure.
    - 20.14.4.2 Settings page controller creates a “invalid payment method” msg.
    - 2.14.4.3 Settings page GUI displays msg.
- 20.15 Else
  - 20.15.1 Account table passes method save failure.
  - 20.15.2 Settings page controller creates a “invalid payment method” msg.
  - 20.15.3 Settings page GUI displays msg.

# SepTech/New Payment Method Sequence Diagram



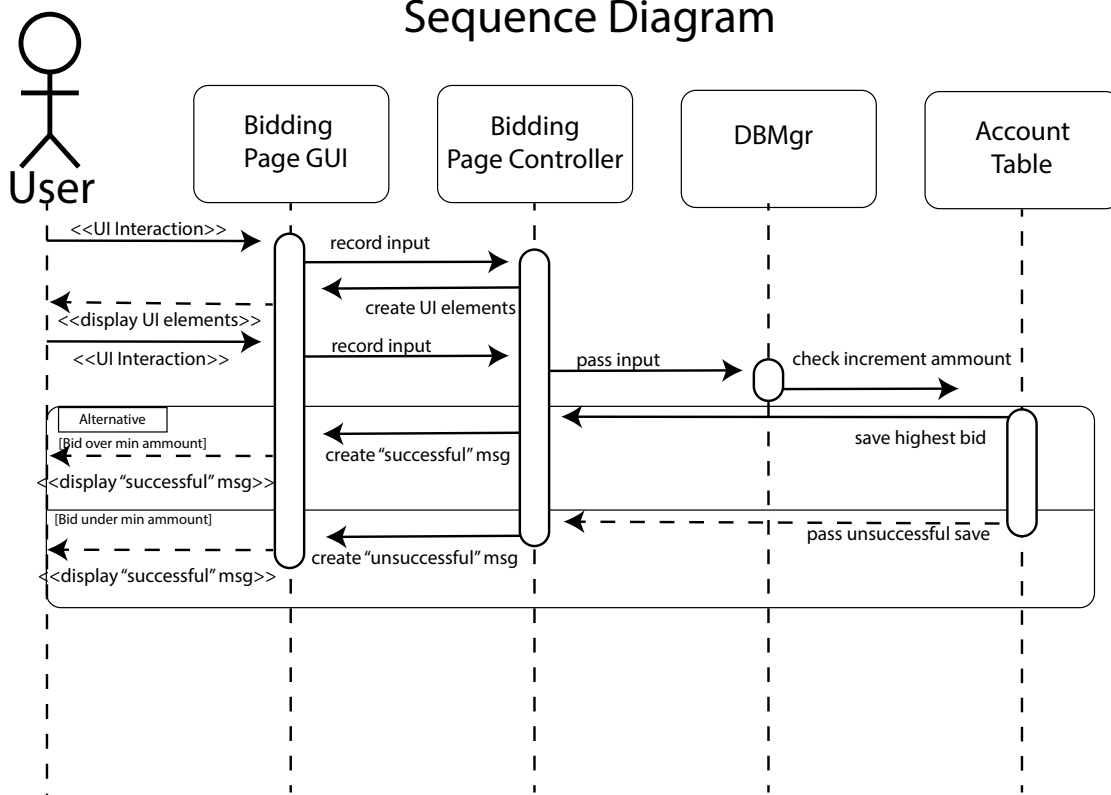
# SepTech/New Payment Method Design Diagram



## SepTech Place Bid

- 56.1 User selects UI element to place bid.
- 56.2 Bidding page GUI records user input.
- 56.3 Bidding page controller Creates UI elements for how much to bid.
- 56.4 Bidding page GUI displays UI elements.
- 56.5 User selects bid amount.
- 56.6 Bidding page GUI records input.
- 56.7 Bidding page controller passes input.
- 56.8 DBMgr checks item table for minimum bid increment.
- 56.9 Item table returns true or false depending on if the bid was over the minimum amount.
- 56.10 If bid is over minimum
  - 56.10.1 Item table saves user bid as highest bid.
  - 56.10.2 Bidding page controller creates “successful bid” msg.
  - 56.10.3 Bidding page GUI displays message.
- 56.11 If bid is under
  - 56.11.1 Bidding page controller creates “unsuccessful bid” msg.
  - 56.11.2 Bidding page GUI displays msg.

## SepTech/Place Bid Sequence Diagram



## **SepTech Remove from Cart**

18.1 User clicks on cart button

18.2 System displays user's cart

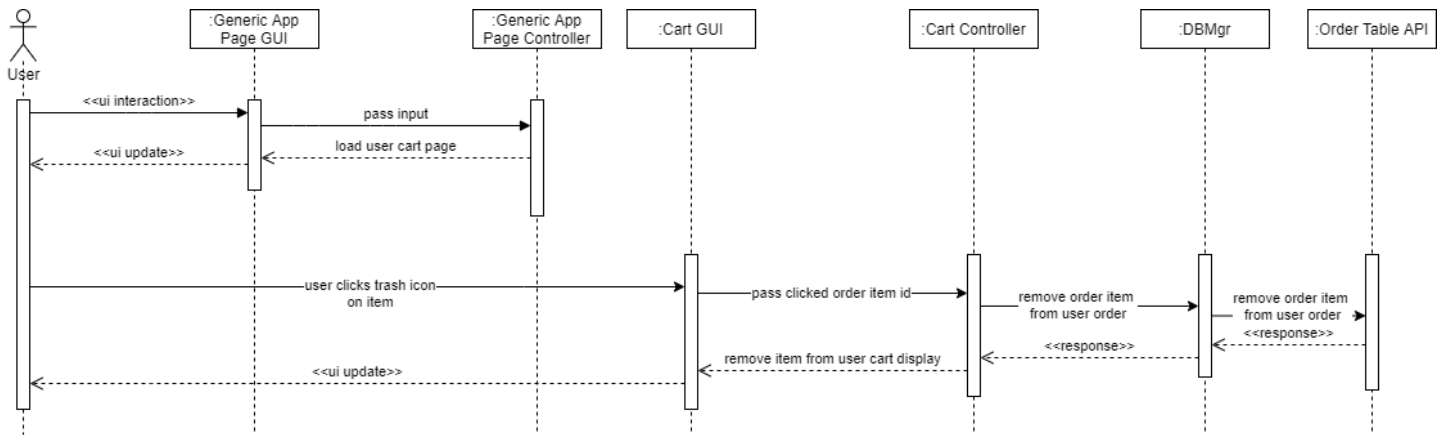
18.3 User clicks on trash icon within the item's UI box in the cart

18.4 System removes item from user's cart

18.4.1 DBMgr removes item from user's cart in DB

18.5 DBMgr sends response to generic app page controller

18.6 Controller updates the cart's UI to remove the item

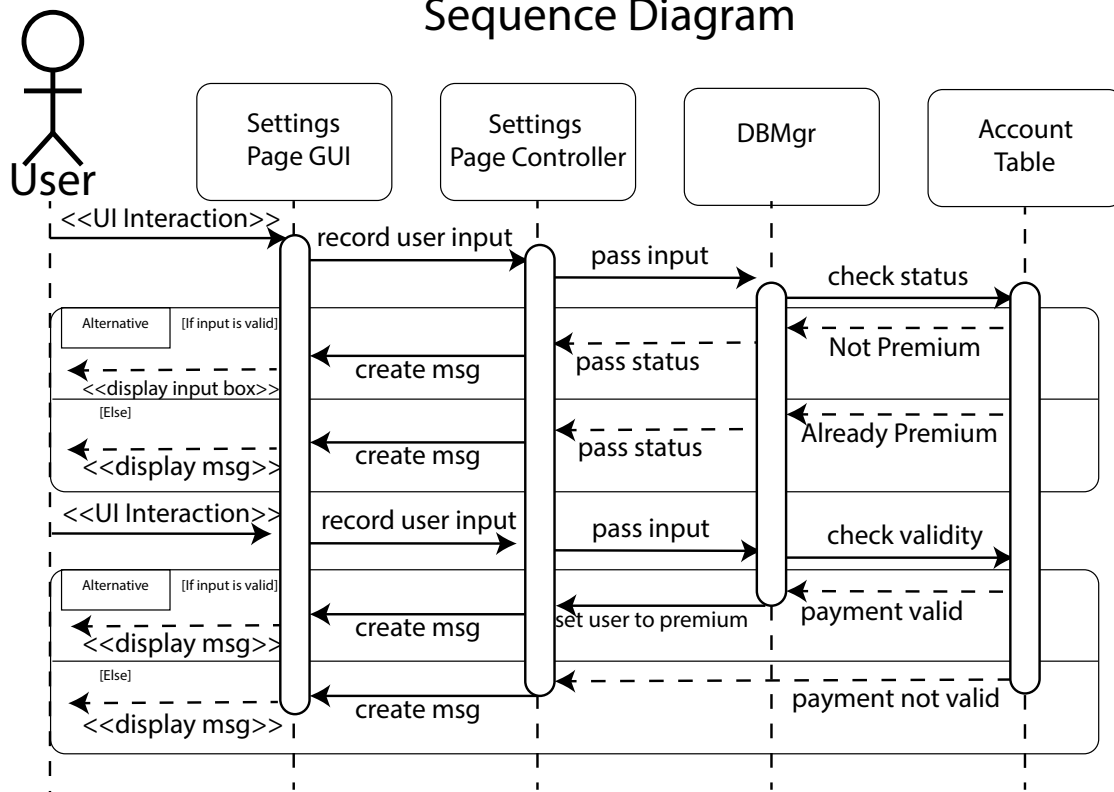




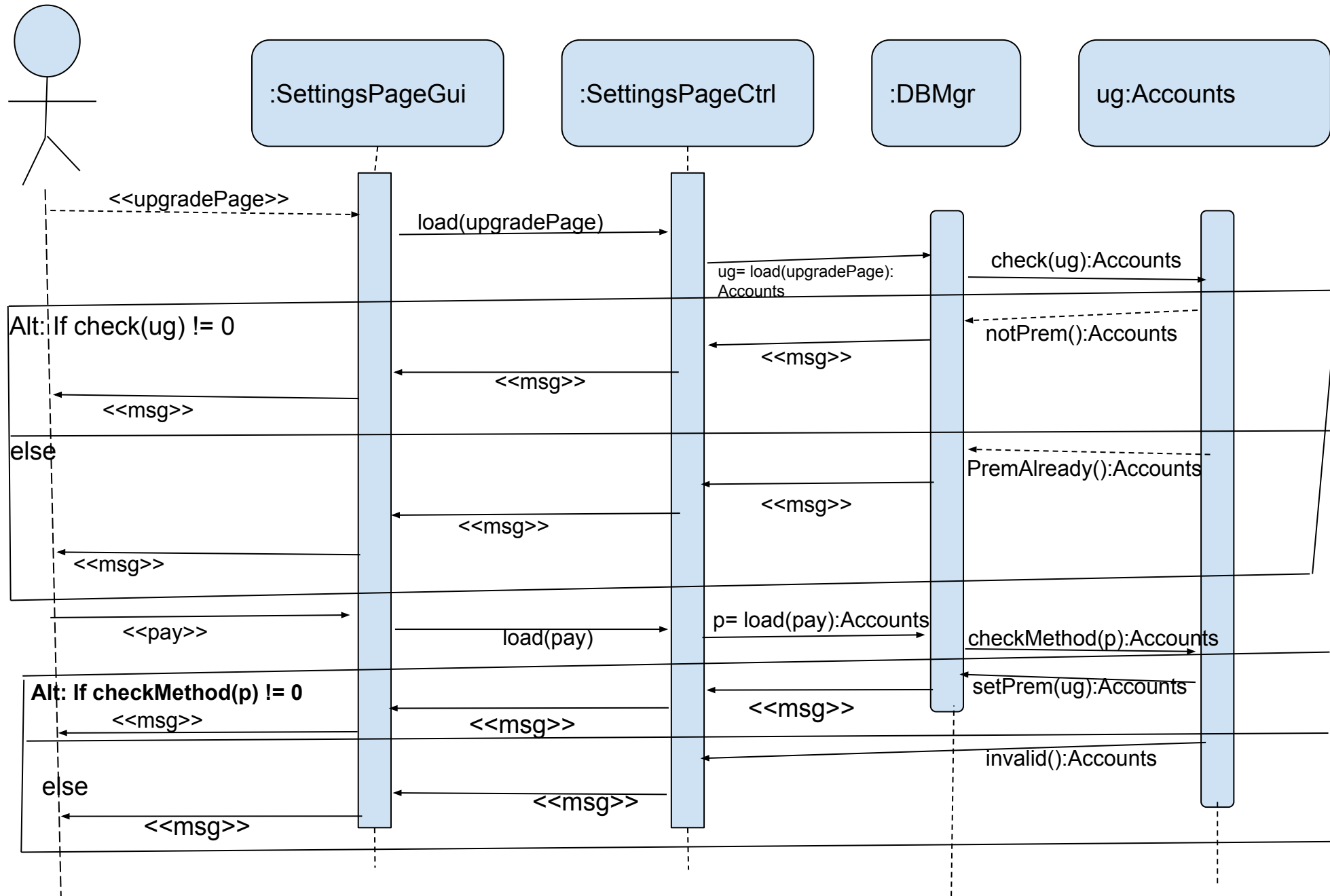
## SepTech Upgrade Account

- 35.1 User clicks a UI element to upgrade account to Premium.
- 35.2 Settings page GUI passes user input to settings page controller.
- 35.3 Upgrade page controller sends request to DBMgr for reference to user's account status (already premium or not).
- 35.4 DBMgr returns true or false depending on the user's account status.
- 35.5 If true is returned, then
  - 35.5.1 Settings page controller creates msg stating "account is already premium."
  - 35.5.2 Settings page GUI Displays msg.
- 35.6 Else
  - 35.6.1 Upgrade page GUI generates an input box for payment method.
  - 35.6.2 Settings page GUI Displays msg.
- 35.7 User inputs payment method in the provided Settings page GUI textbox.
- 35.8 Settings page controller sends request to DBMgr for reference to inputed payment method.
- 35.9 DBMgr returns true or false depending on if the DBMgr finds a match in the account table.
- 35.10 If true is returned, then
  - 35.10.1 Account table sets user to premium.
  - 35.10.2 Settings page controller creates a "welcome to premium" msg.
  - 35.10.3 Settings page GUI displays msg to user.
- 35.11 Else
  - 35.11.1 Settings page controller creates msg stating "invalid payment method."
  - 35.11.2 Settings page GUI displays msg.

## SepTech/Upgrade Account Sequence Diagram



# SepTech/Upgrade Account Design Diagram



## 26. View History

- 26.1. The user clicks on a button to look at a list of previously viewed items.
- 26.2. The View History controller receives a request to check for items that have been previously viewed.
- 26.3. The View History controller looks for previously viewed items recorded in the database.
- 26.4. If viewings exist:
  - 26.4.1. The View History controller returns a stack of items that the user has viewed.
  - 26.4.2. The View History controller loads the view history page.
  - 26.4.3. The View History page displays the view history UI.
- 26.5. Else:
  - 26.5.1. The View History controller returns a message stating no items have been viewed.

