Team Big Data

U-tification

Low Level Design

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Team Leader: Joseph Armas

Team Members: Joshua Gherman

Rhoy Oviedo

Frank Curry

Ghabrille Ampo

David DeGirolamo

Git Repository: https://github.com/JosephArmas/cecs-491A-Team-Big-Data

Version History

Current Version: V1

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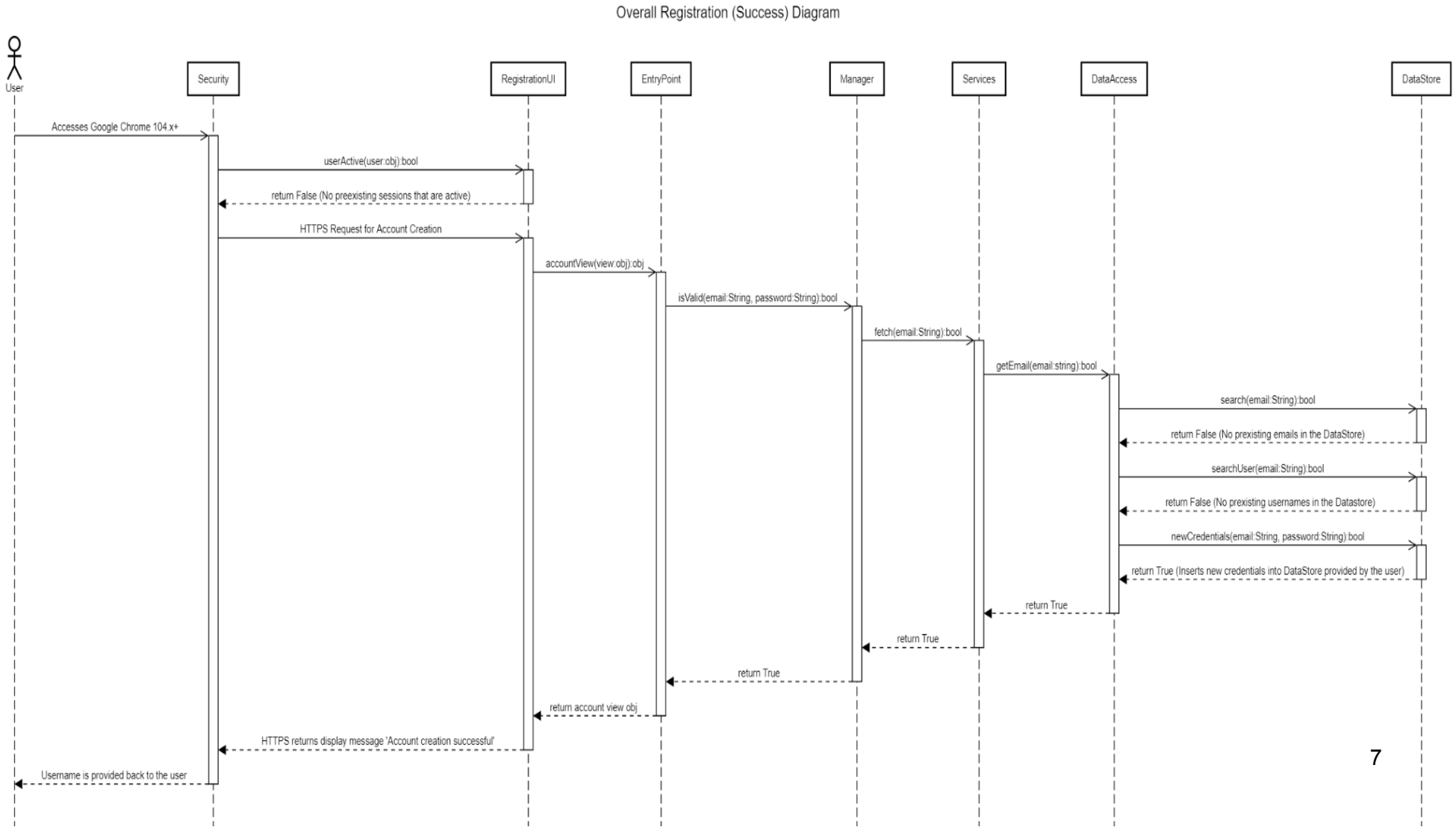
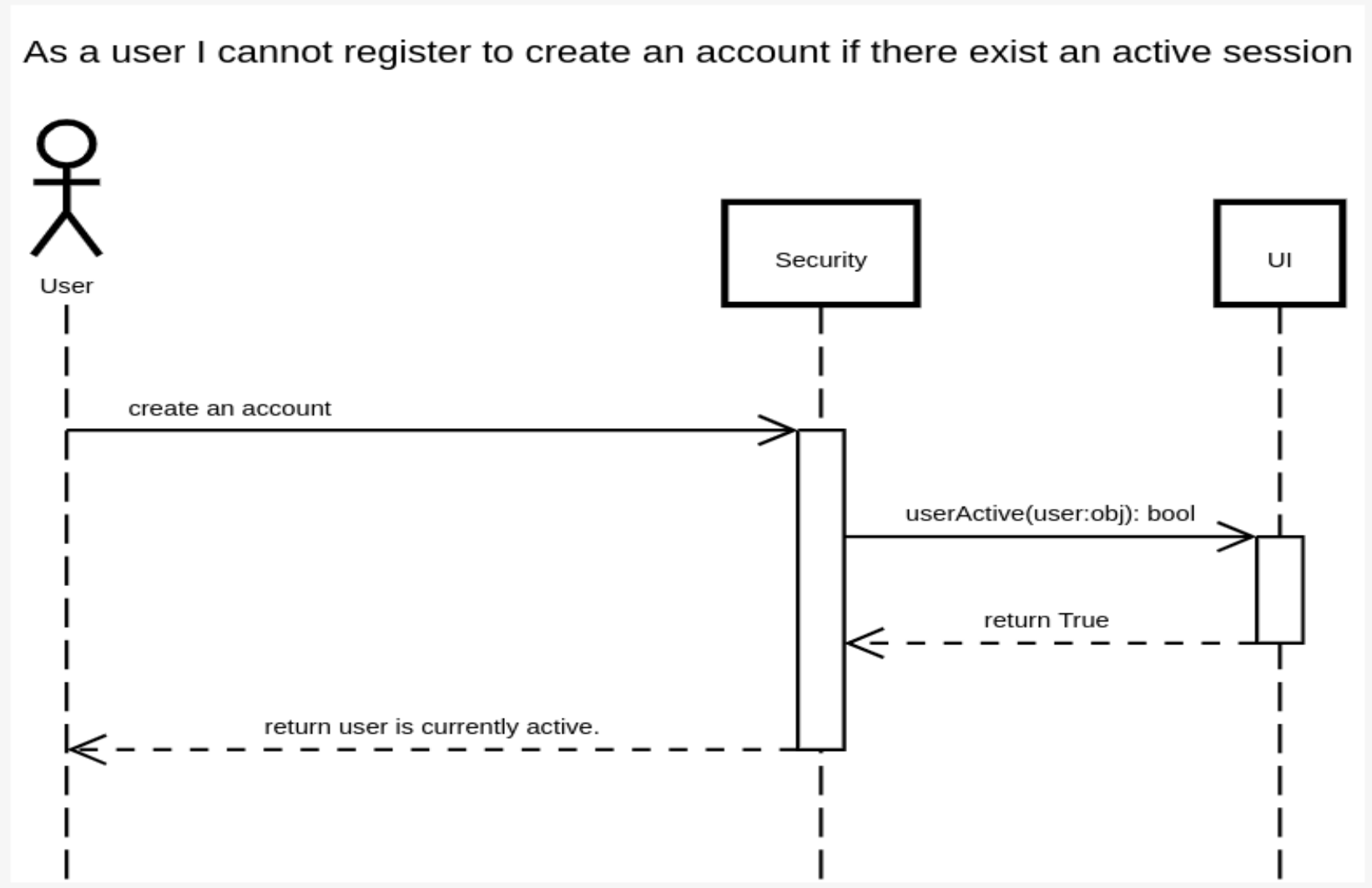
Registration Success Sequence Diagram

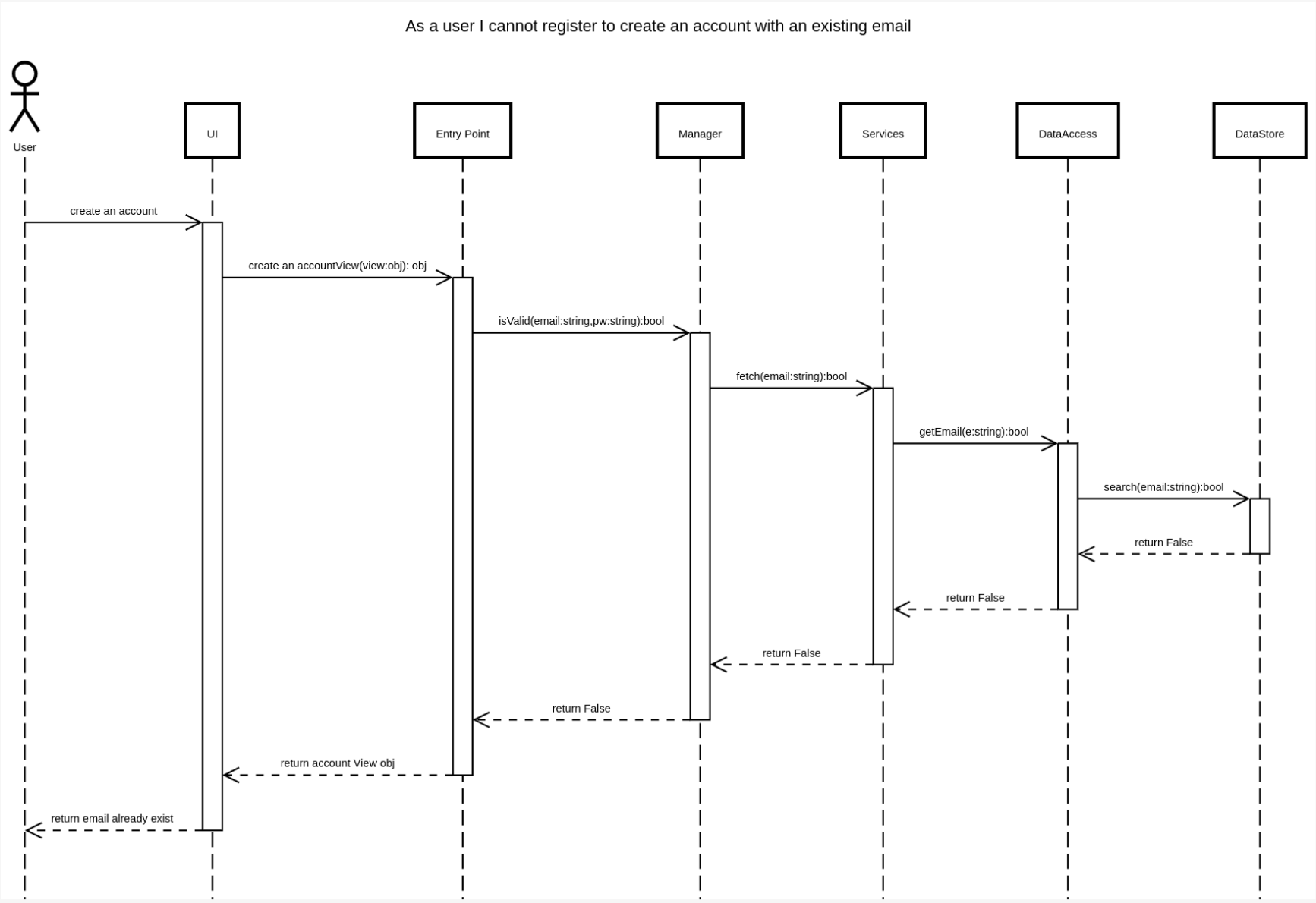
An overall successful use case diagram that outlines each condition that the system will check in order to the end goal of creatinine a new user account

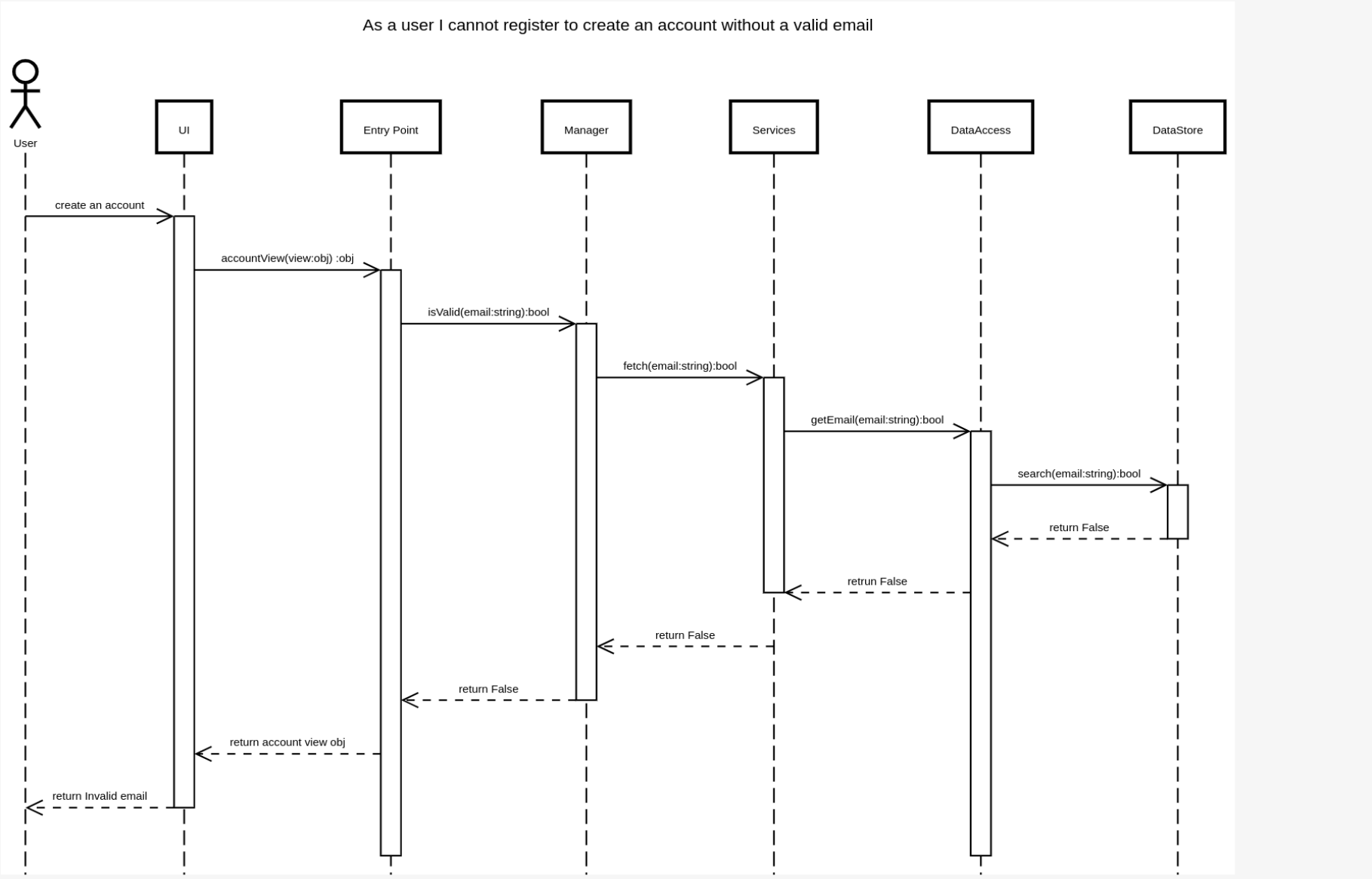


Registration Failure Sequence Diagrams

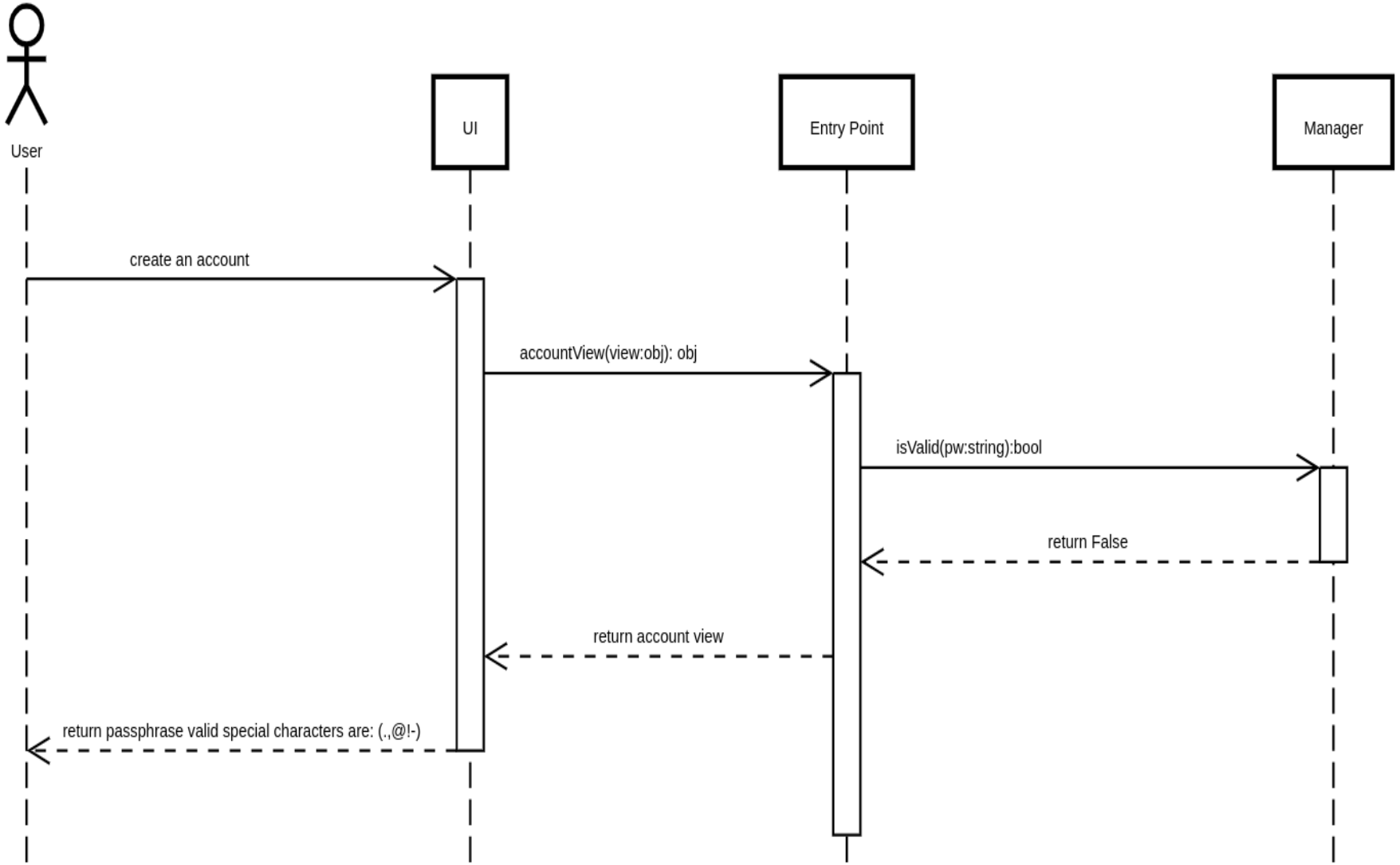
Series of user use cases in a form of a sequence diagram to display possible errors in the process of creating an account



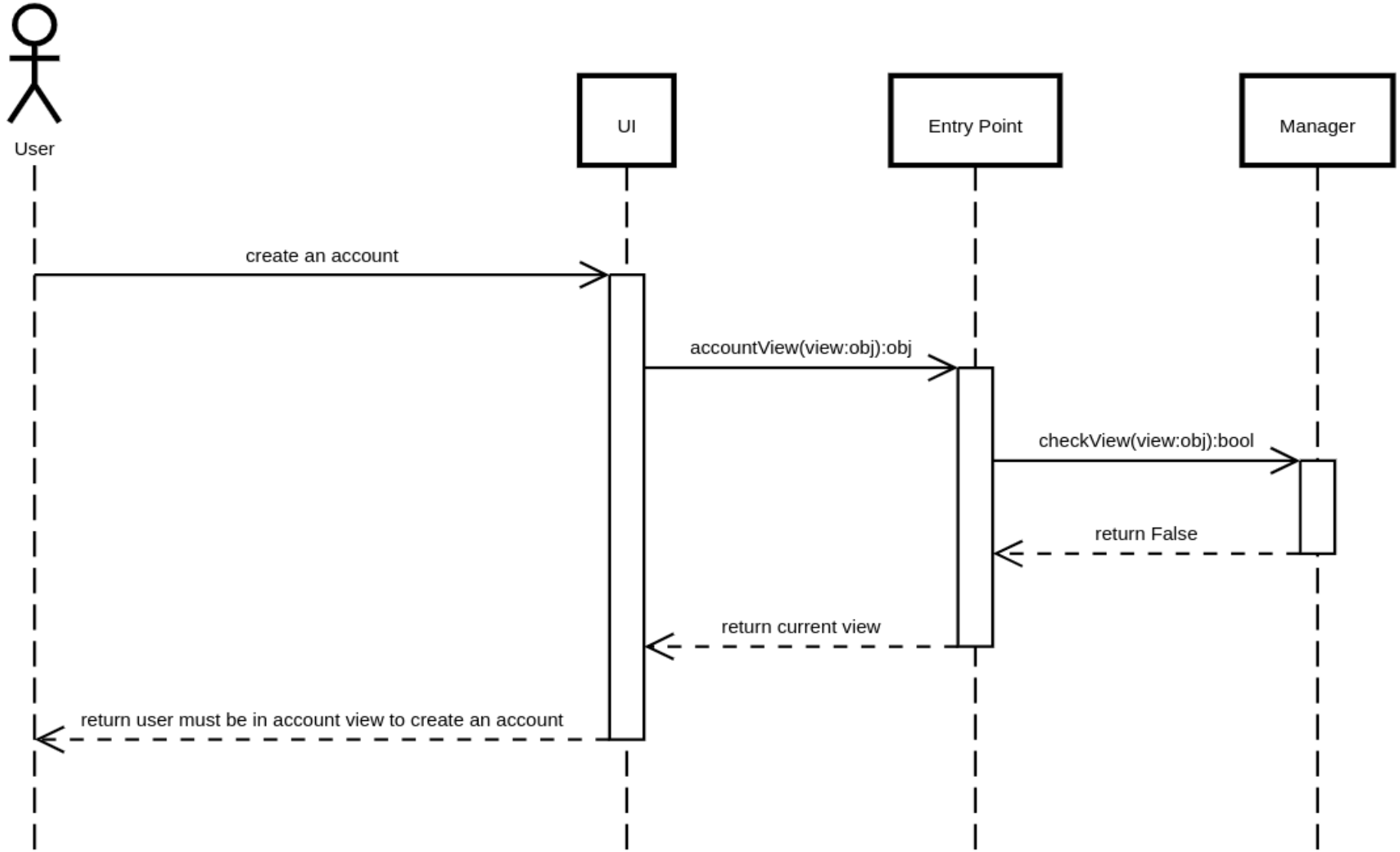

As a user I cannot register to create an account with an existing email
User
UI
Entry Point
Manager
Services
DataAccess
DataStore
create an account
create an accountView(view:obj): obj
isValid(email:string,pw:string):bool
fetch(email:string):bool
getEmail(e:string):bool
search(email:string):bool
return False
return False
return False
return False
return account View obj
return email already exist

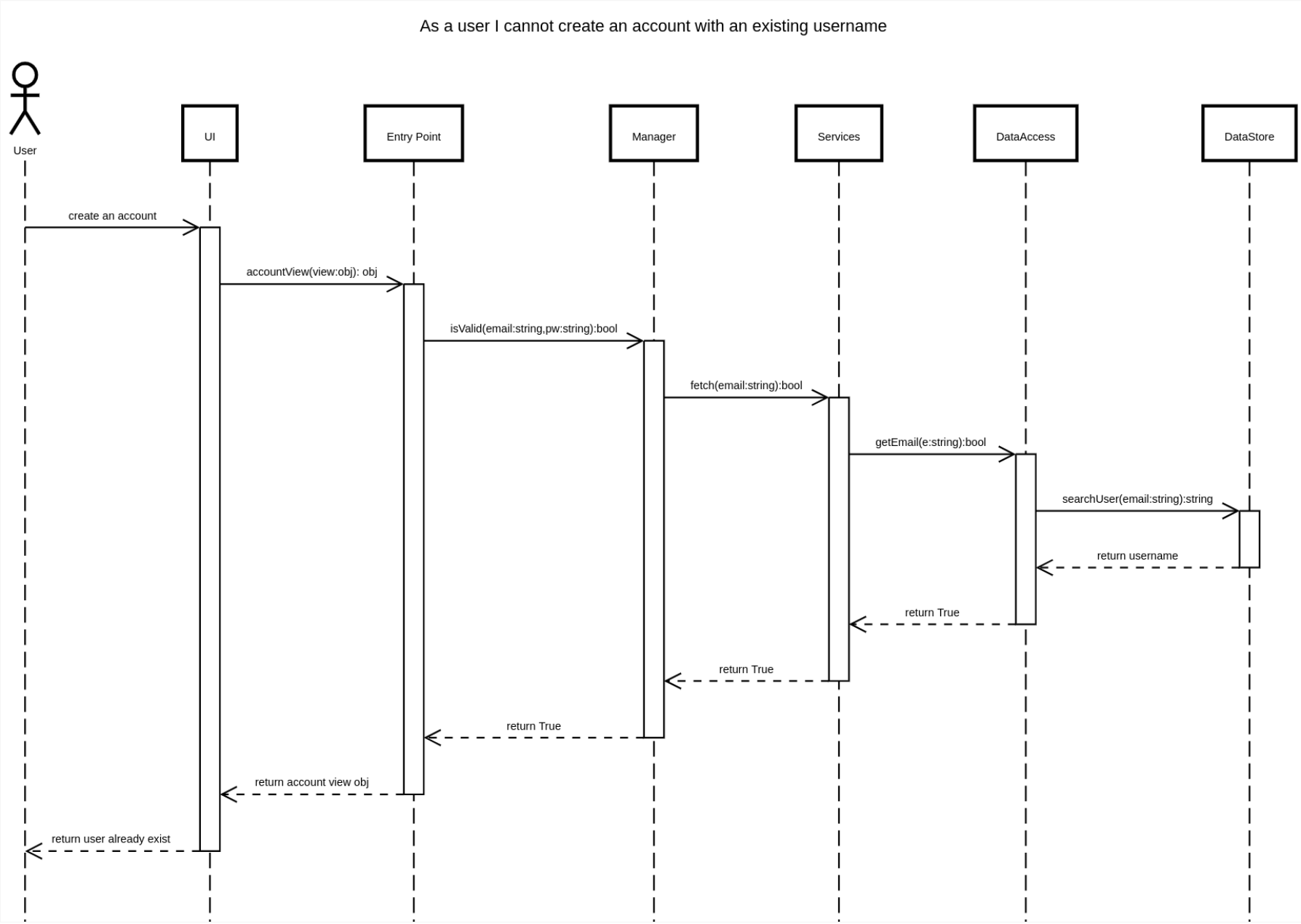

As a user I cannot register to create an account without a valid email
User
UI
Entry Point
Manager
Services
DataAccess
DataStore
create an account
accountView(view:obj) :obj
isValid(email:string):bool
fetch(email:string):bool
getEmail(email:string):bool
search(email:string):bool
return False
retrun False
return False
return False
return account view obj
return Invalid email

As a user I cannot register to create an account with a pass phrase that consist with special characters out of the scope requirements

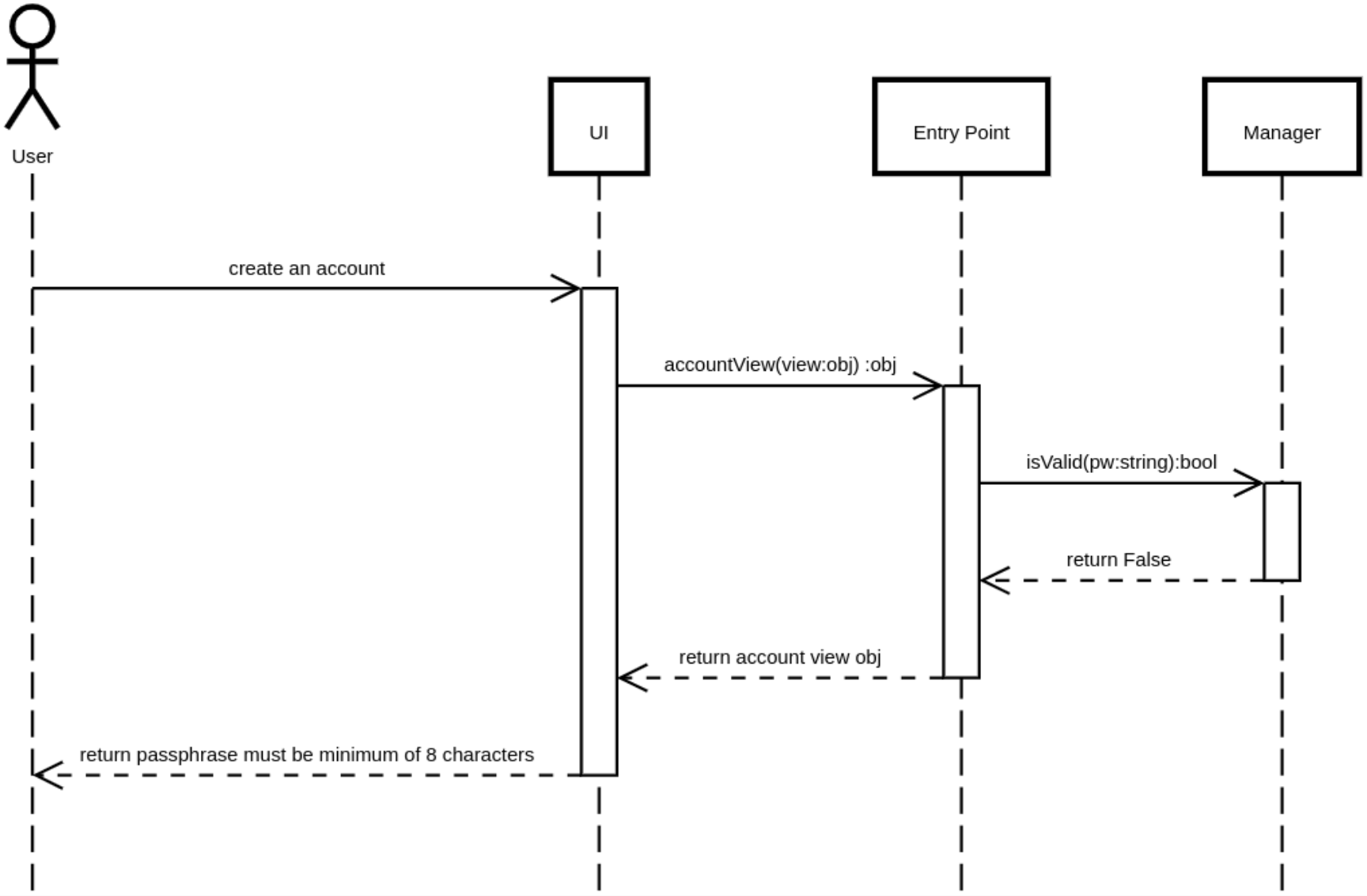


As a user I cannot create an account in a different view

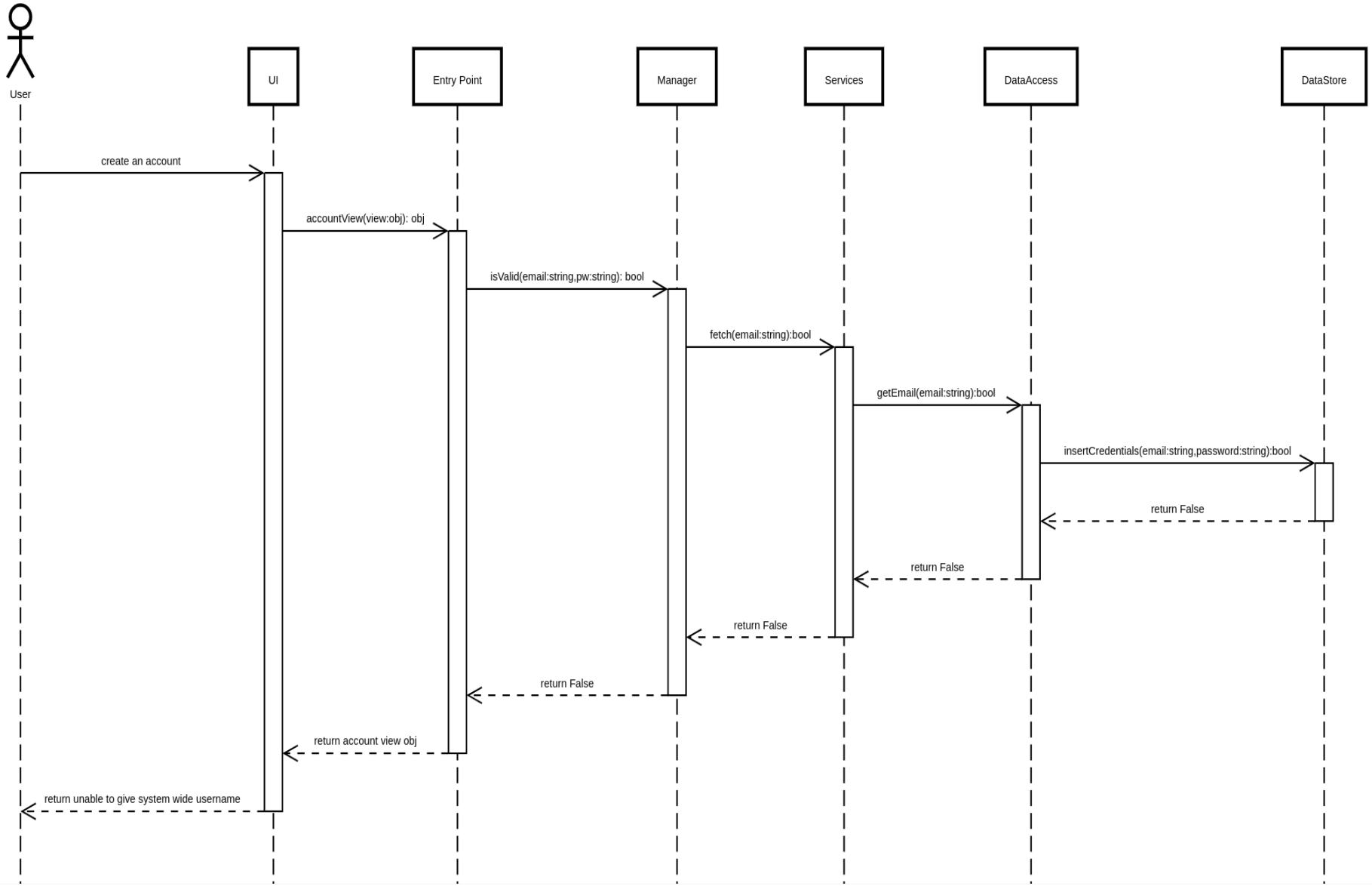



As a user I cannot create an account with an existing username
User
UI
Entry Point
Manager
Services
DataAccess
DataStore
create an account
accountView(view:obj): obj
isValid(email:string,pw:string):bool
fetch(email:string):bool
getEmail(e:string):bool
searchUser(email:string):string
return username
return True
return True
return True
return account view obj
return user already exist

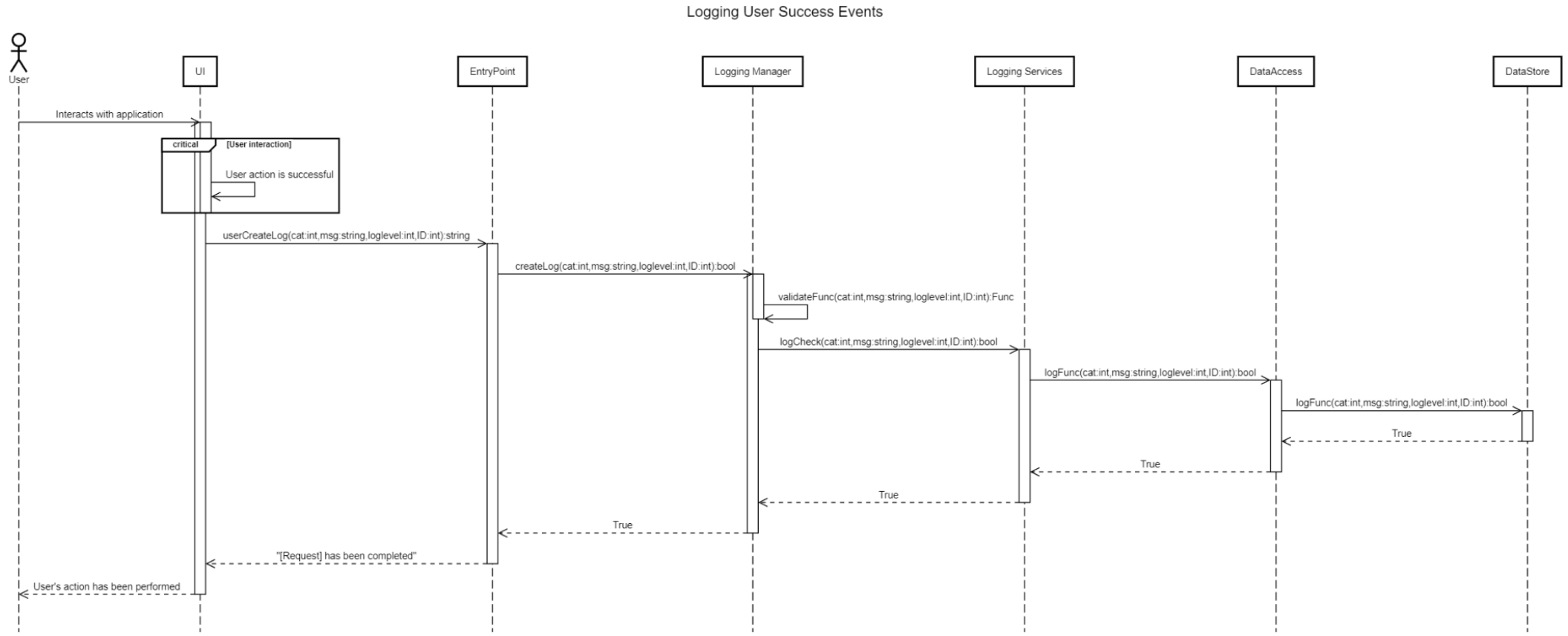
As a user I cannot register to create an account with a passphrase of length less than 8

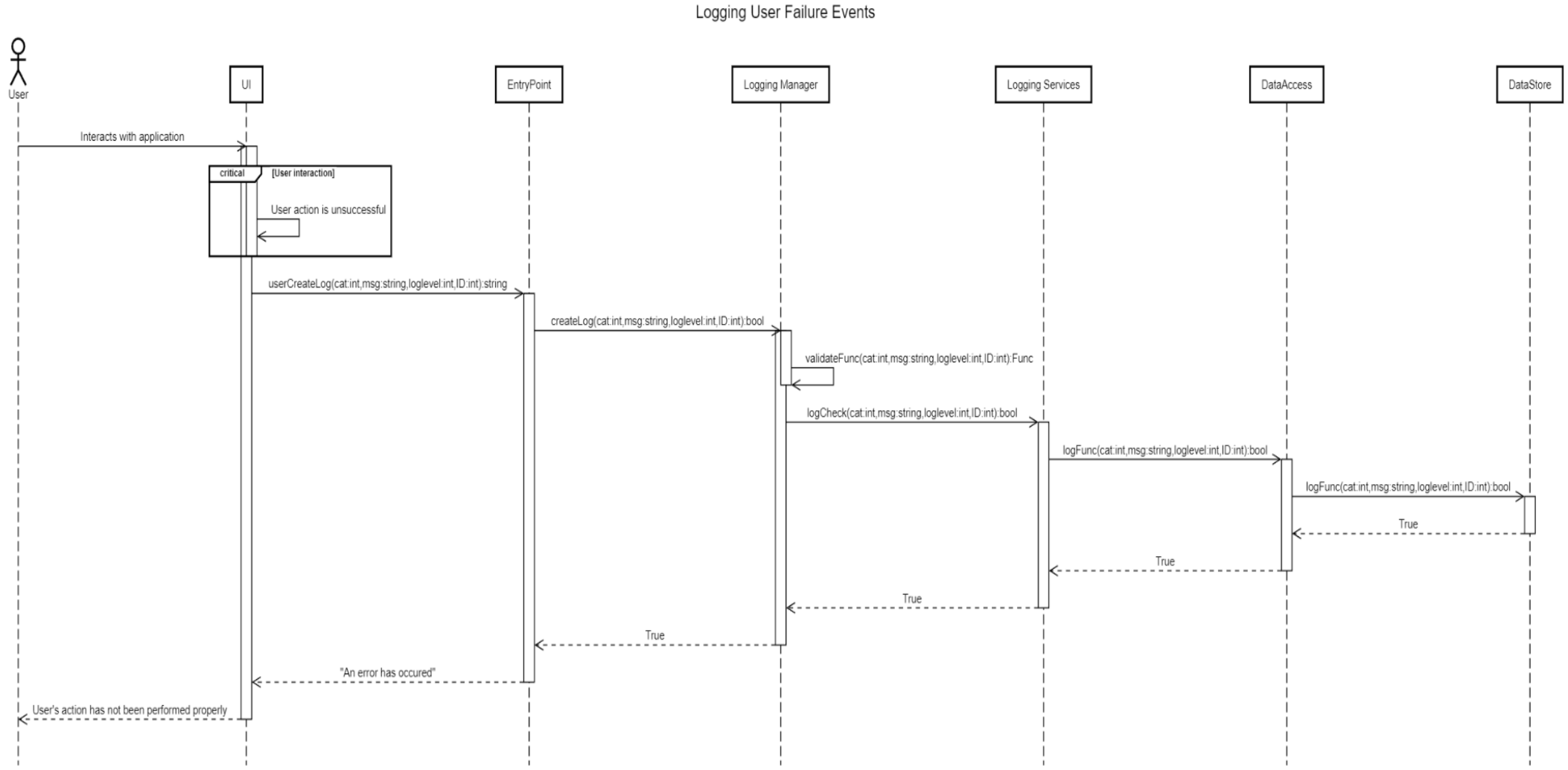


As a user I want to register to create an account but system fails to distribute system wide username

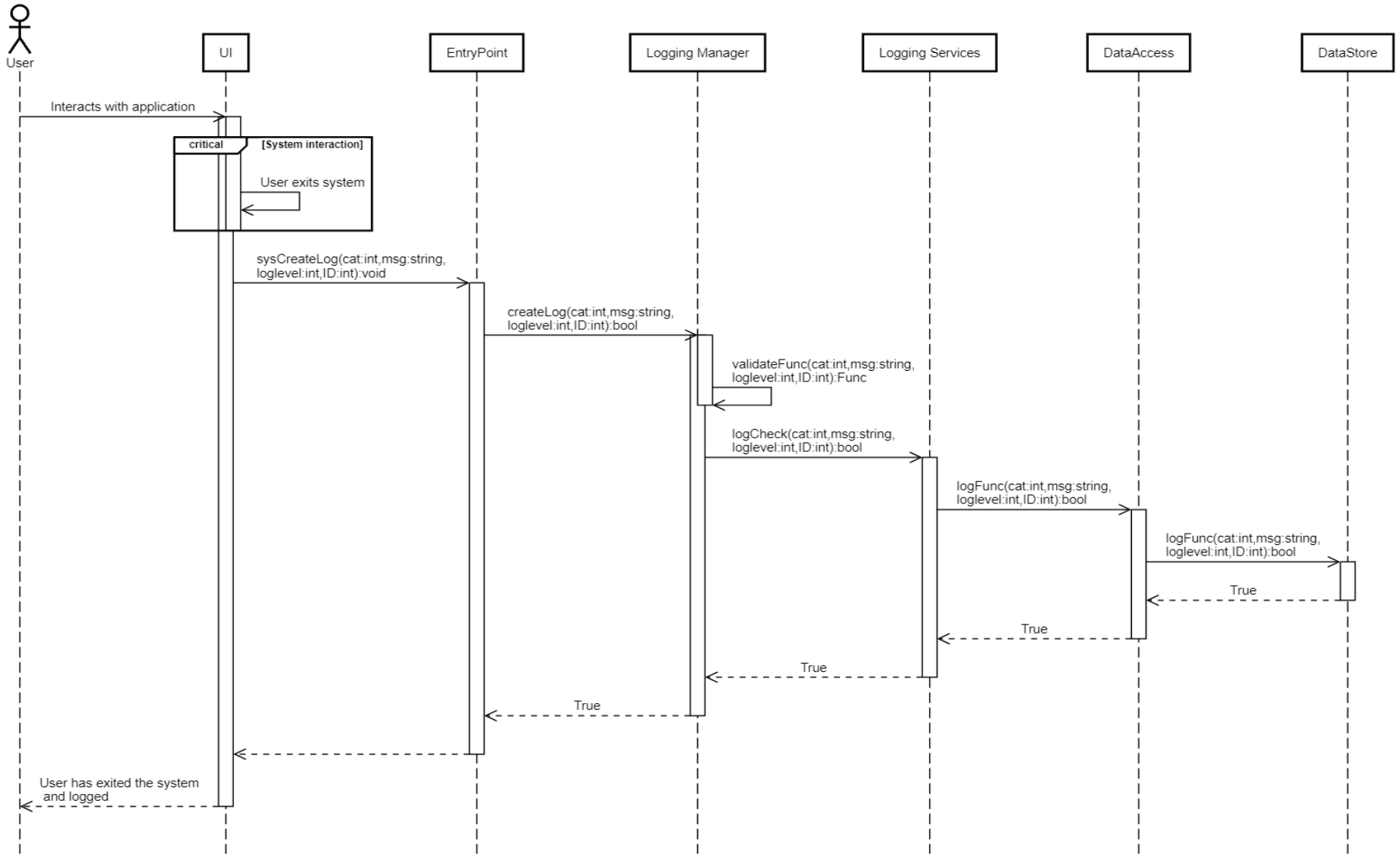


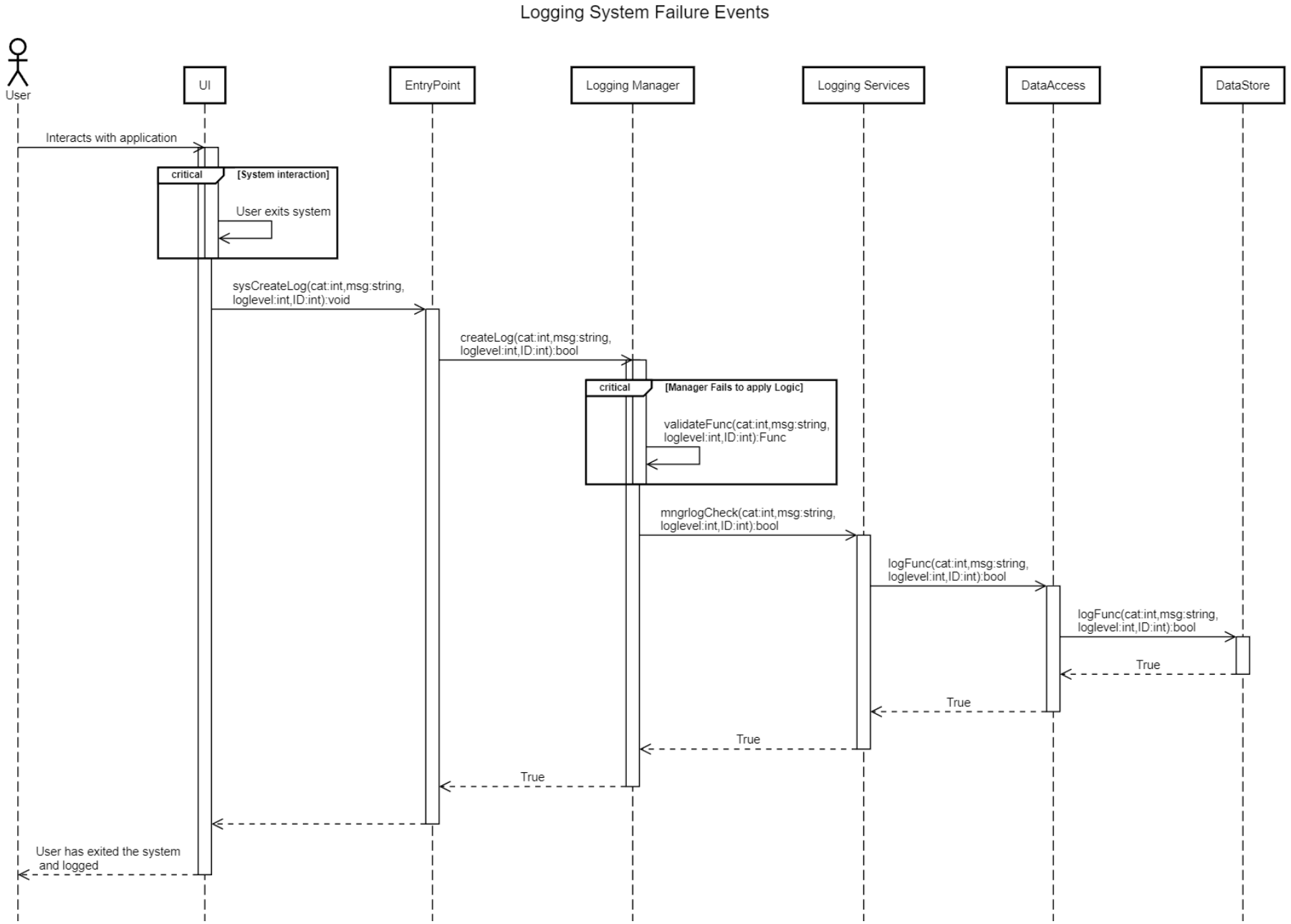
Logging Success Sequence Diagrams




Logging User Failure Events
User
UI
EntryPoint
Logging Manager
Logging Services
DataAccess
DataStore
Interacts with application
critical
[User interaction]
User action is unsuccessful
userCreateLog(cat:int,msg:string,loglevel:int,ID:int):string
createLog(cat:int,msg:string,loglevel:int,ID:int):bool
validateFunc(cat:int,msg:string,loglevel:int,ID:int):Func
logCheck(cat:int,msg:string,loglevel:int,ID:int):bool
logFunc(cat:int,msg:string,loglevel:int,ID:int):bool
logFunc(cat:int,msg:string,loglevel:int,ID:int):bool
True
True
True
True
"An error has occured"
User's action has not been performed properly

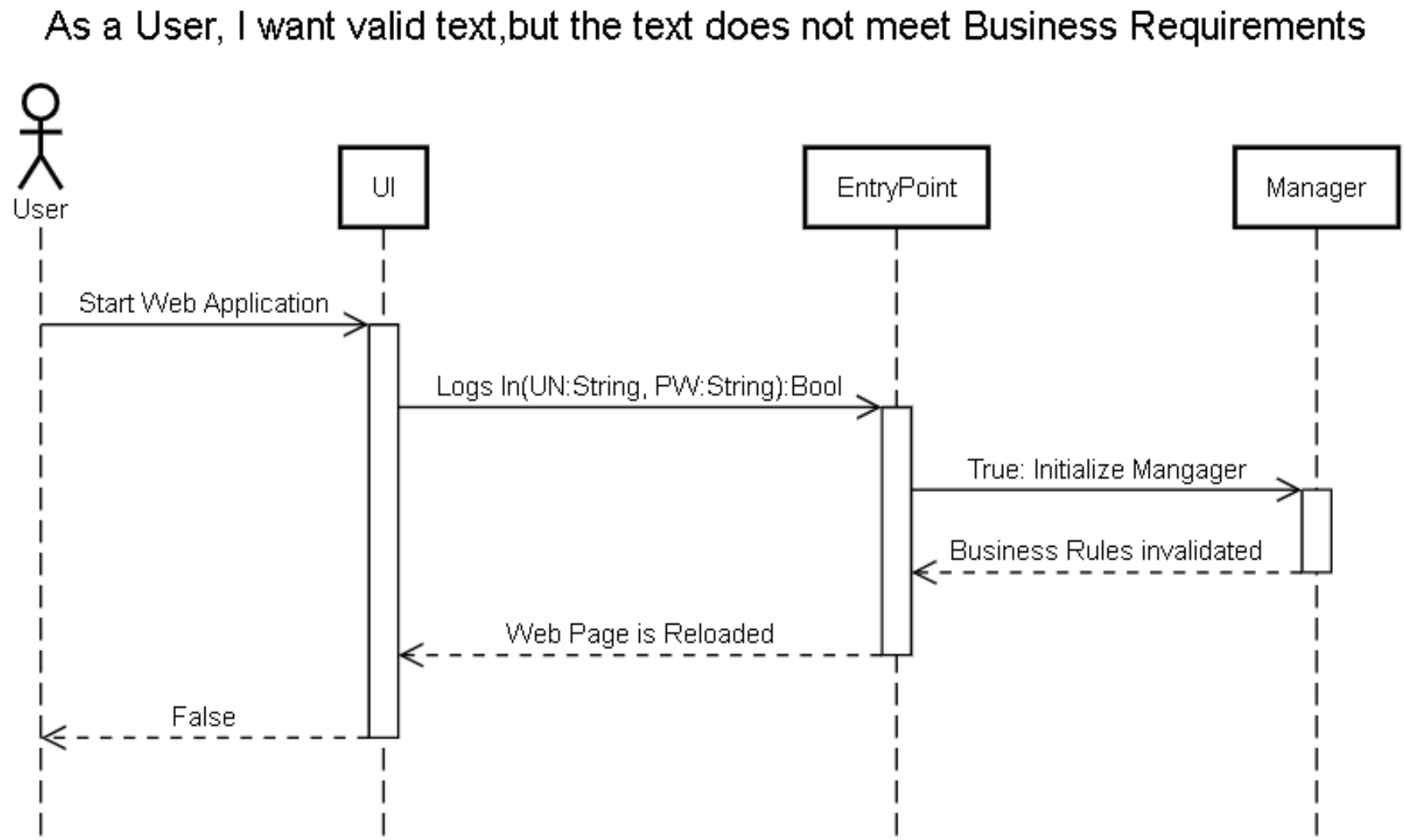
Logging System Success Events



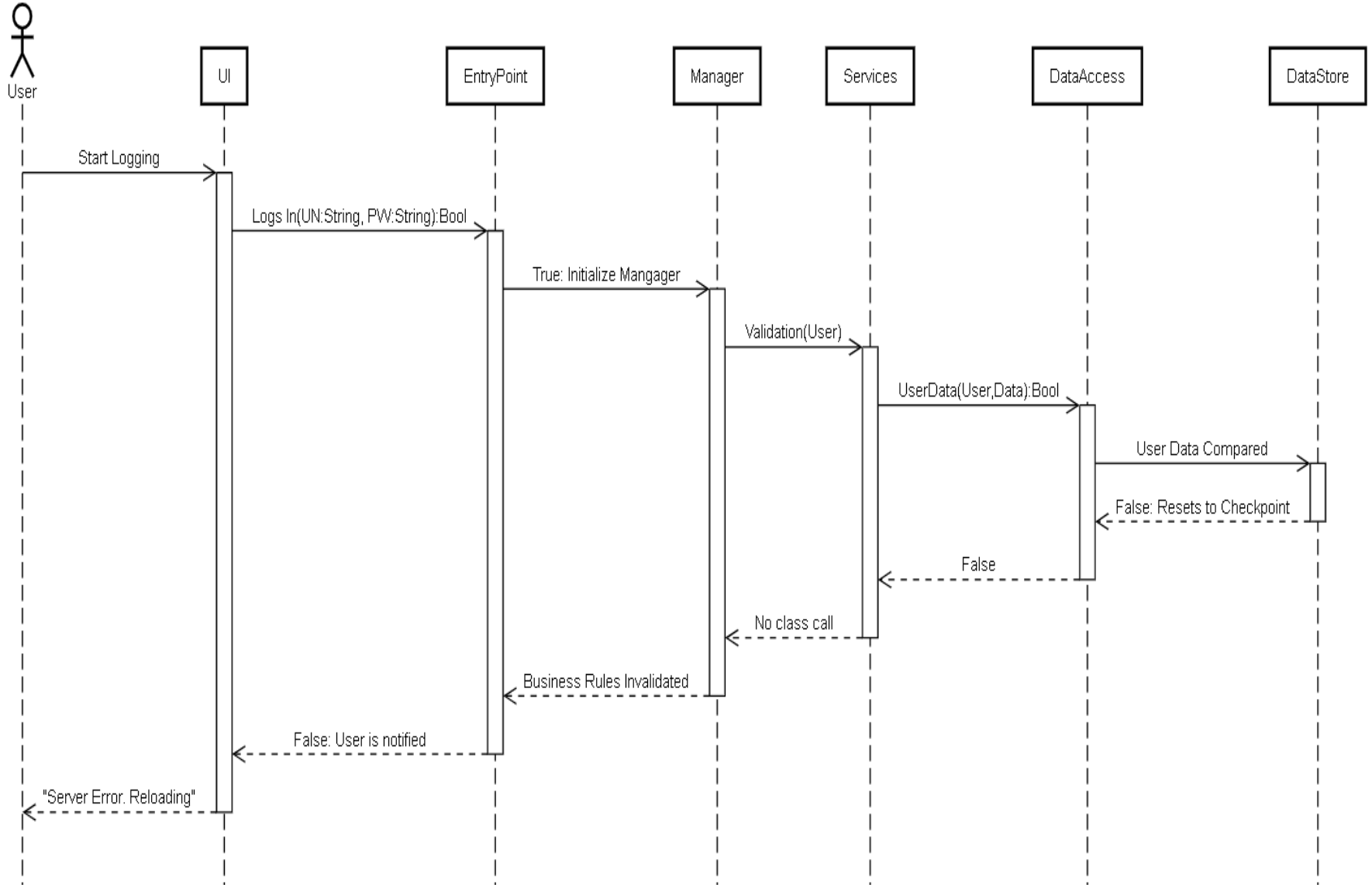

Logging System Failure Events
User
UI
EntryPoint
Logging Manager
Logging Services
DataAccess
DataStore
Interacts with application
critical
[System interaction]
User exits system
sysCreateLog(cat:int,msg:string,
loglevel:int,ID:int):void
createLog(cat:int,msg:string,
loglevel:int,ID:int):bool
critical
[Manager Fails to apply Logic]
validateFunc(cat:int,msg:string,
loglevel:int,ID:int):Func
mngrlogCheck(cat:int,msg:string,
loglevel:int,ID:int):bool
logFunc(cat:int,msg:string,
loglevel:int,ID:int):bool
logFunc(cat:int,msg:string,
loglevel:int,ID:int):bool
True
True
True
True
User has exited the system
and logged

Logging Failure Sequence Diagrams

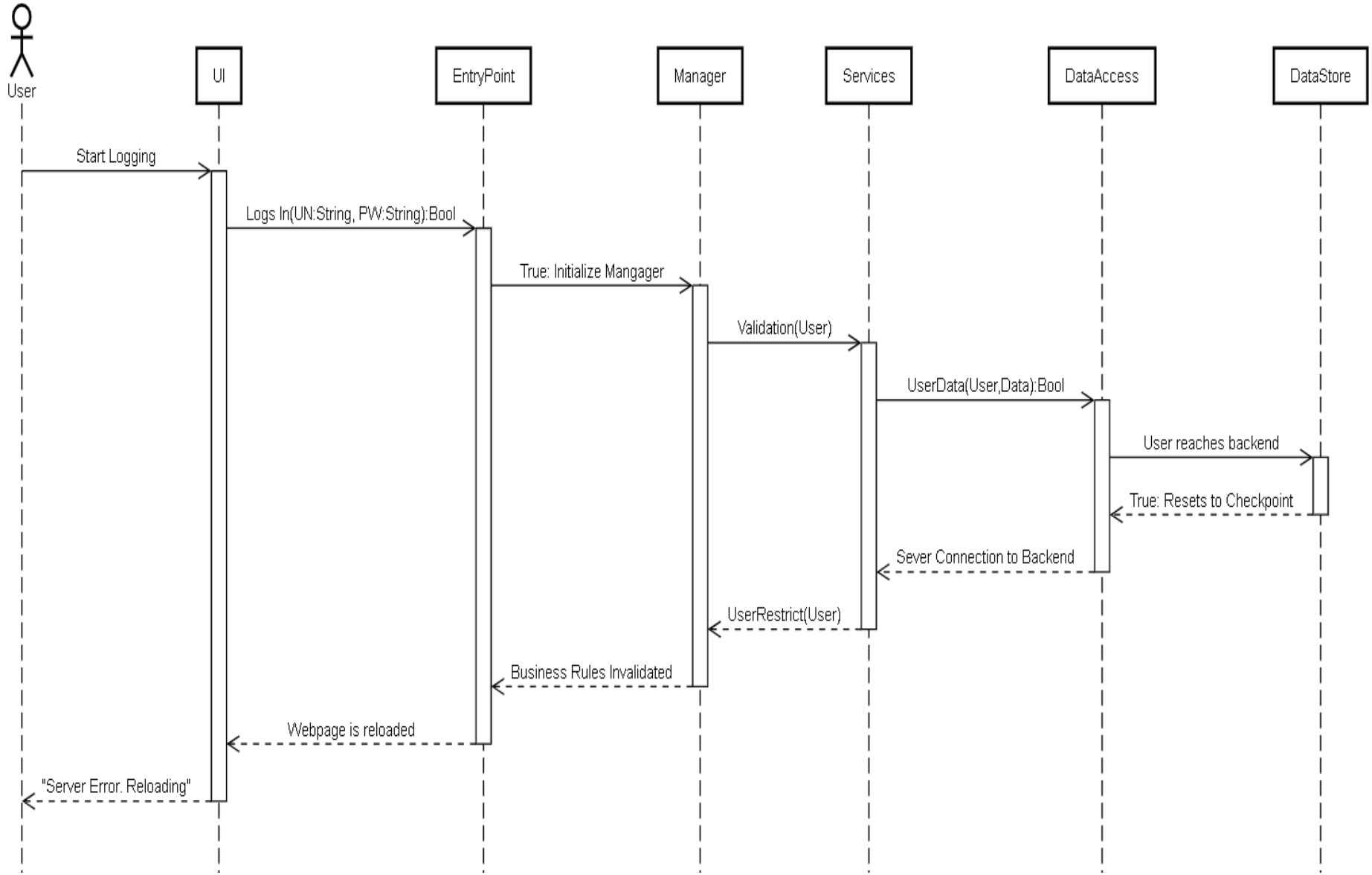
General Failure Conditions



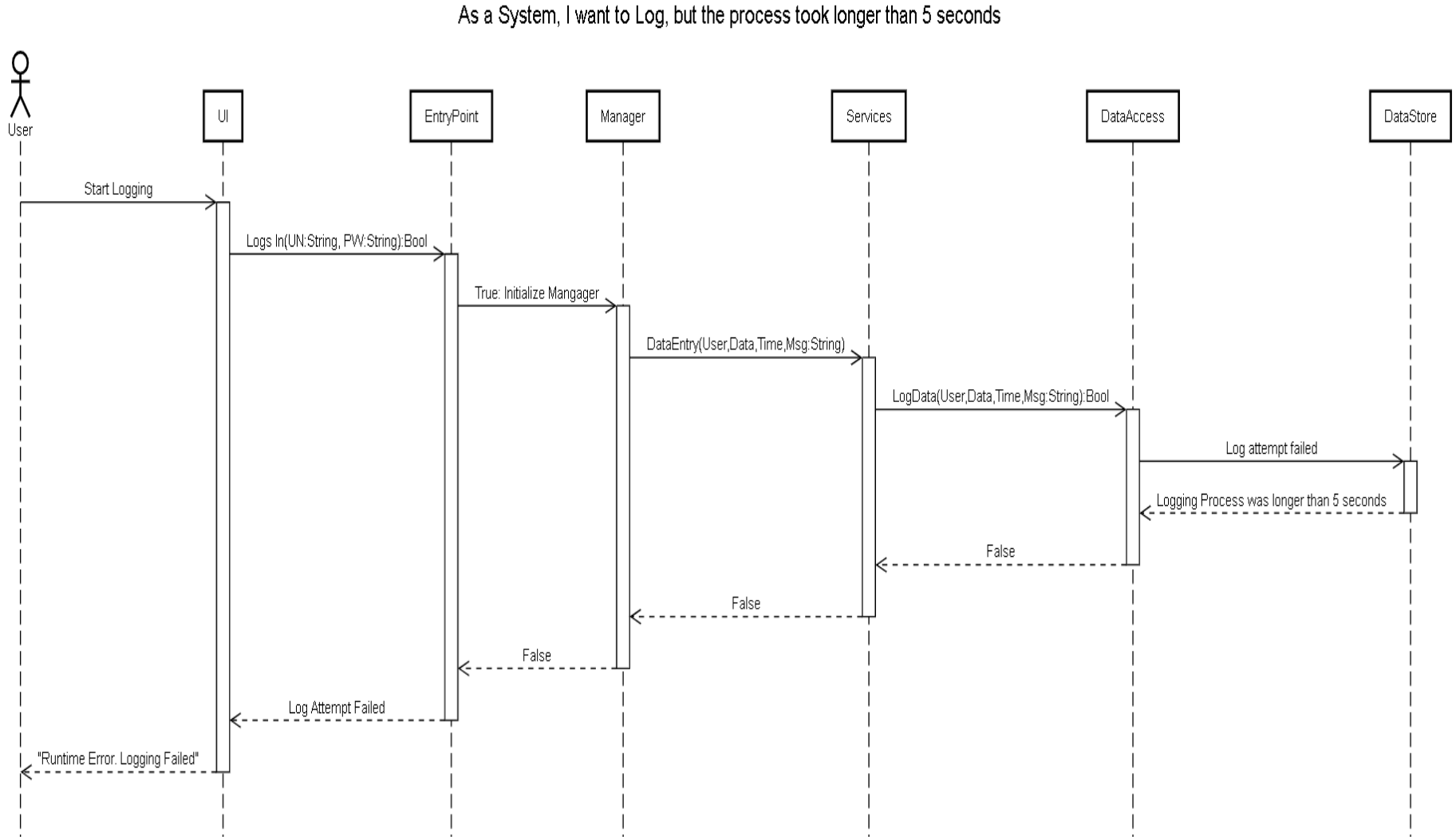
As a User, I want data to be recorded accurately on Client and Server end, but data is not recorded properly.



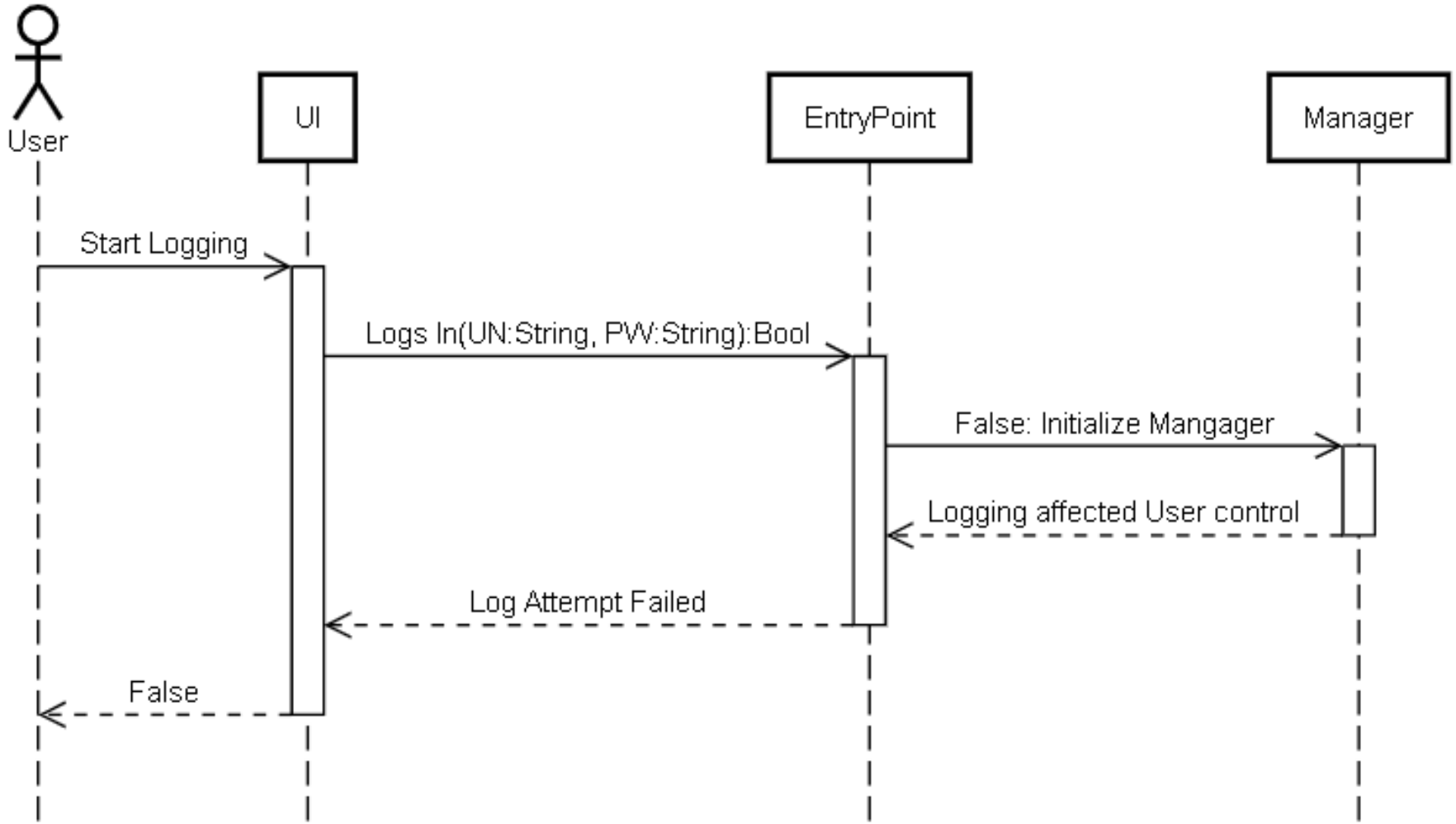
As a User, I want to have my data stored, but I communicating directly with the Backend.



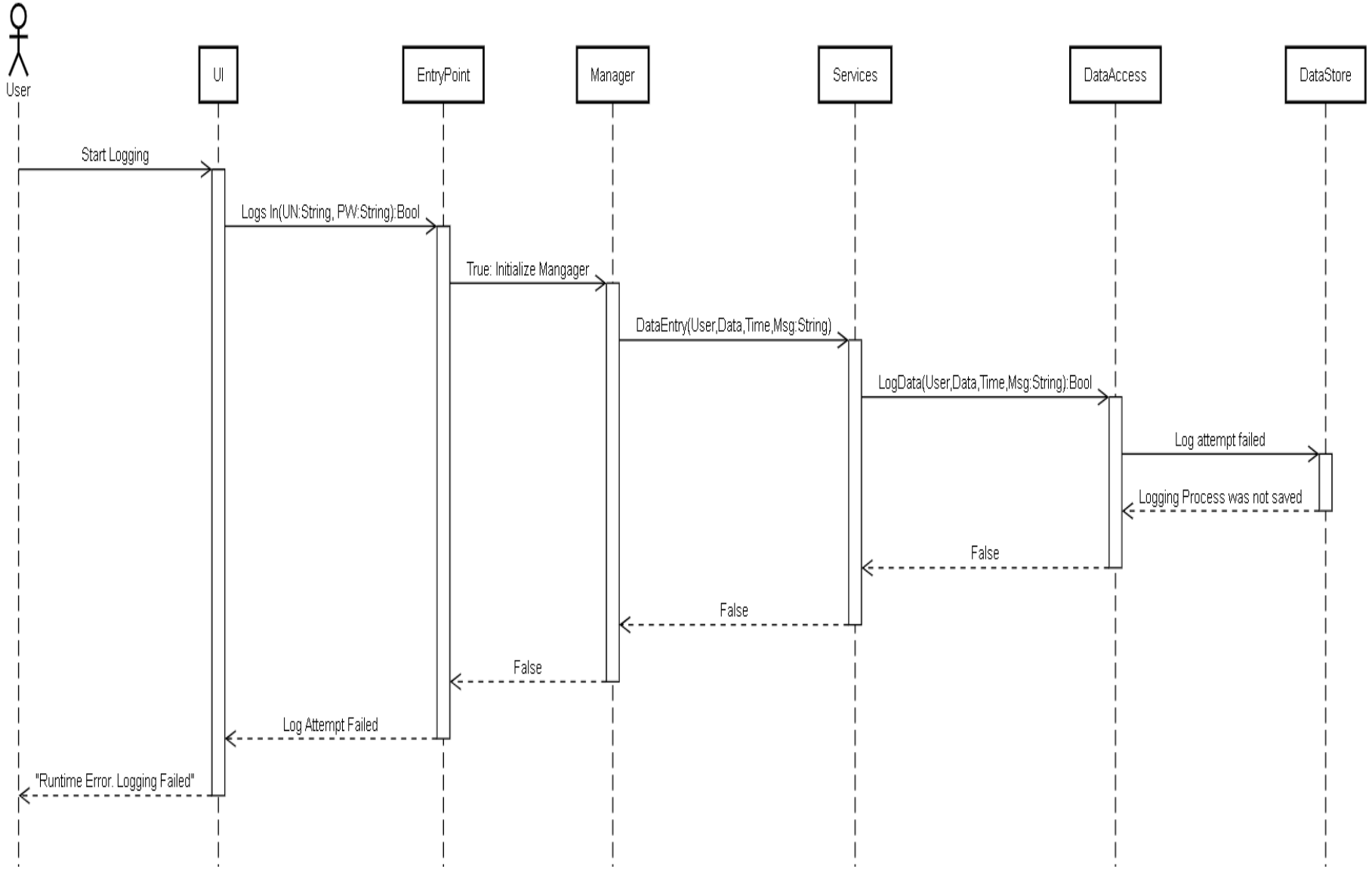
Core Component Failure Conditions



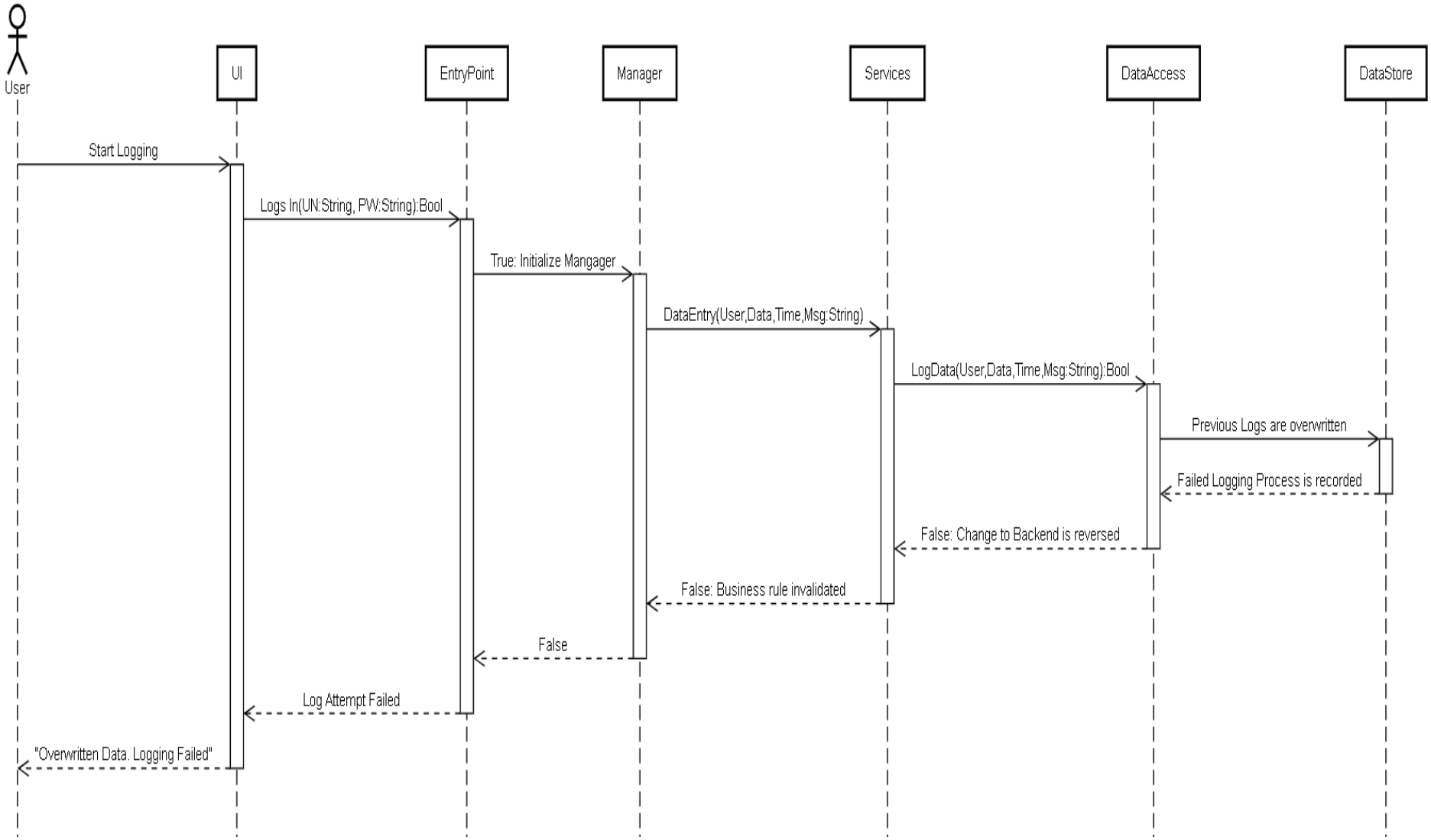
As a User, I want to Log, but I cannot interact with the system.



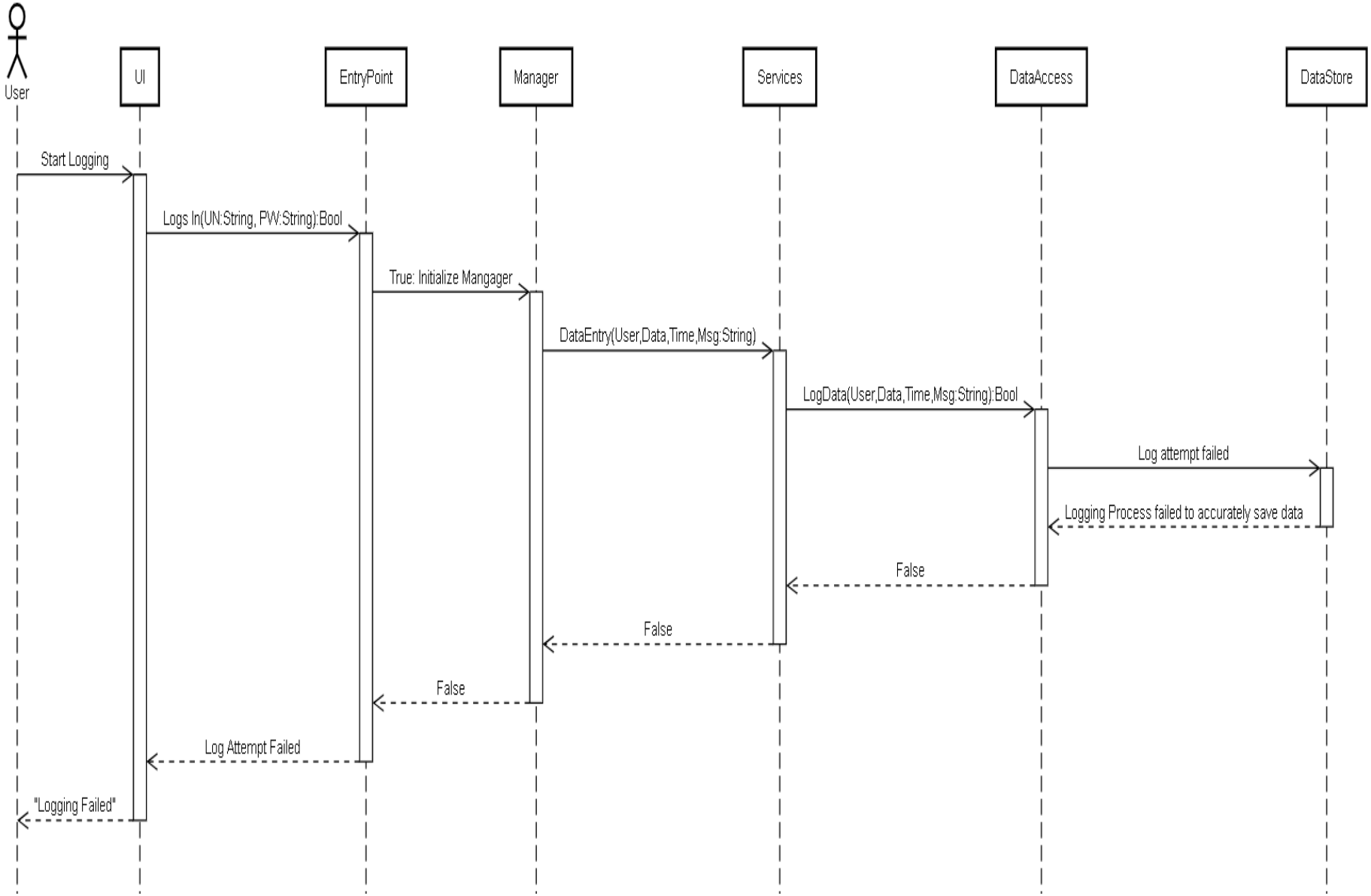
As a System, I want to Log, but the process did not save to the data store.



As a System, I want to Log, but previous logs are modifiable.

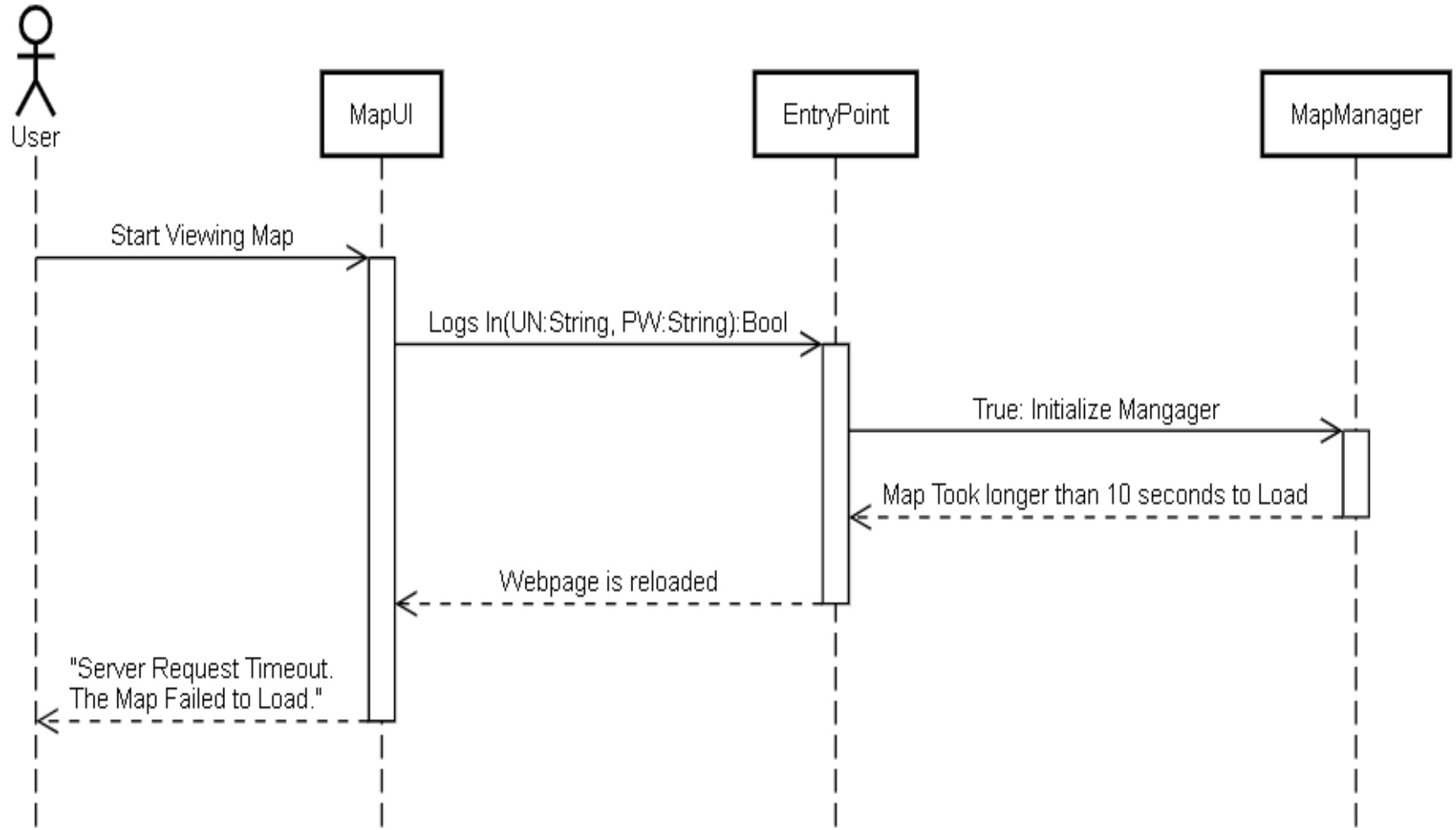


As a System, I want to Log, but the process did not accurately save all data.

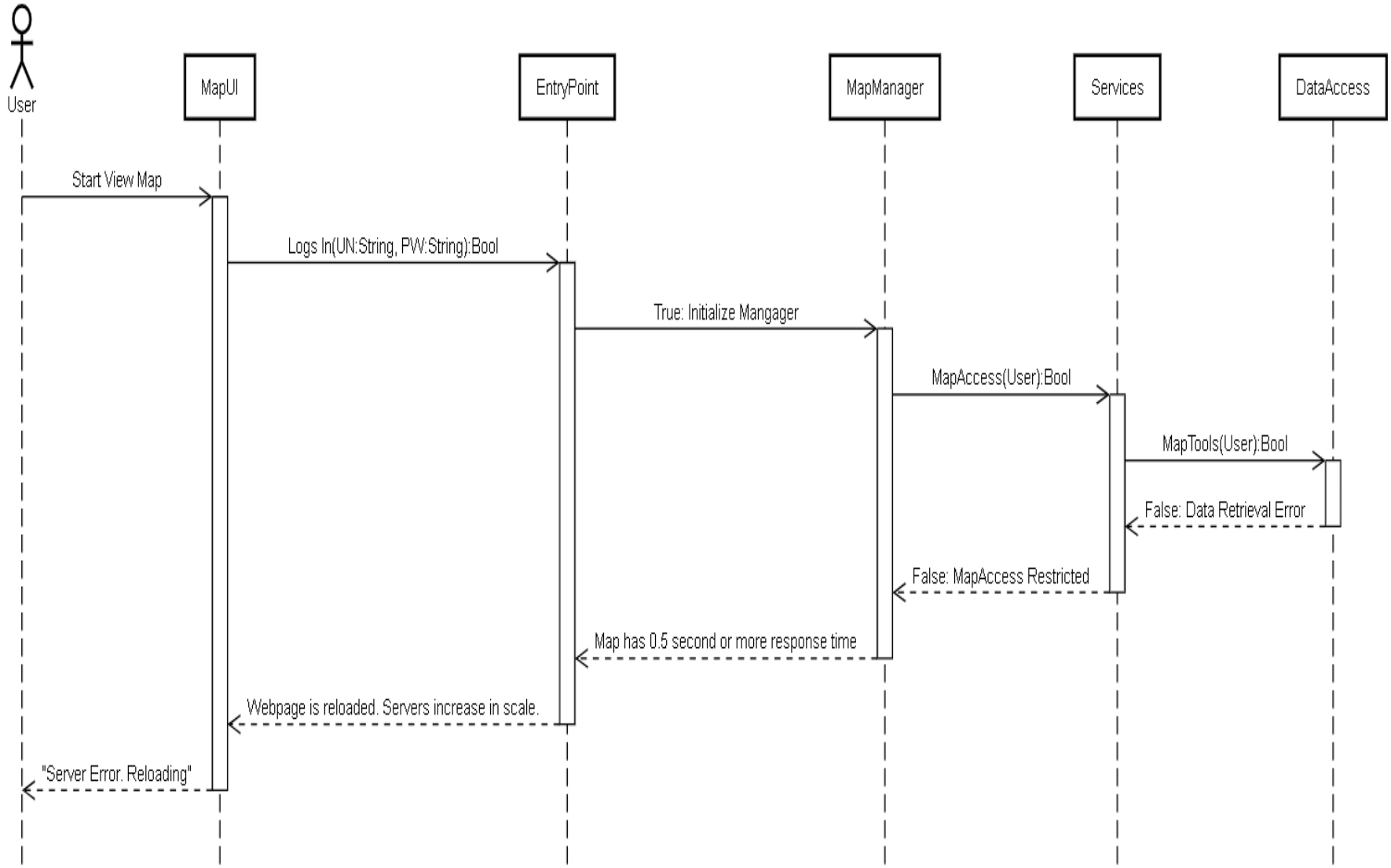


Litter Map Failure Conditions

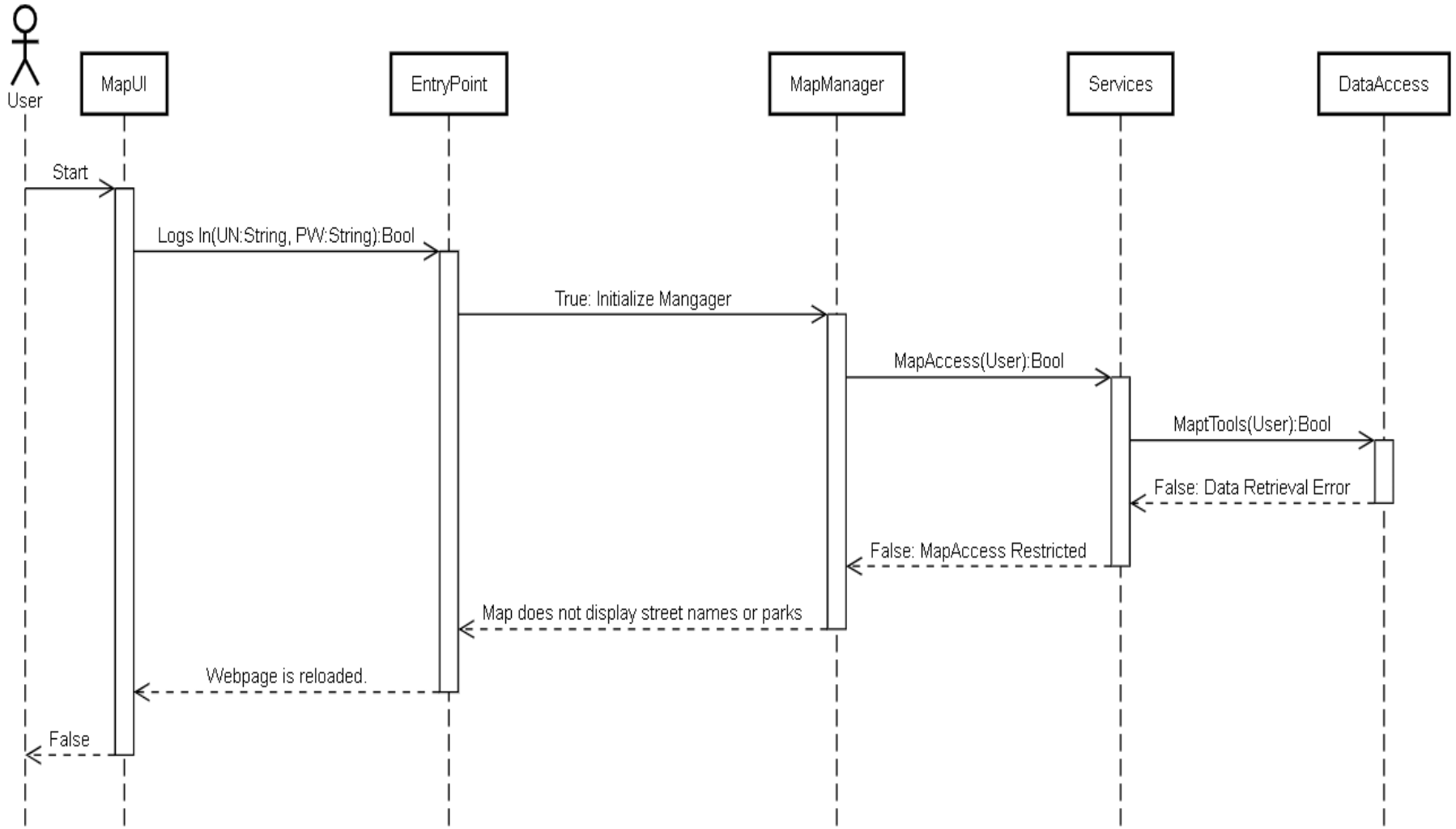
As a User, I want to load the litter map, but the map took longer than 10 seconds to load.



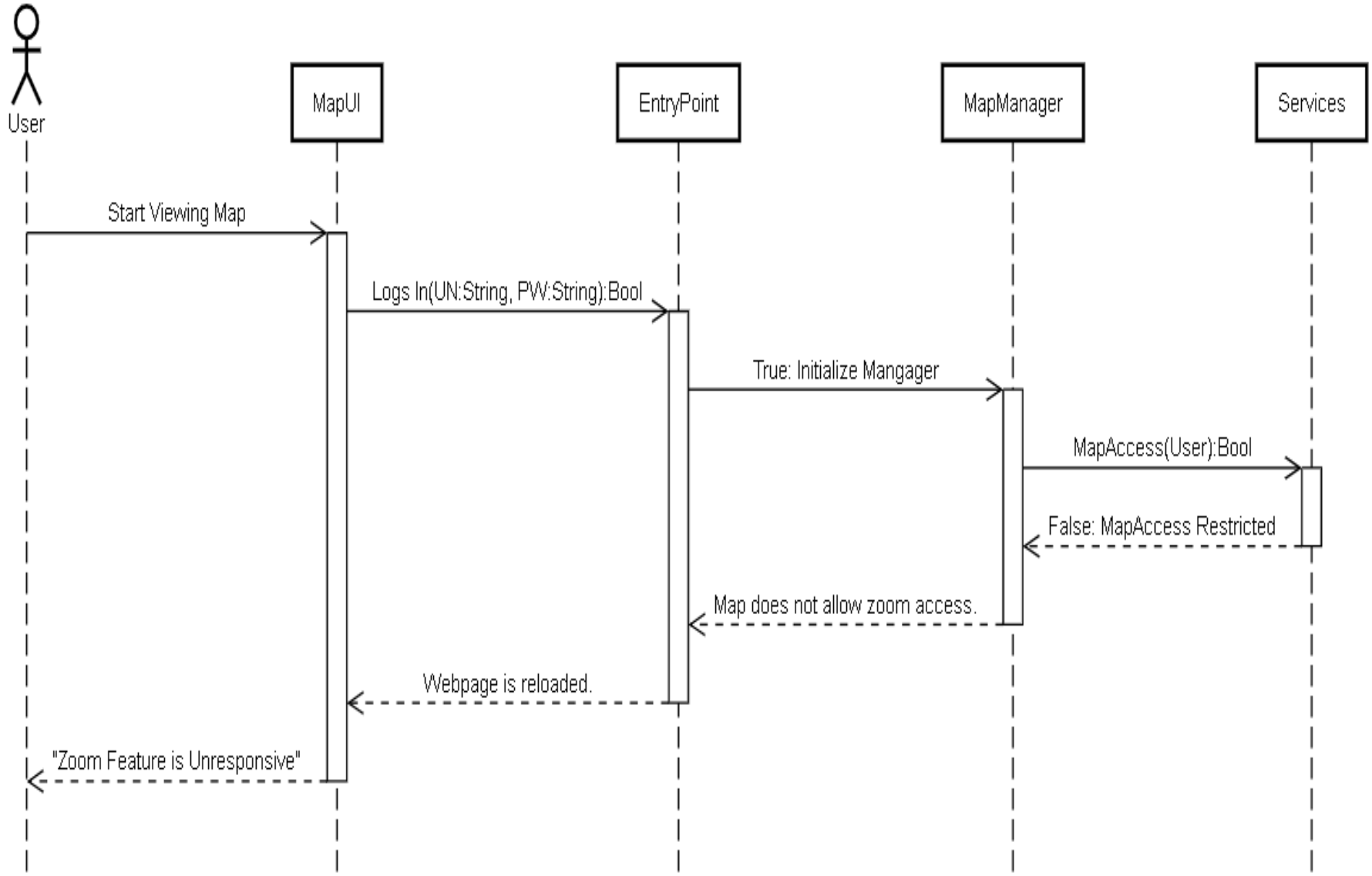
As a User, I want to view a Litter Map, but the Map has a poor response time of 0.5 seconds.



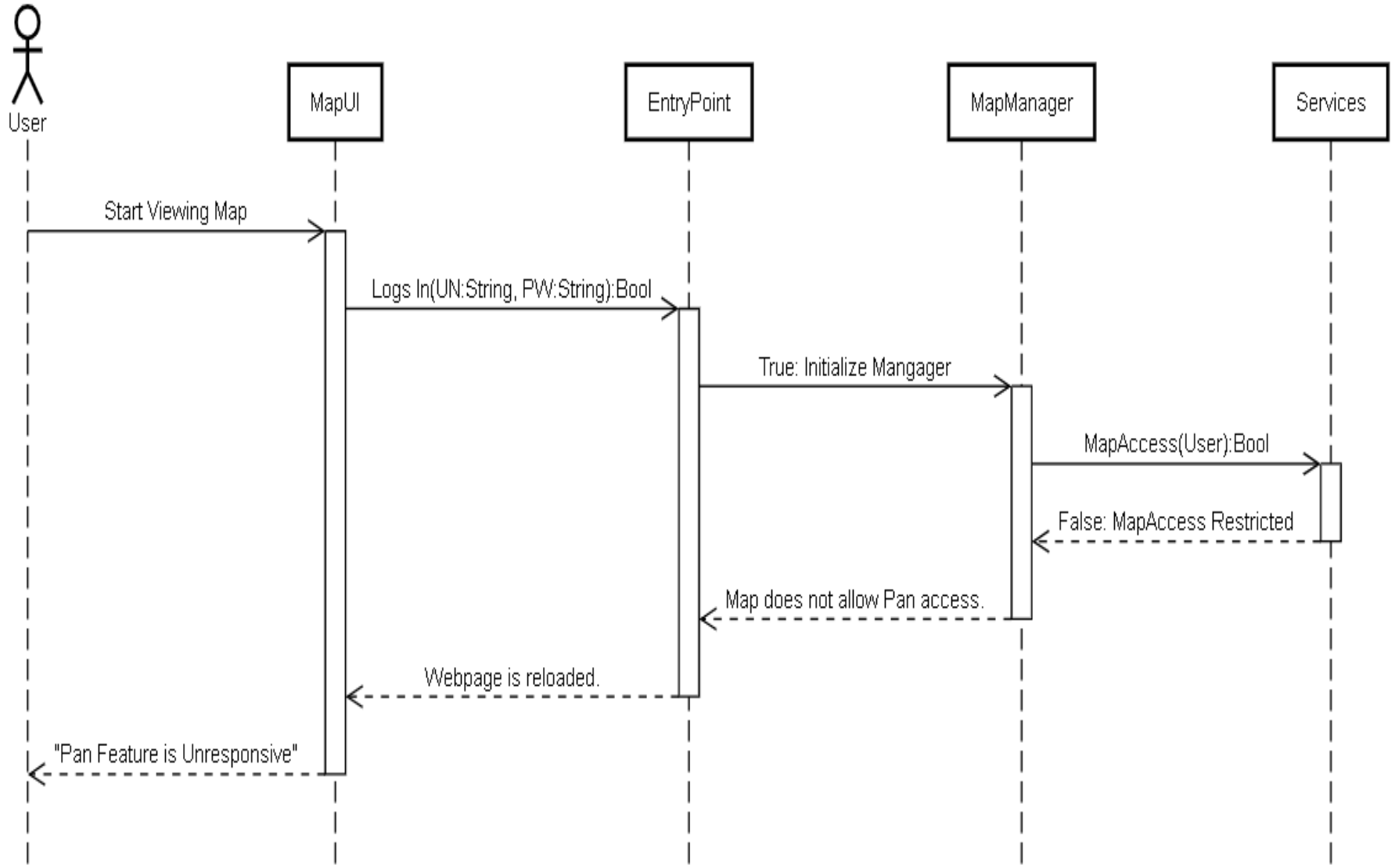
As a User, I want to view a Litter Map, but the map does not display street names or parks.



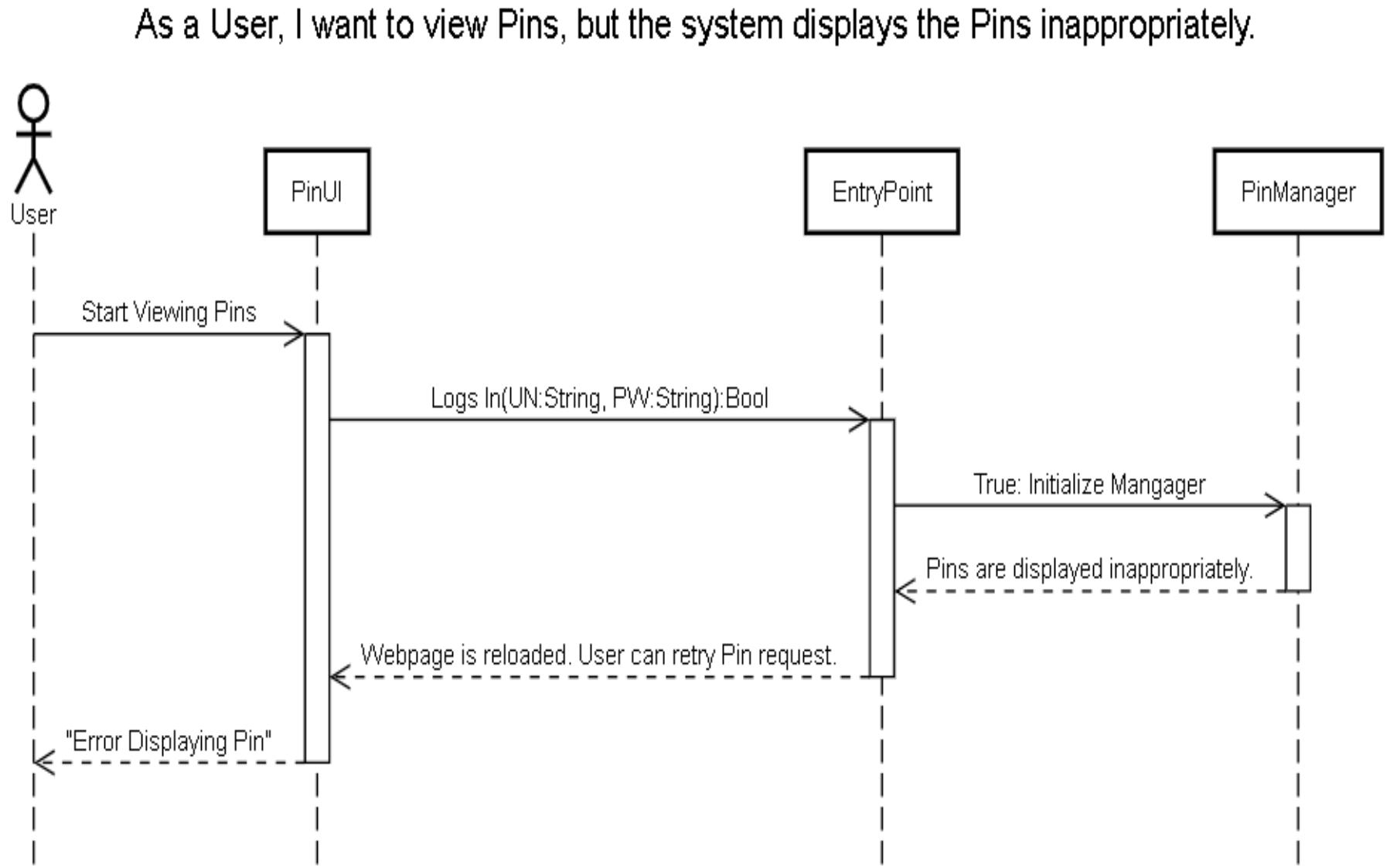
As a User, I want to zoom on a map, but the map will not allow me to zoom.



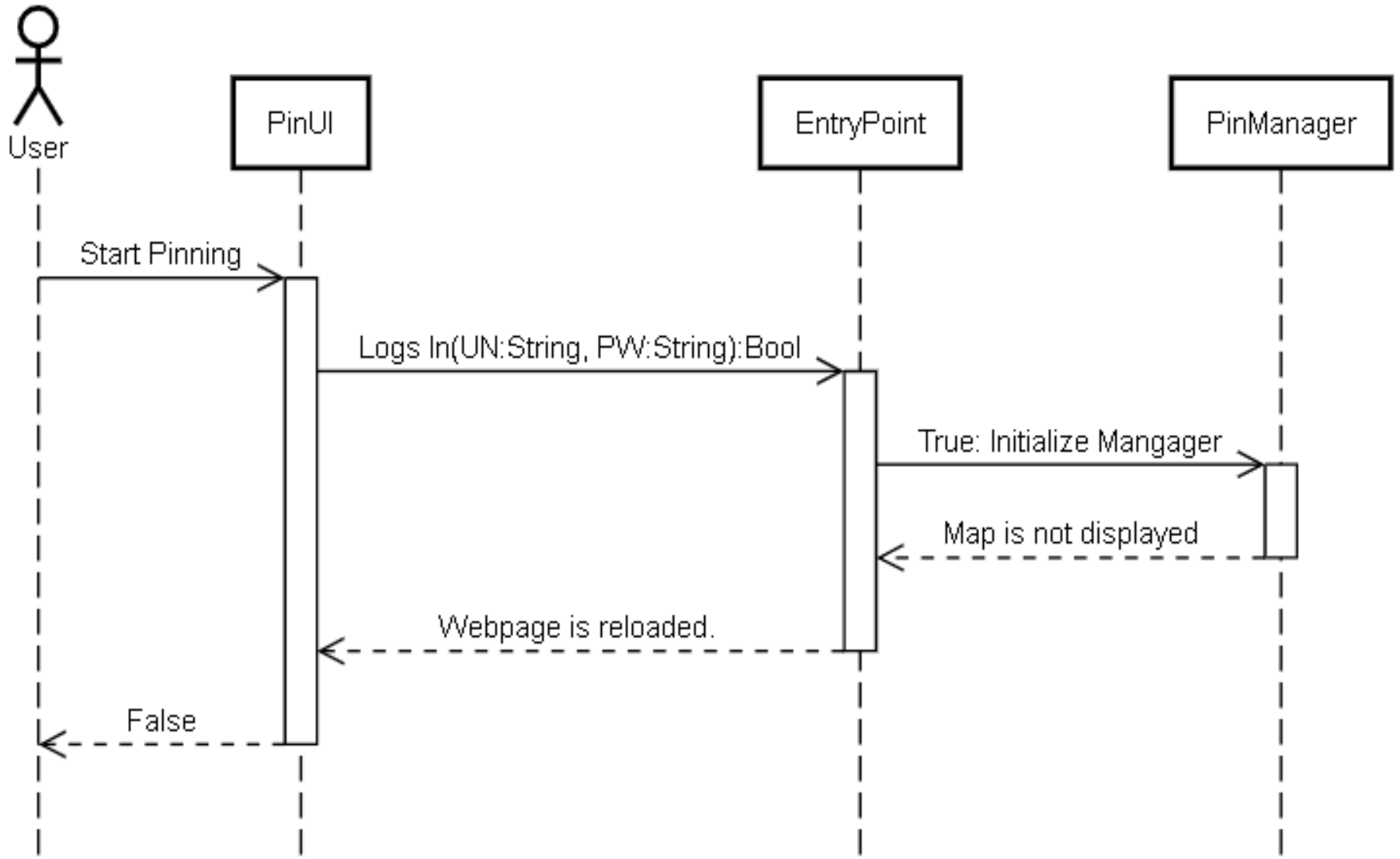
As a User, I want to pan on a Map, but I am unable to pan.



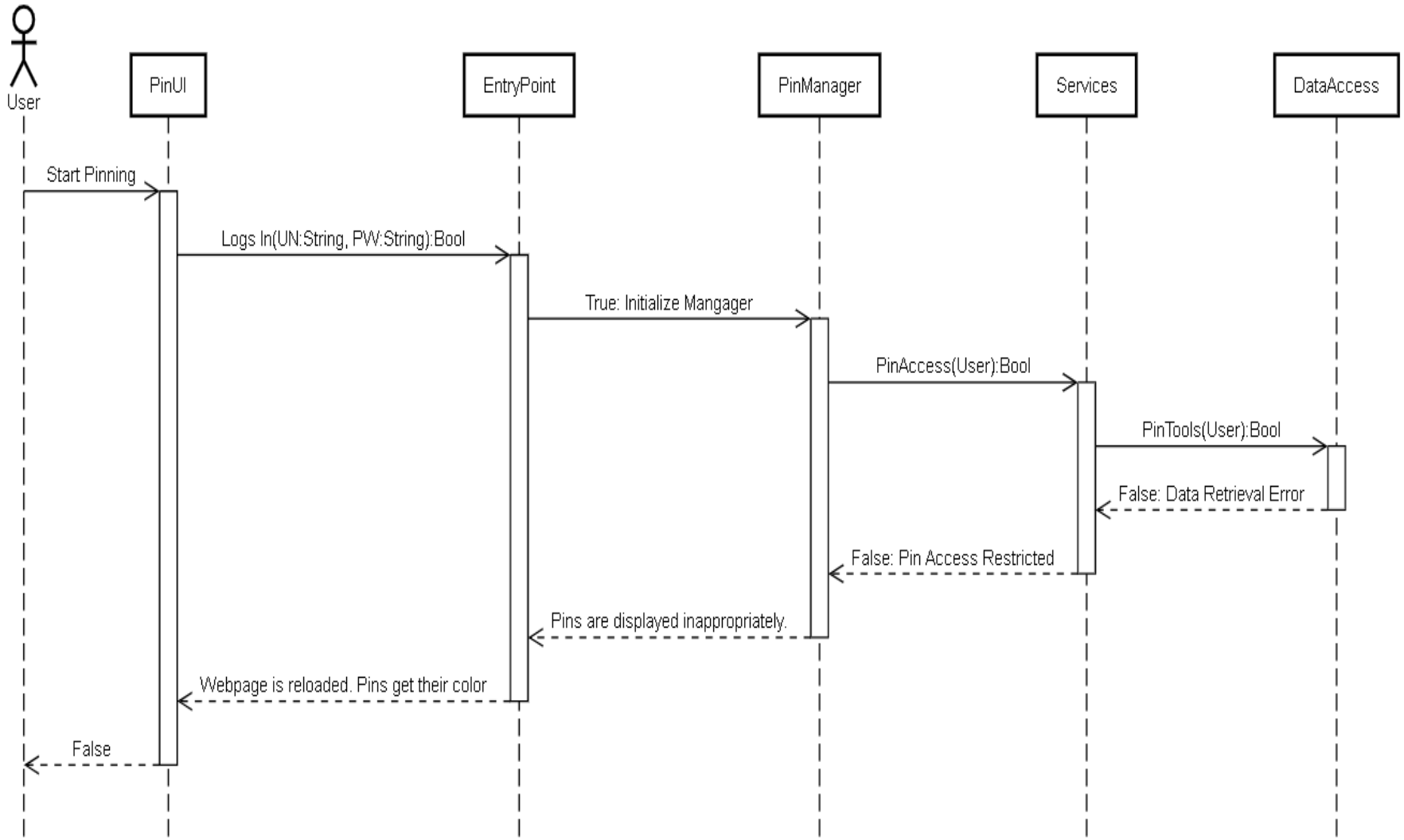
Pinning Failure Conditions



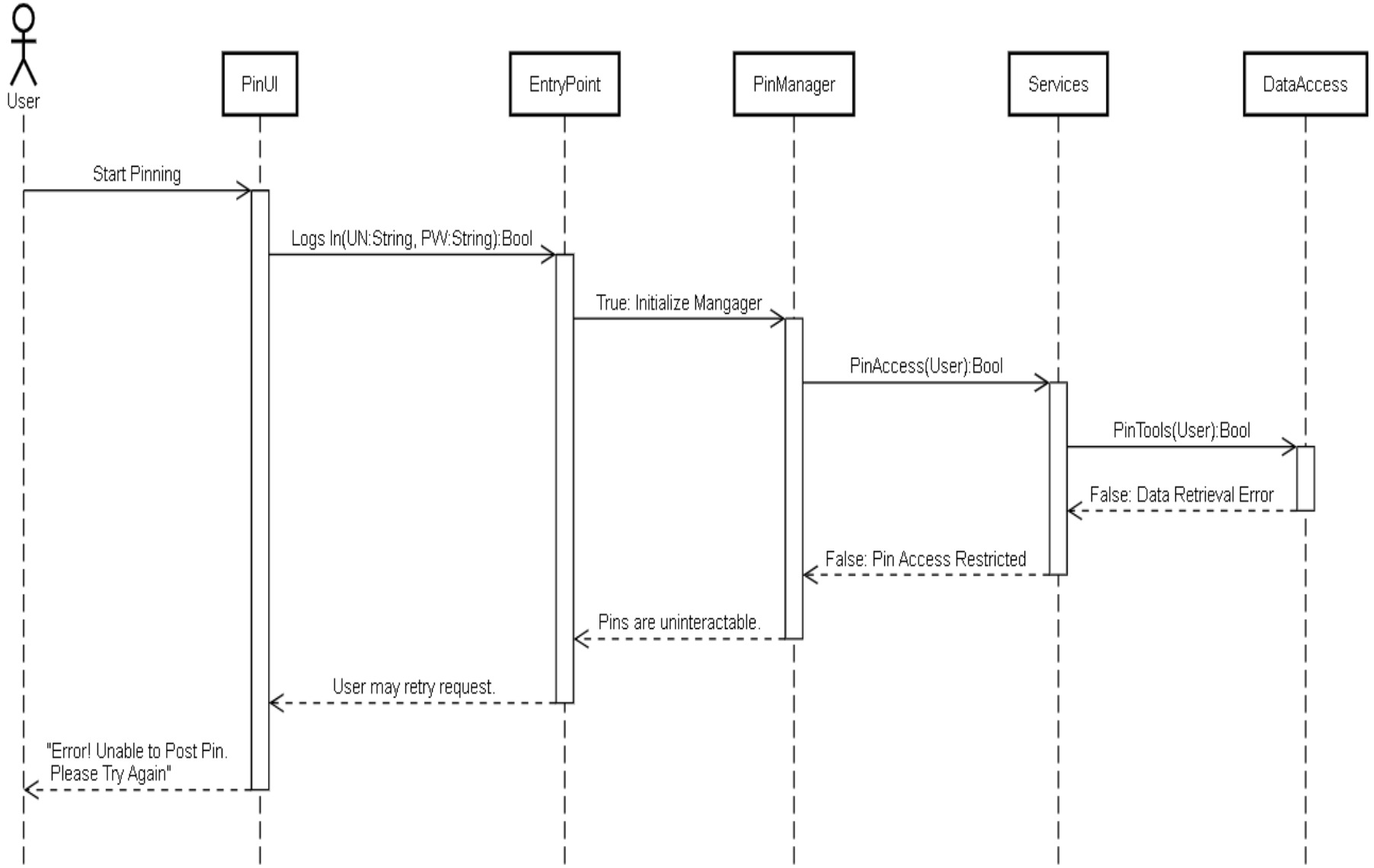
As a User, I want to post Pins, but the map is unviewable.



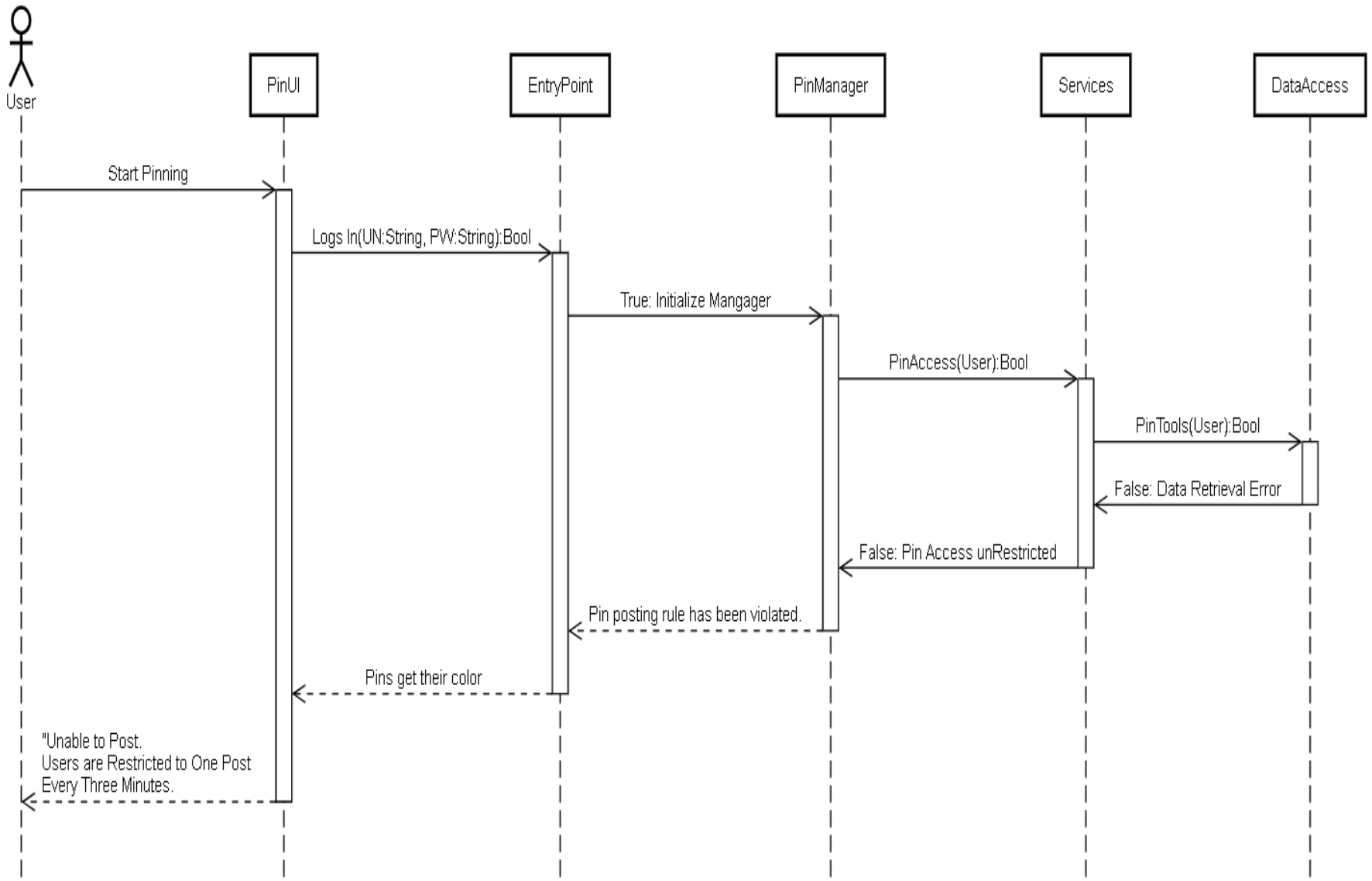
As a User, I want to view Pins, but Pins are displayed with an invalid Color.



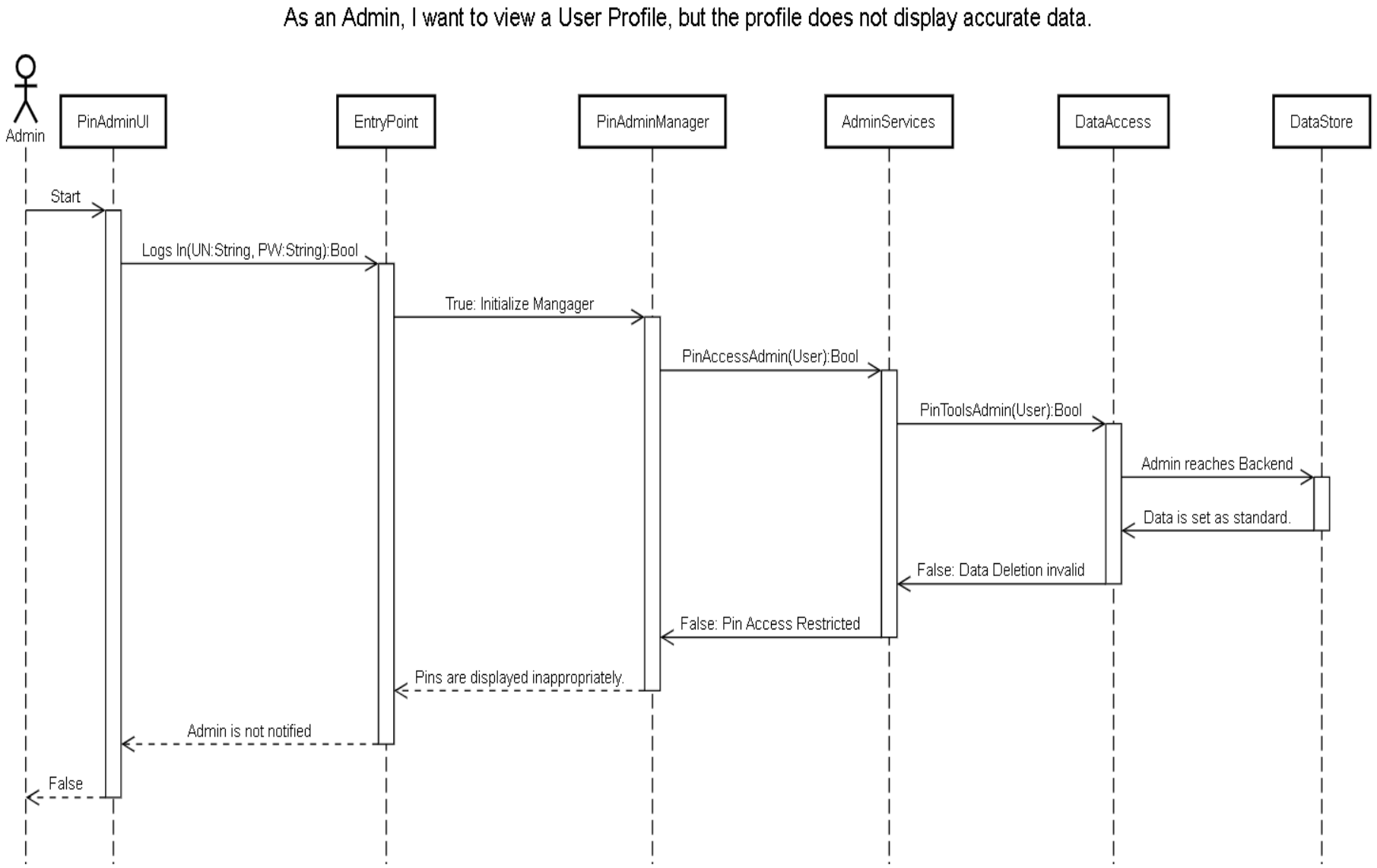
As a User, I want to post Pins, but I am unable to post Pins.



As a User, I want to post Pins, but the system allowed me to pin more than once in 3 minutes.

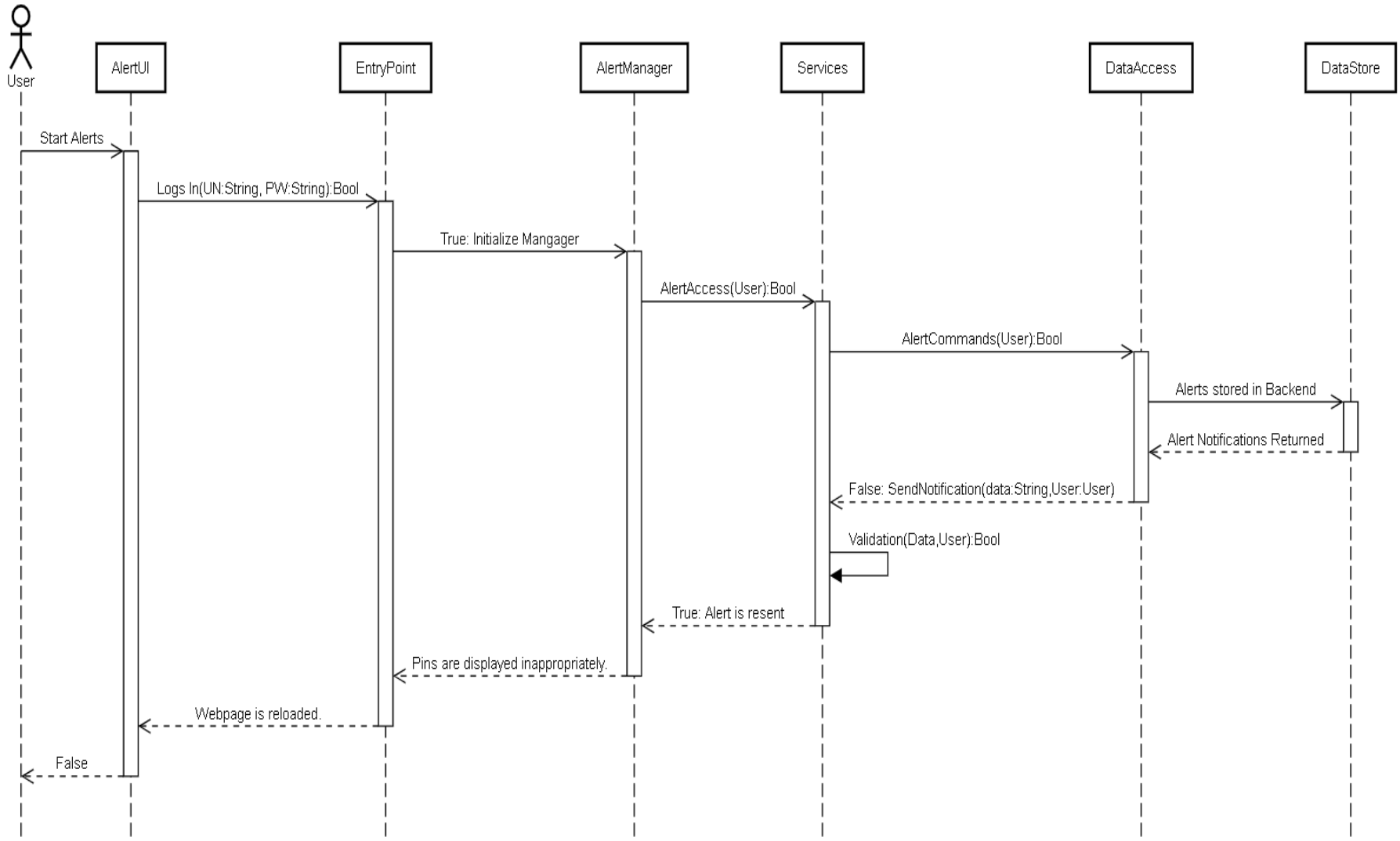


Pinning(Admin) Failure Conditions

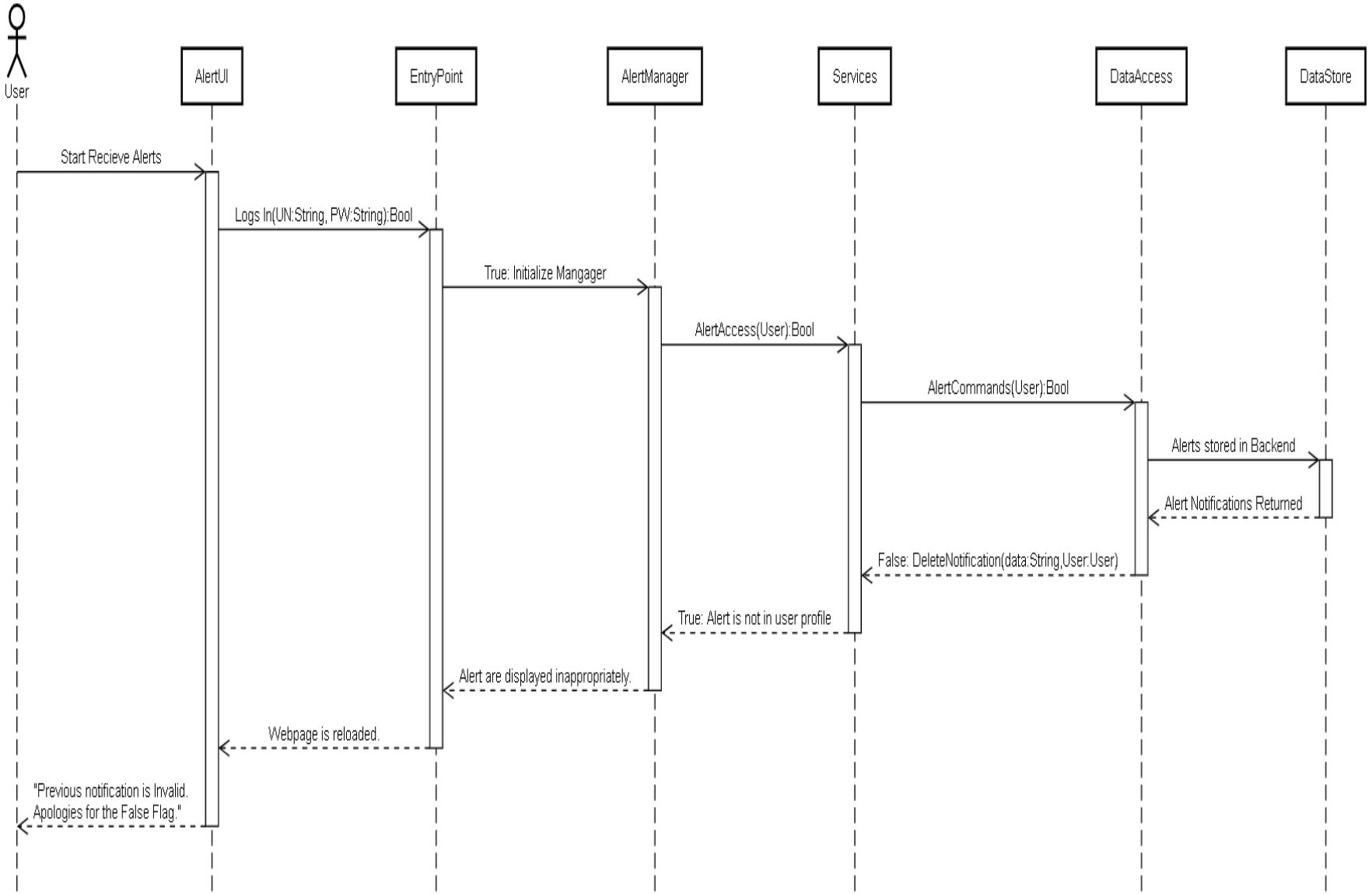


Alerts Failure Conditions

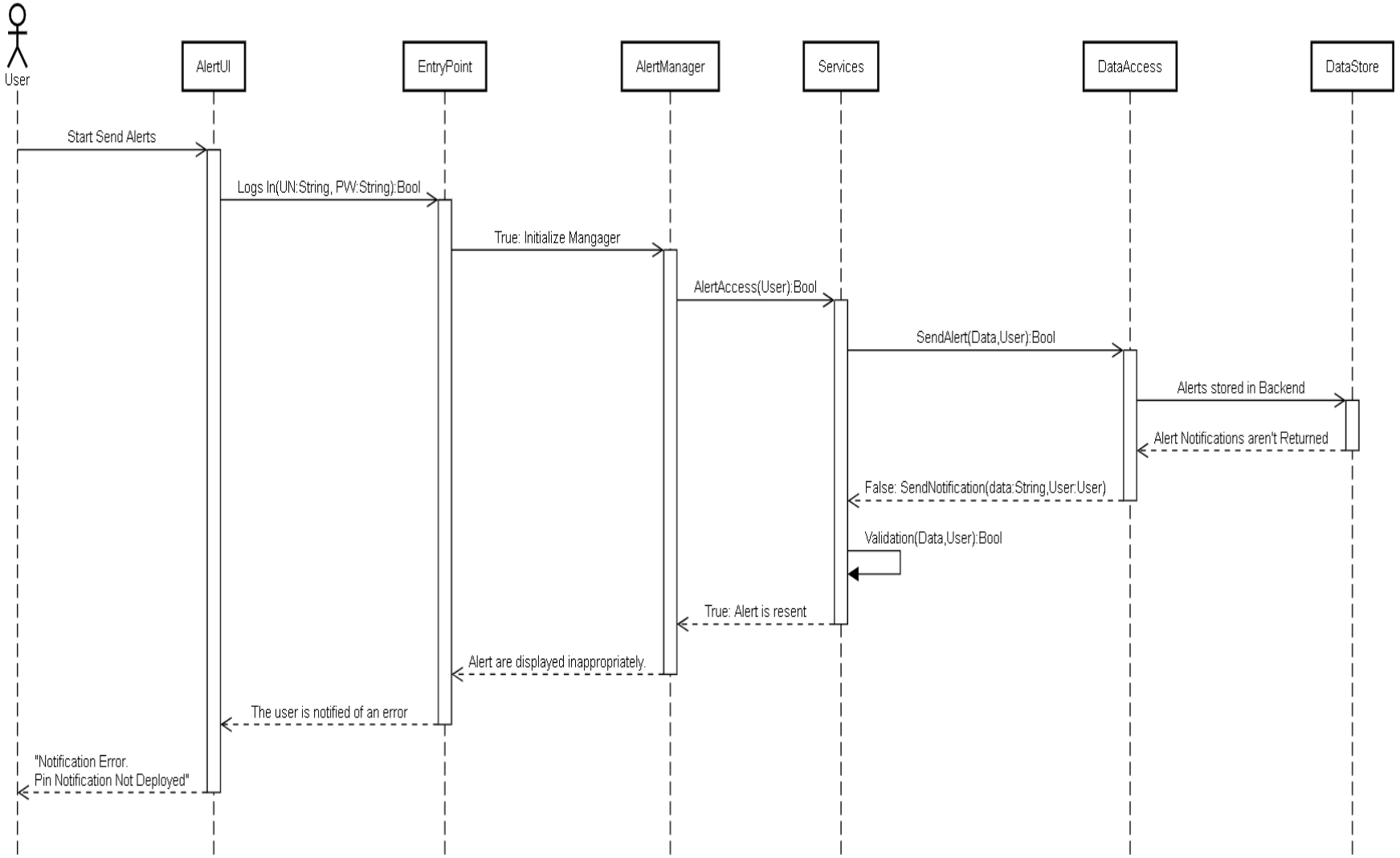
As a User, I want to recieve Alerts, but I recieved Alerts not meant for me.



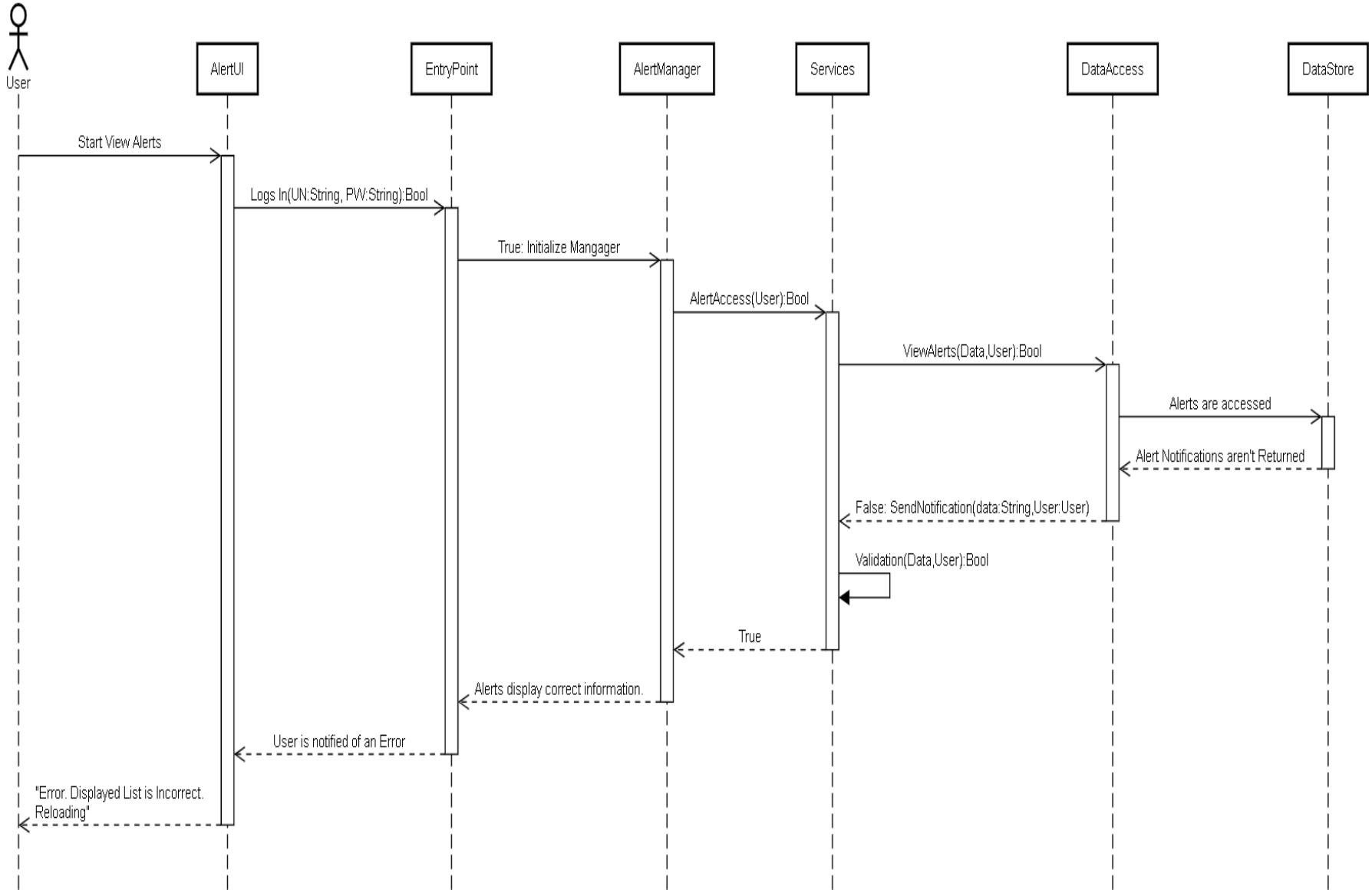
As a User, I want to recieve Alerts, but I recieve Alerts to pins I did not accept notifications from.



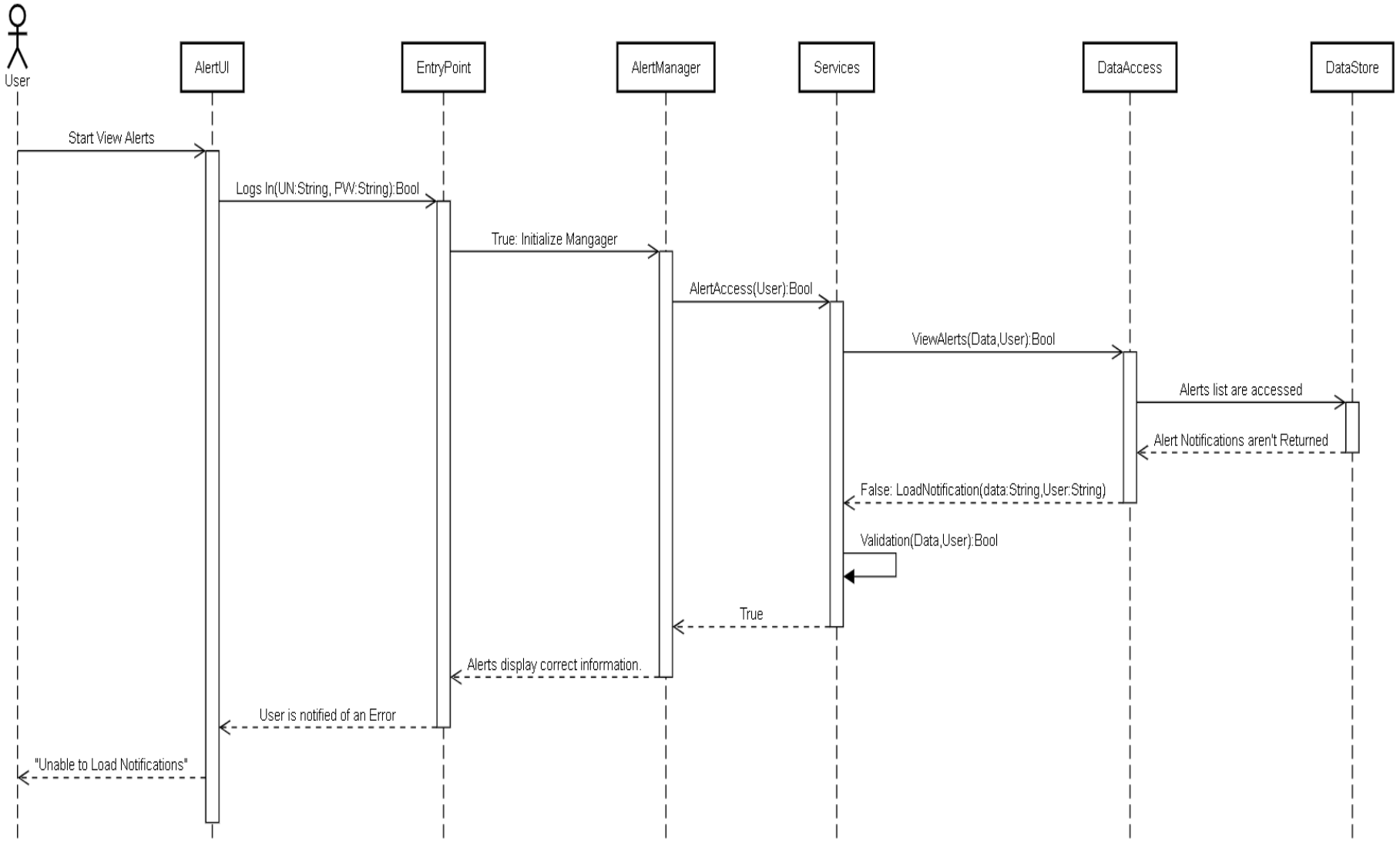
As a User, I want my pins to Alert other Users, but the alert never deploys.



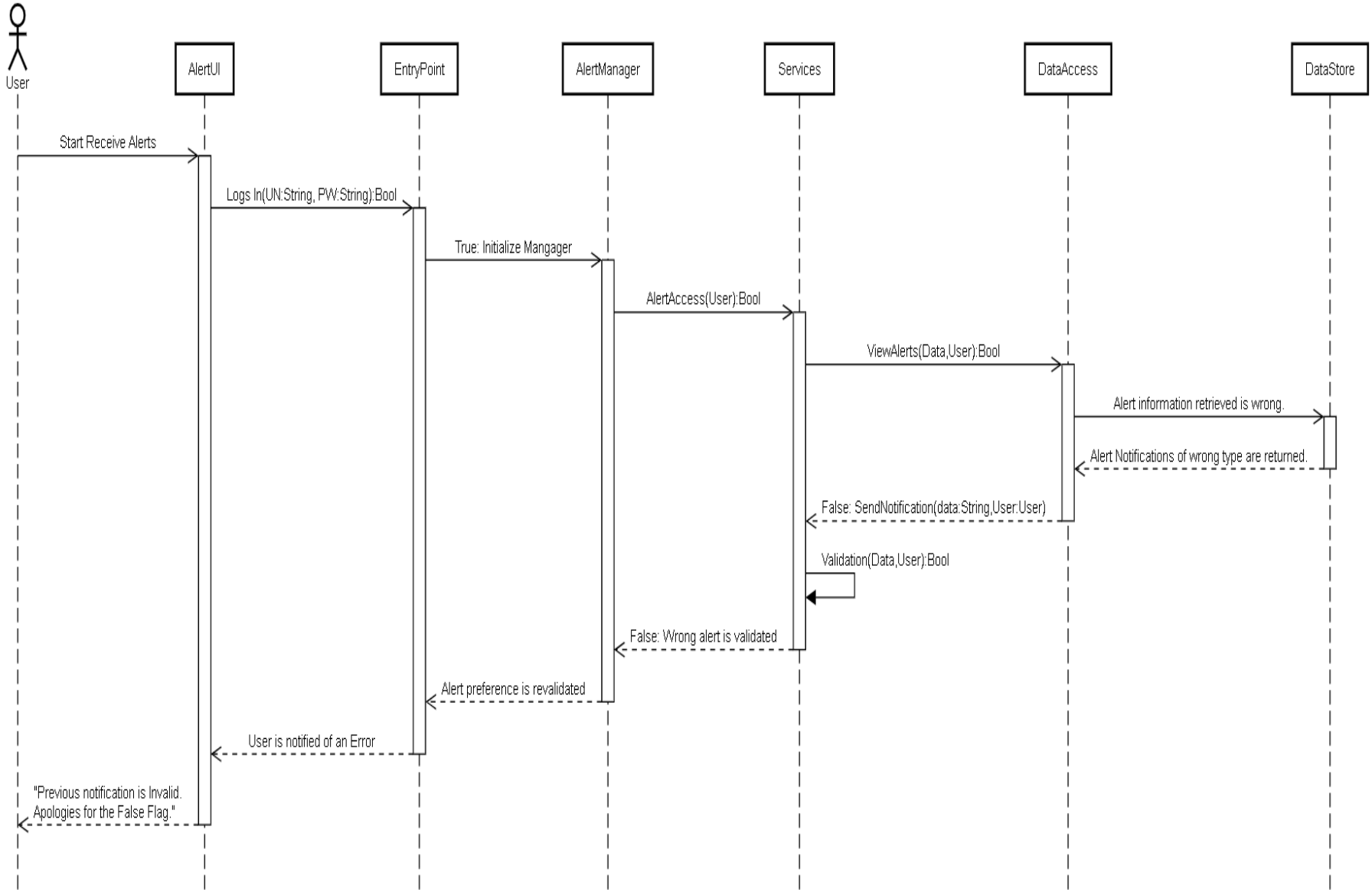
As a User, I want to have a list of notifications, but it does not show the correct notifications.



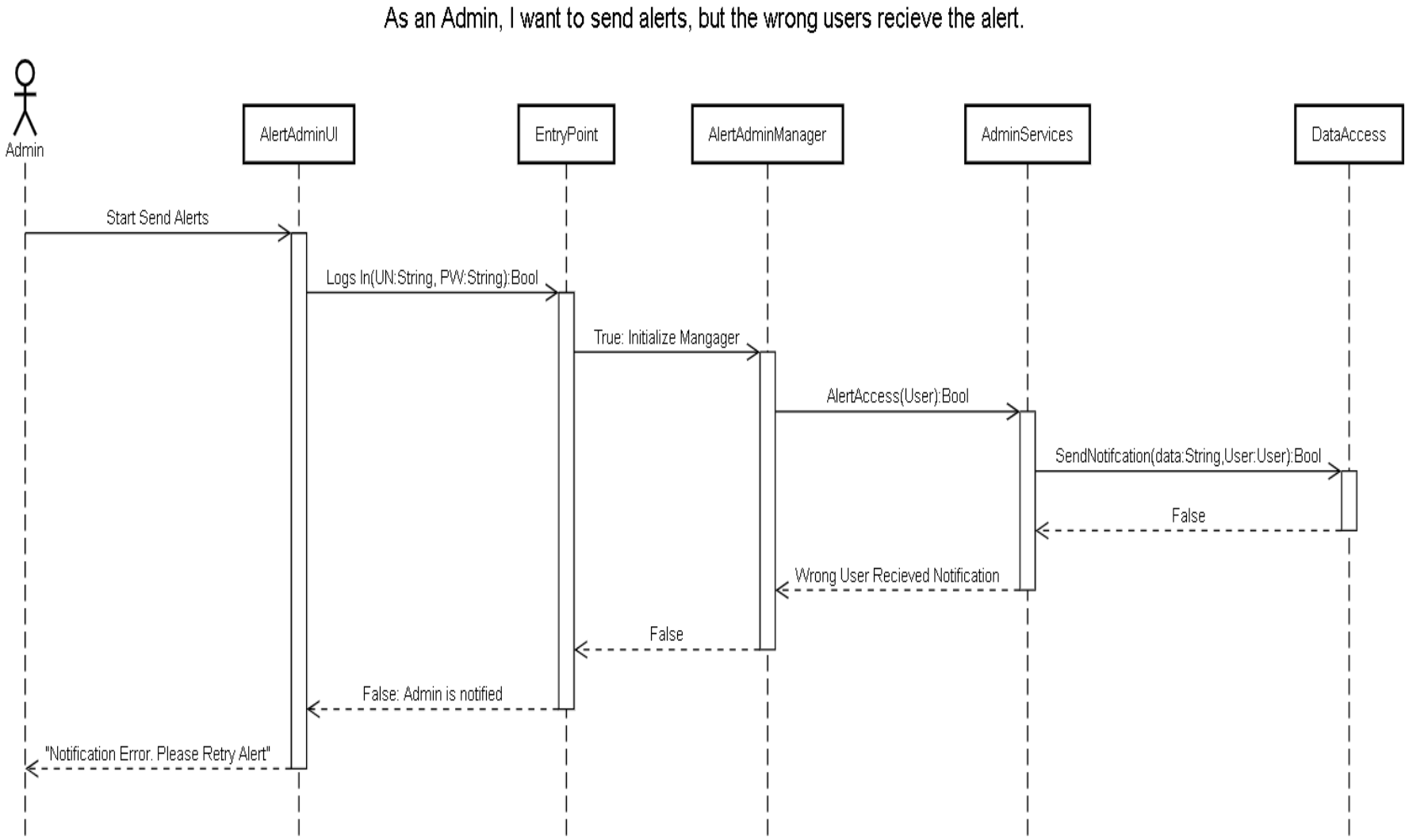
As a User, I want to view a list of notifications, but the list will not display.



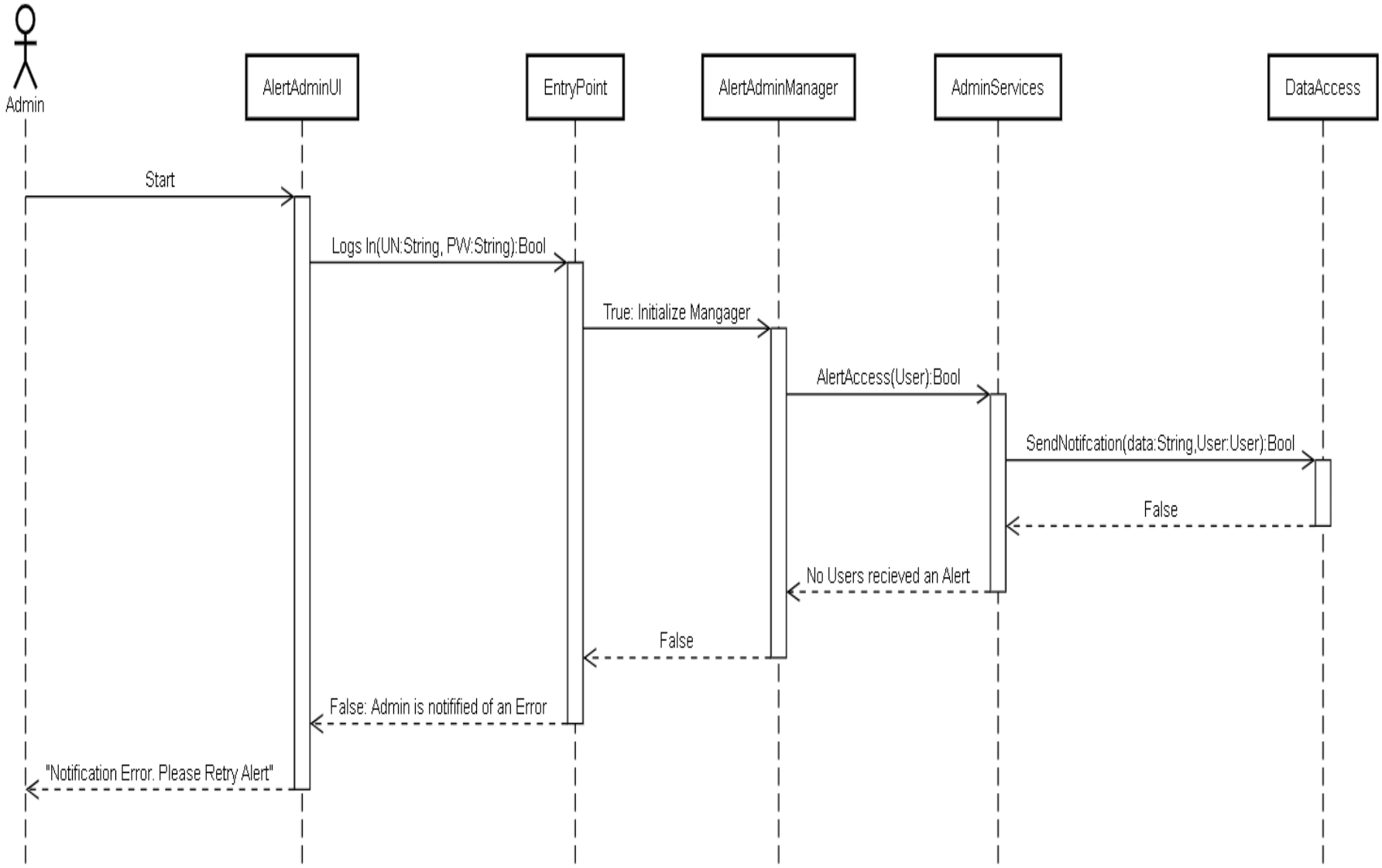
As a User, I want to recieve alerts, but I recieve alerts of the wrong type.



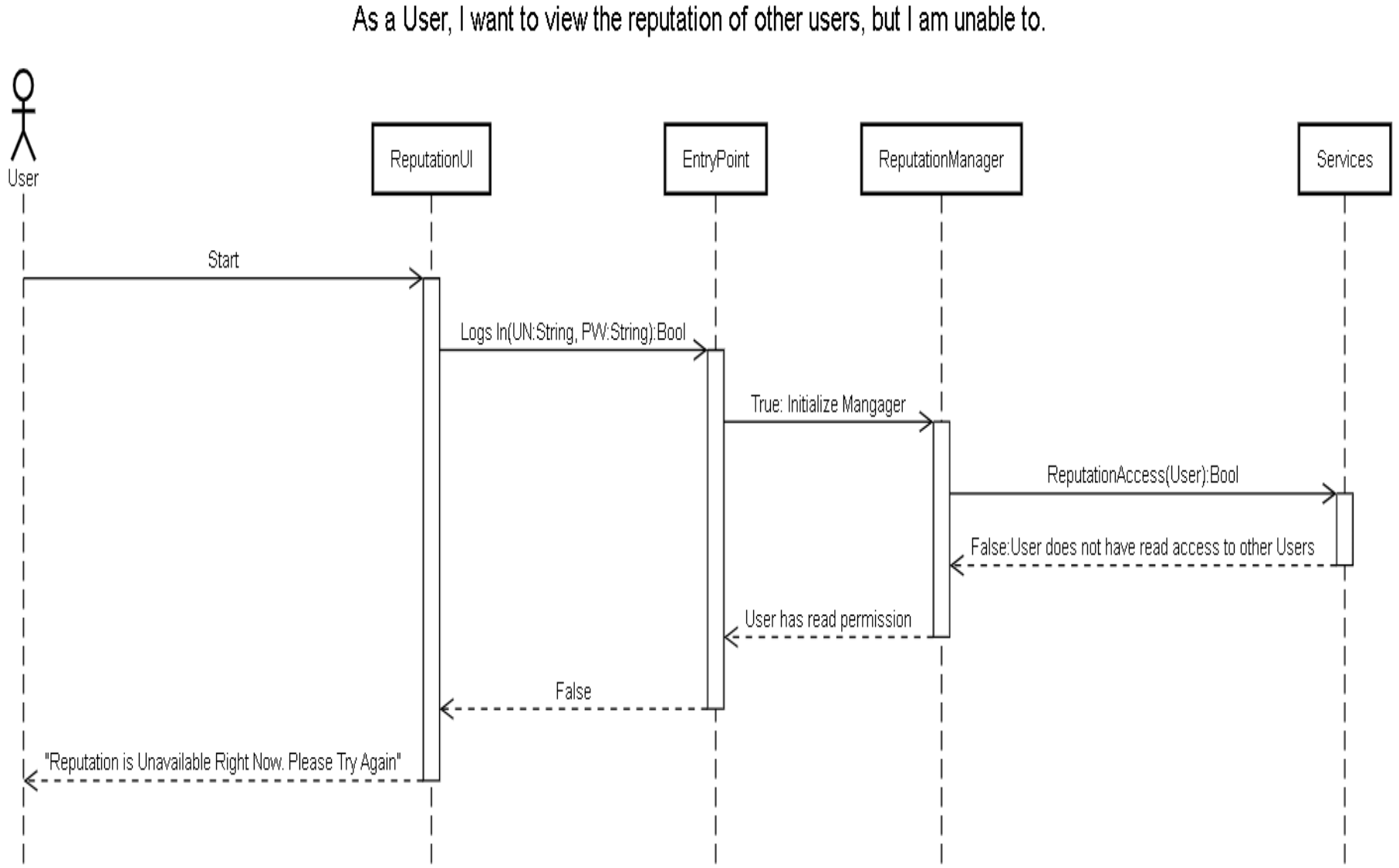
Alerts(Admin) Failure Conditions



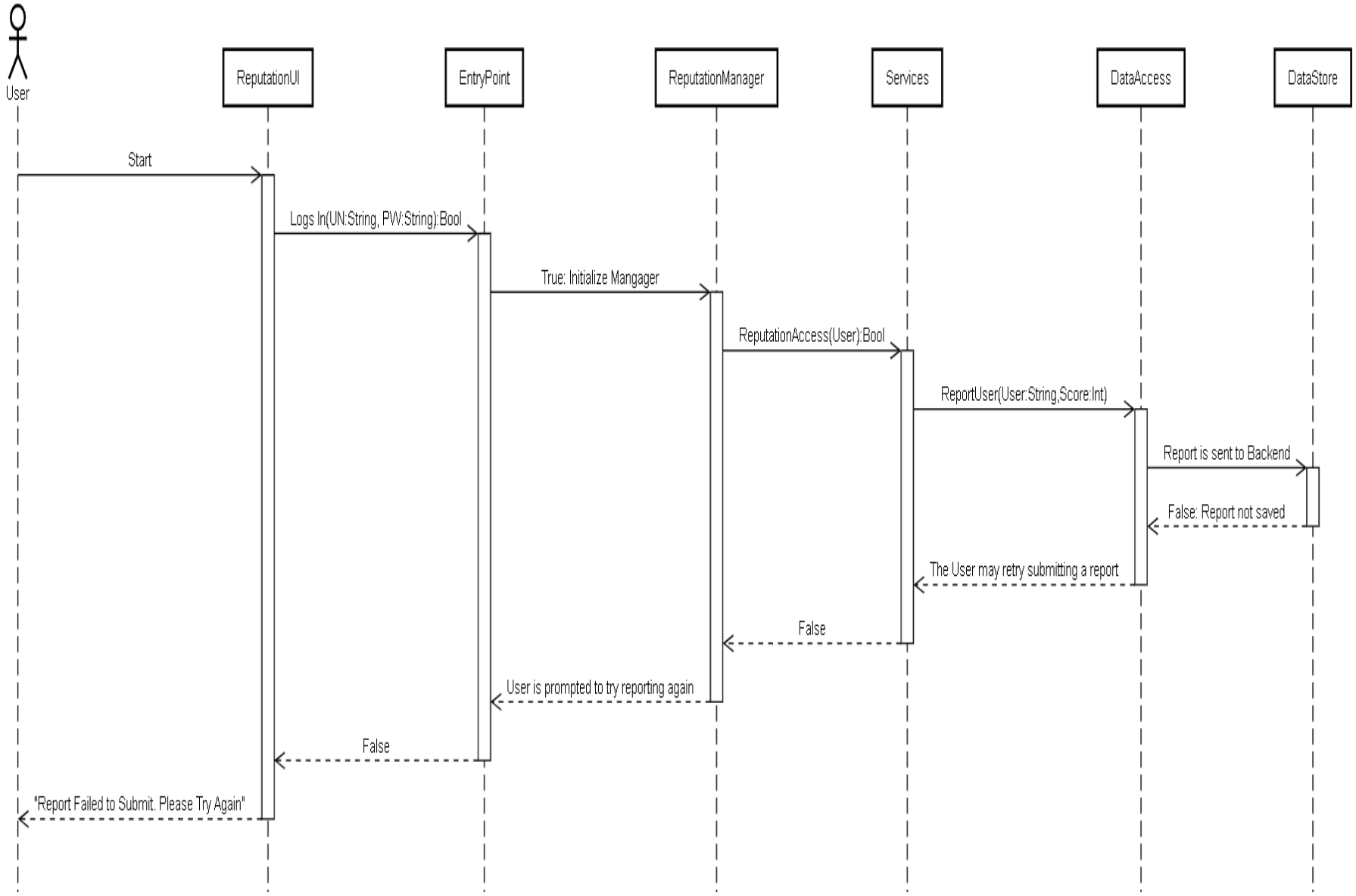
As an Admin, I want to send alerts, but users do not recieve the alert.



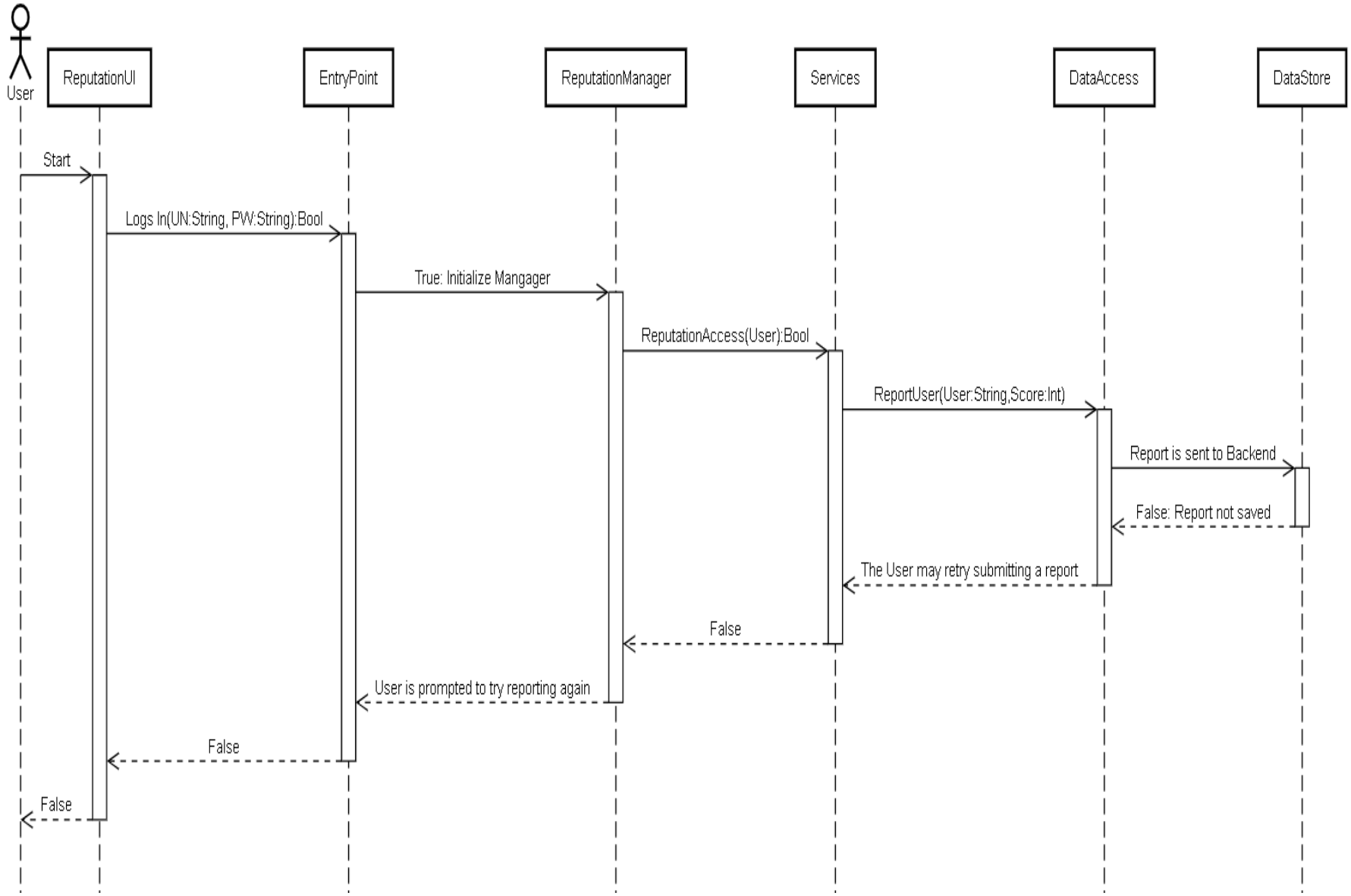
Reputation Failure Conditions



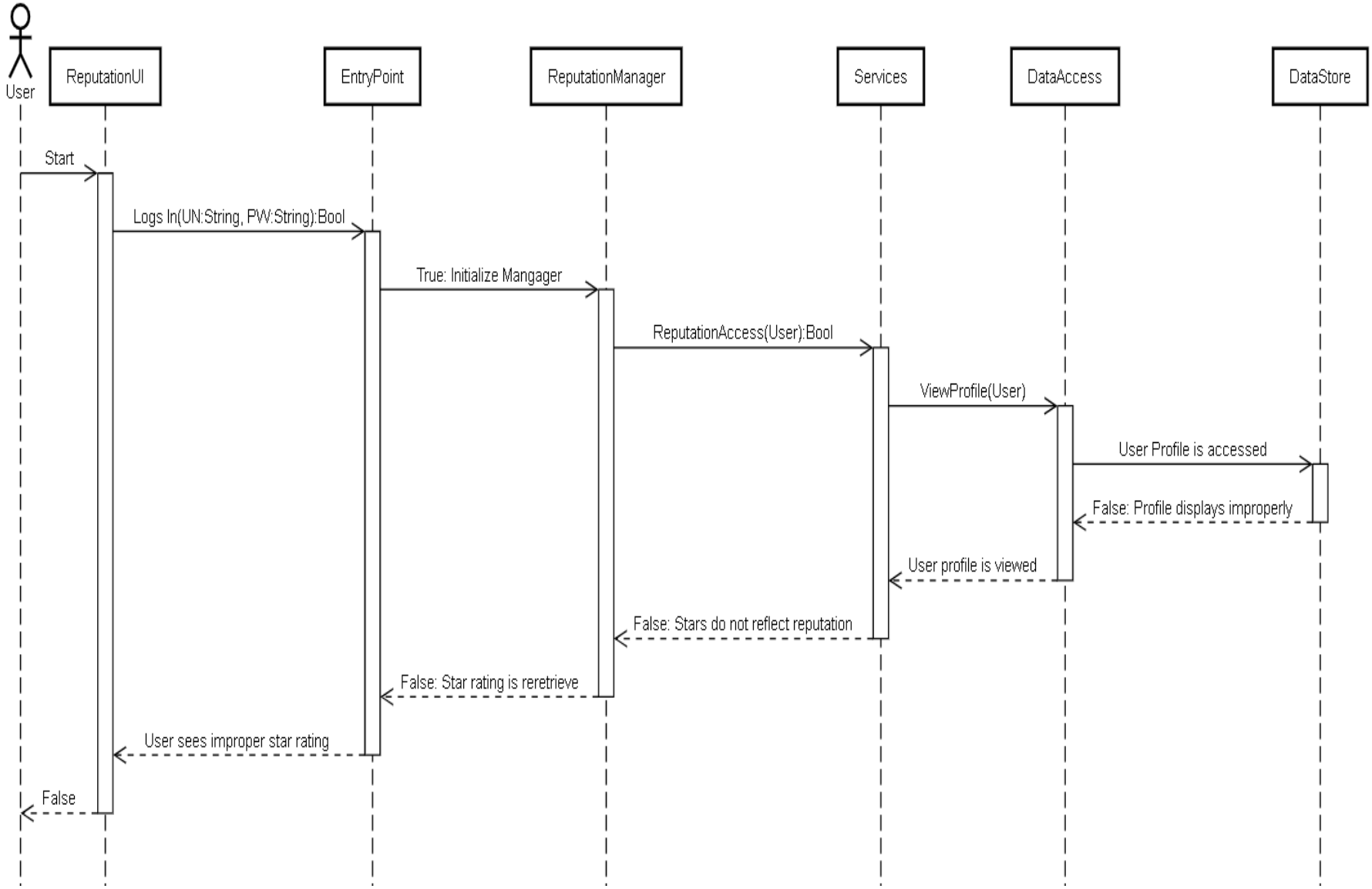
As a User, I want to report a User, but the report does not impact the User.



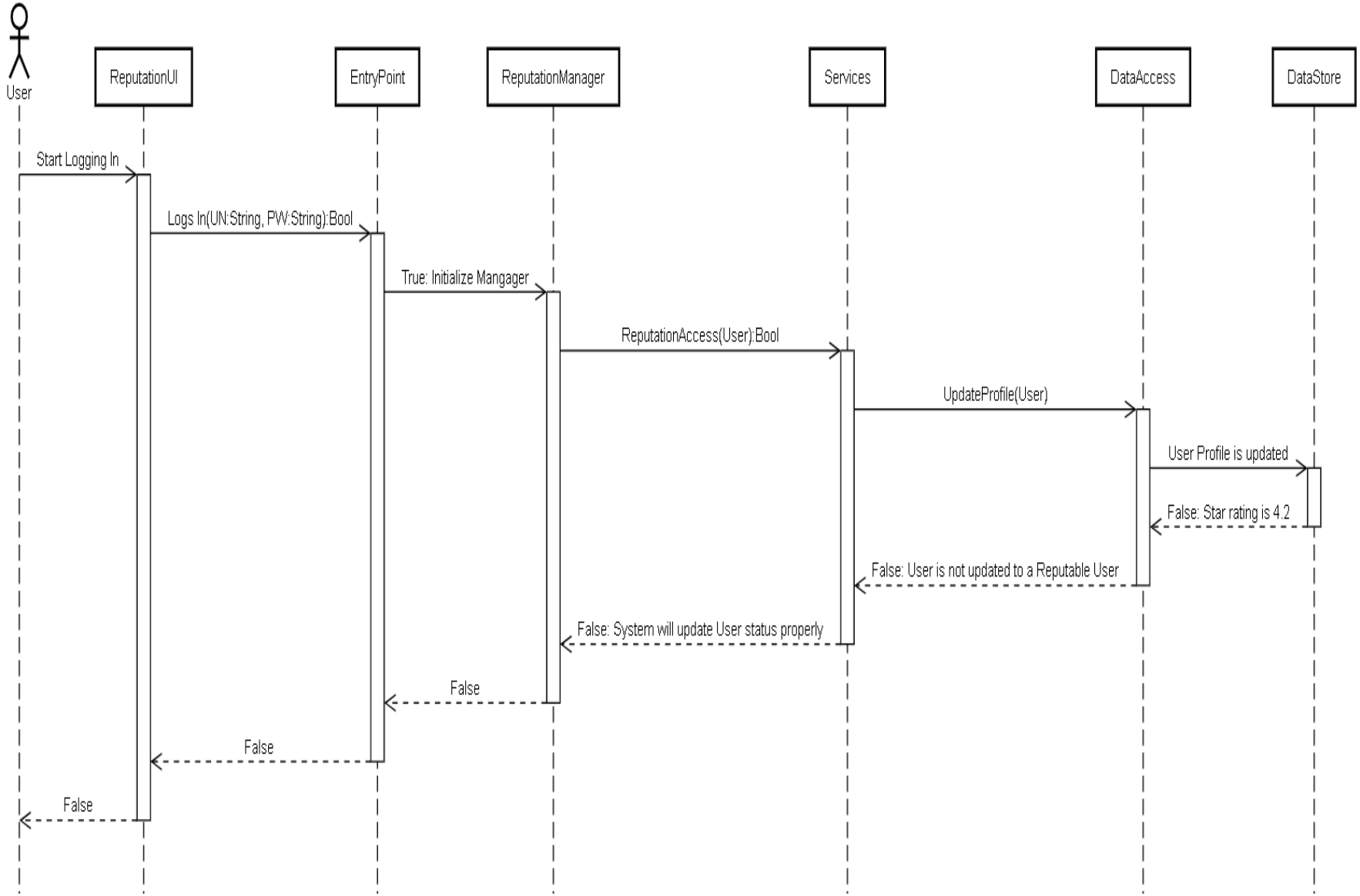
As a User, I want to report a User, but the report is not stored in the backend.



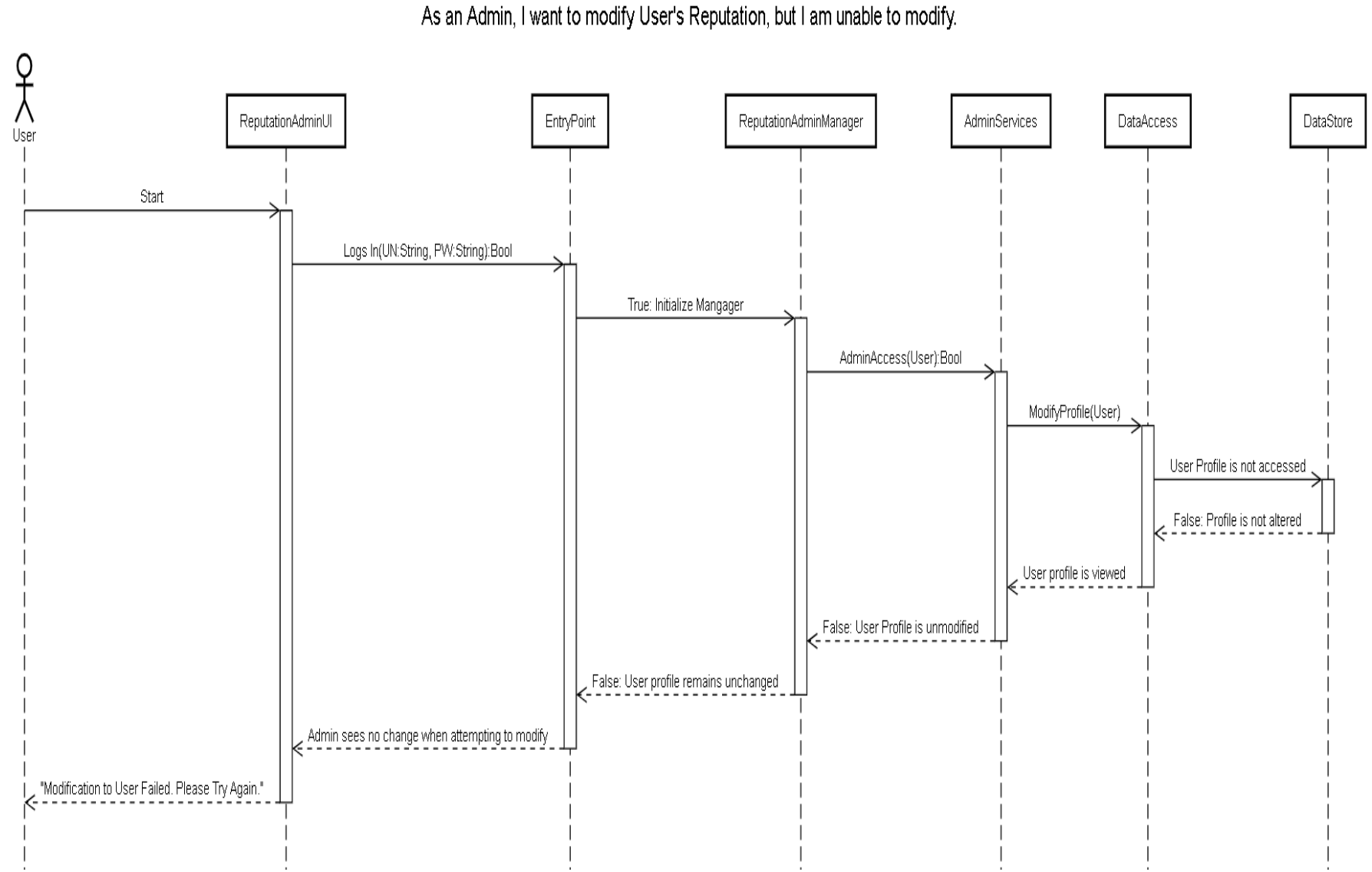
As a User, I want to view my reputation, but my reputation is not reflected properly.



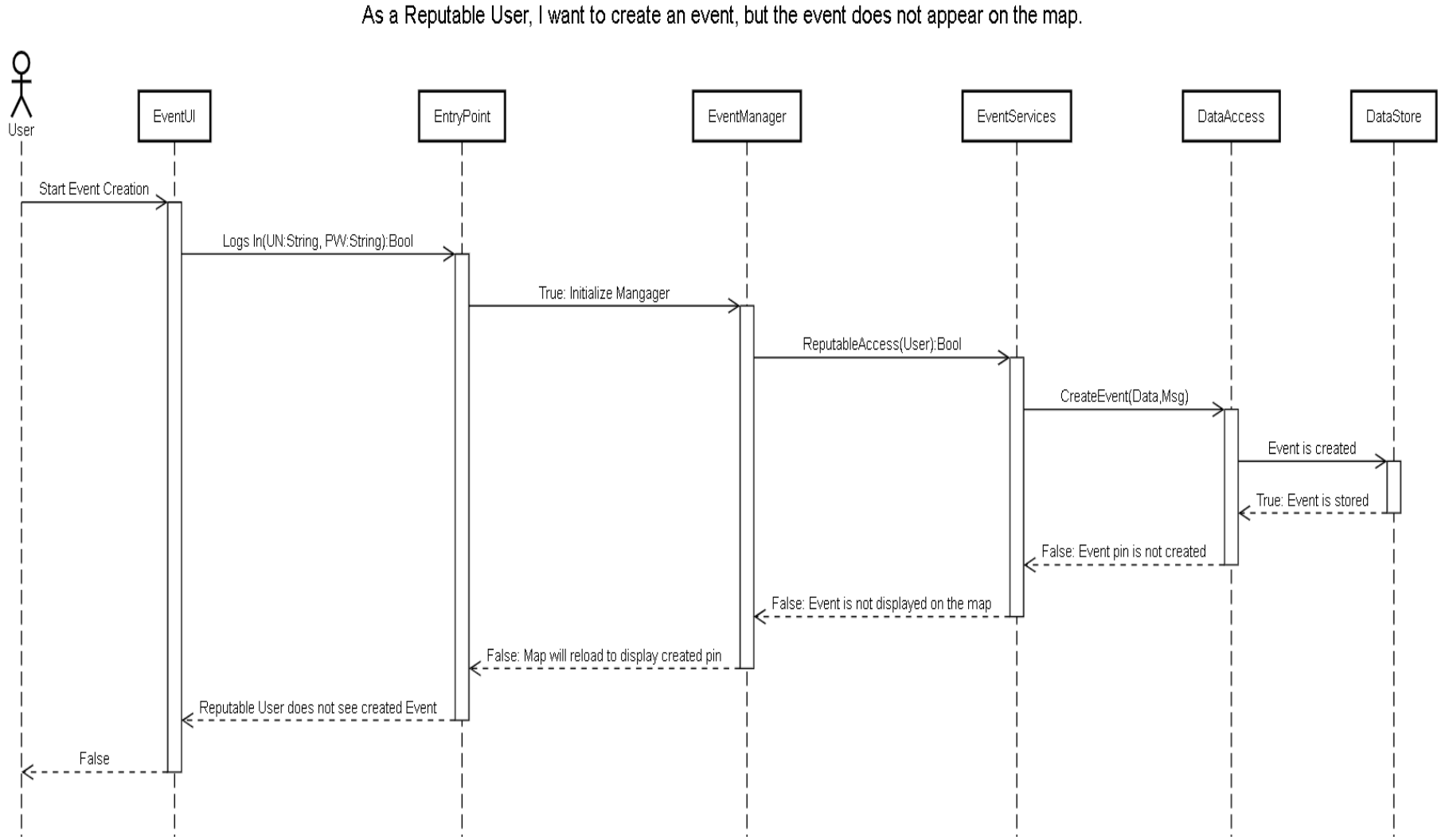
As a User, I want to become a Reputable User, but the system did not update my permissions when reaching 4.2 star rating.



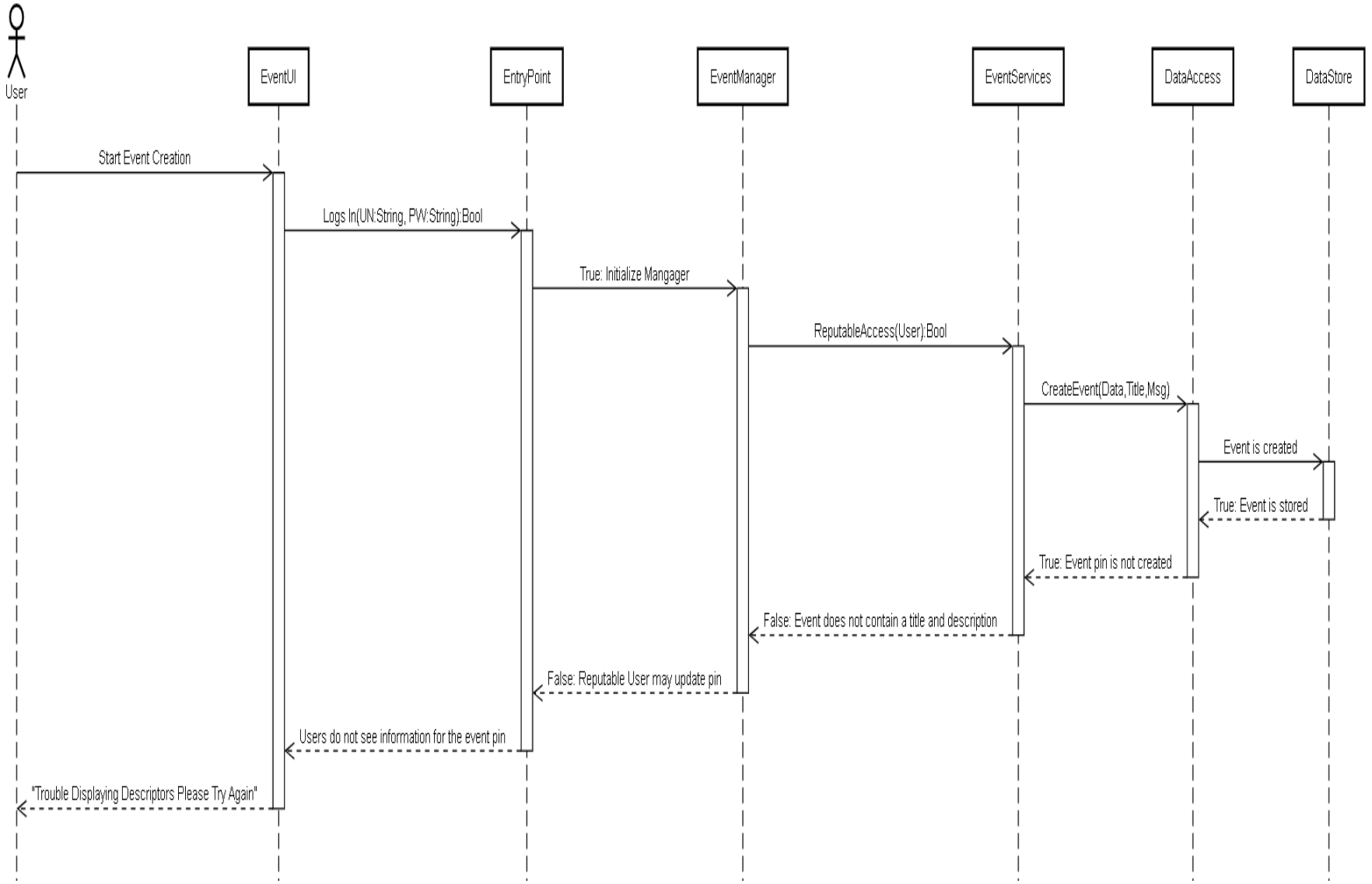
Reputation(Admin) Failure Conditions



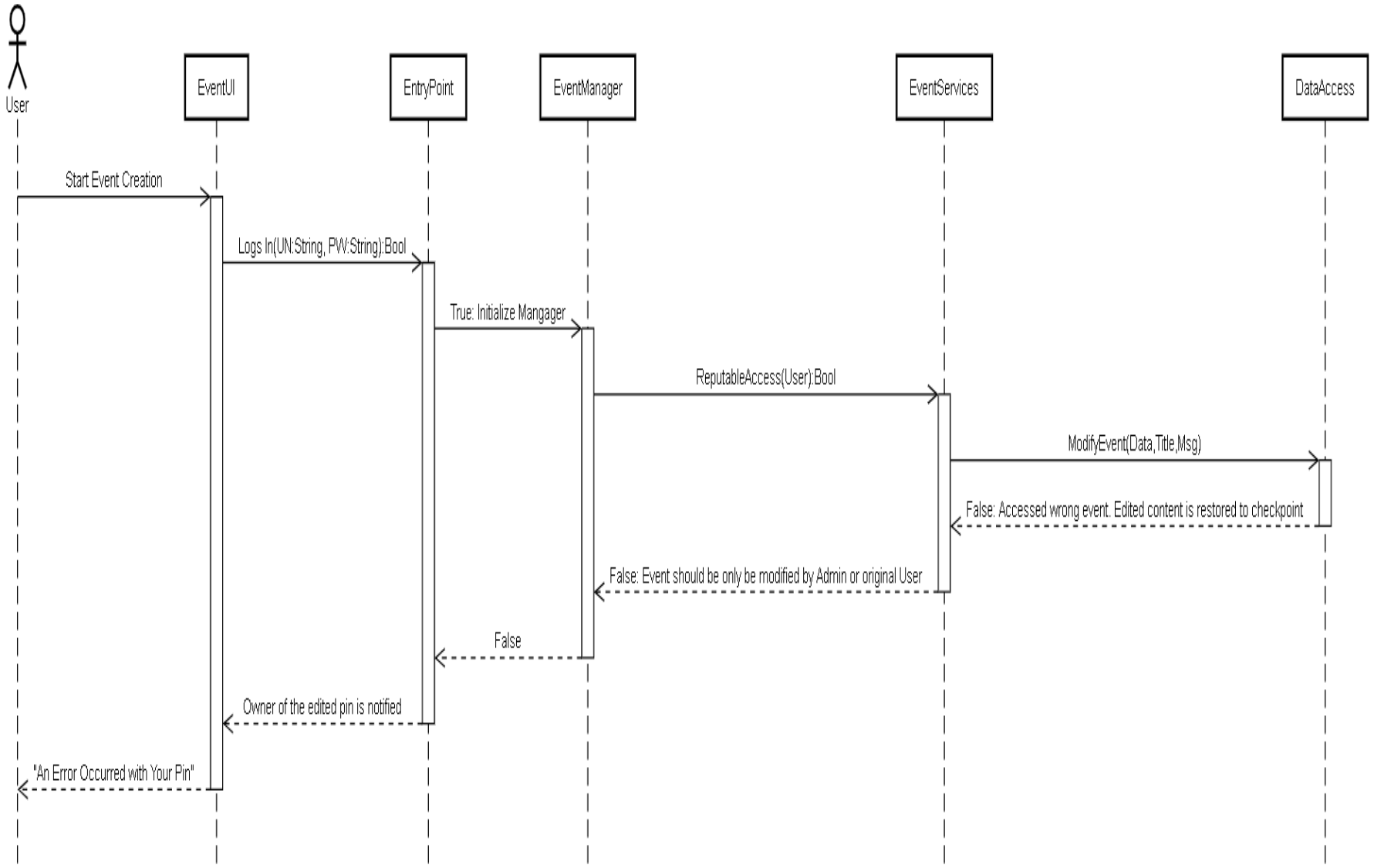
Event Creation Failure Conditions



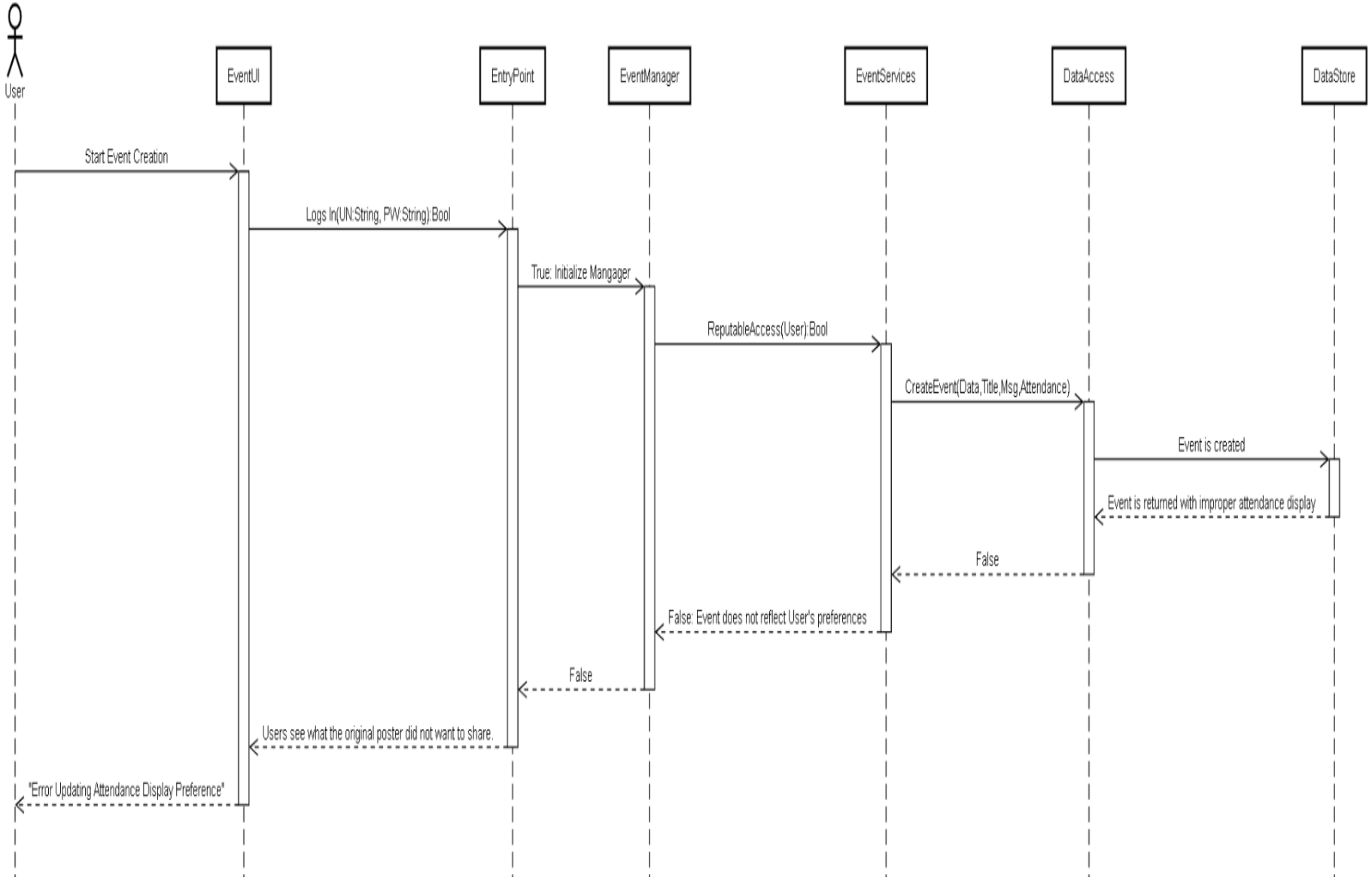
As a Reputable User, I want to create an event, but the event does not contain a title or description.



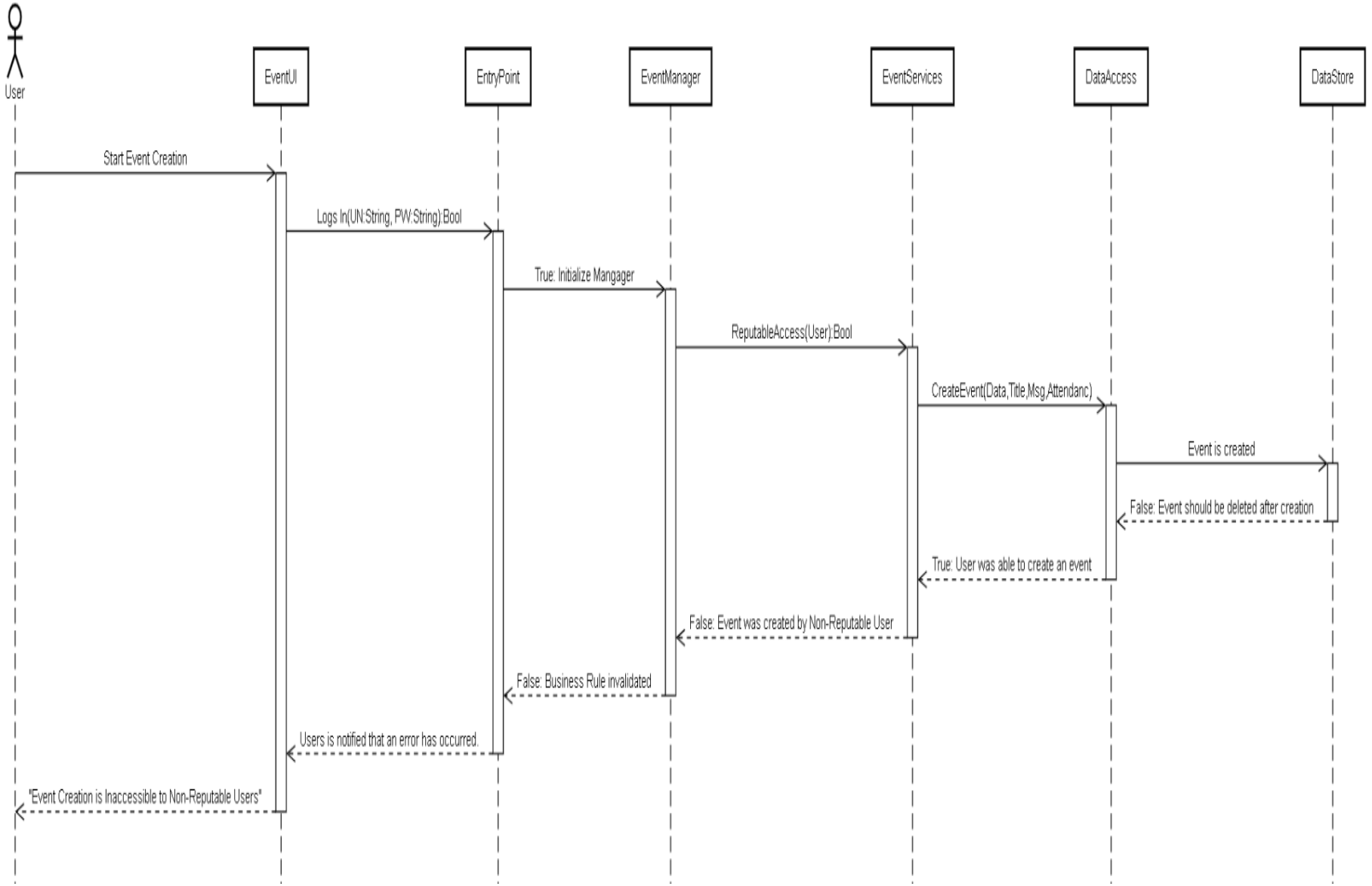
As a Reputable User, I want to edit an event, but I am modifying another User's event.



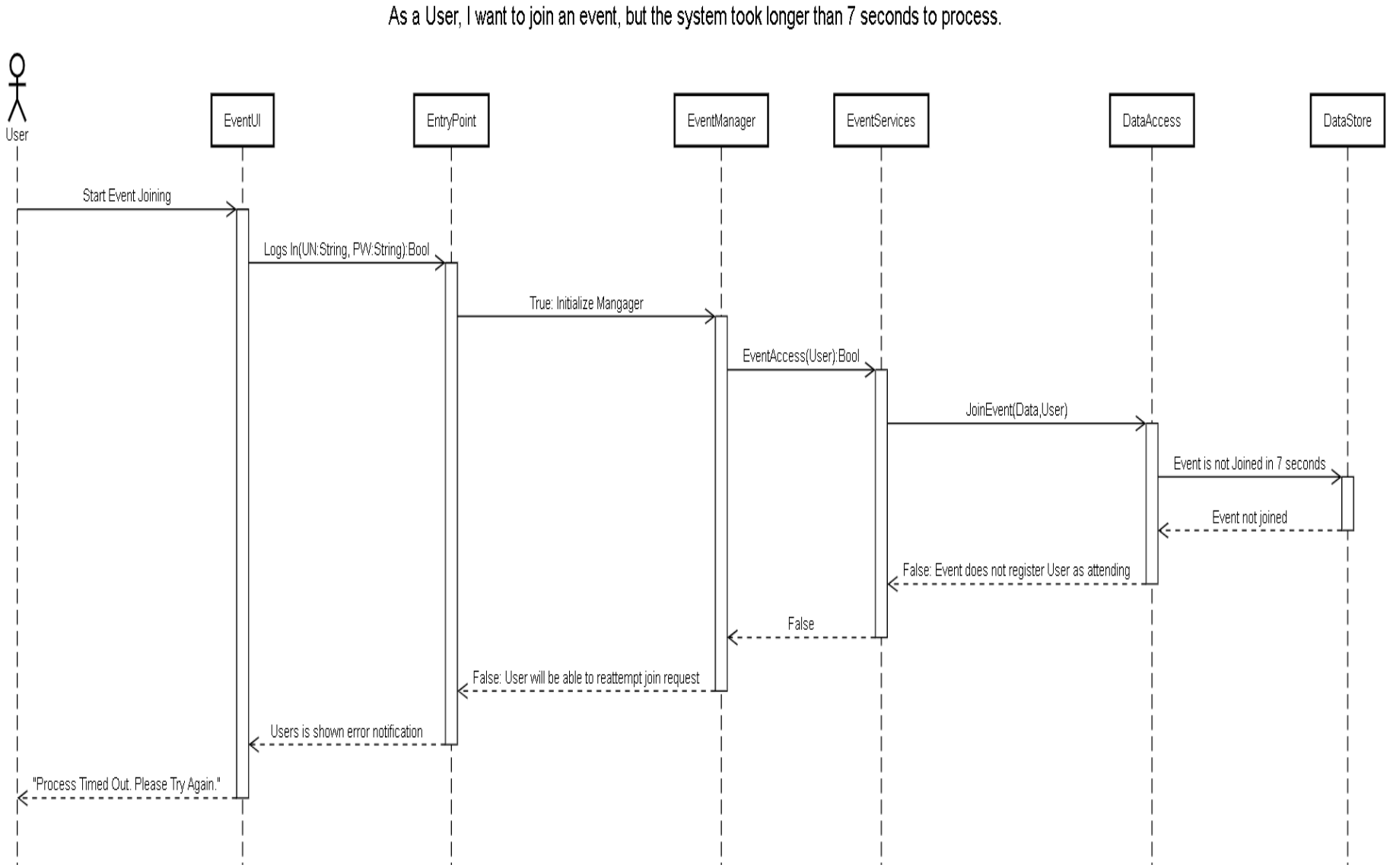
As a Reputable User, I want to create an event, but the event does not update Attendance preference.



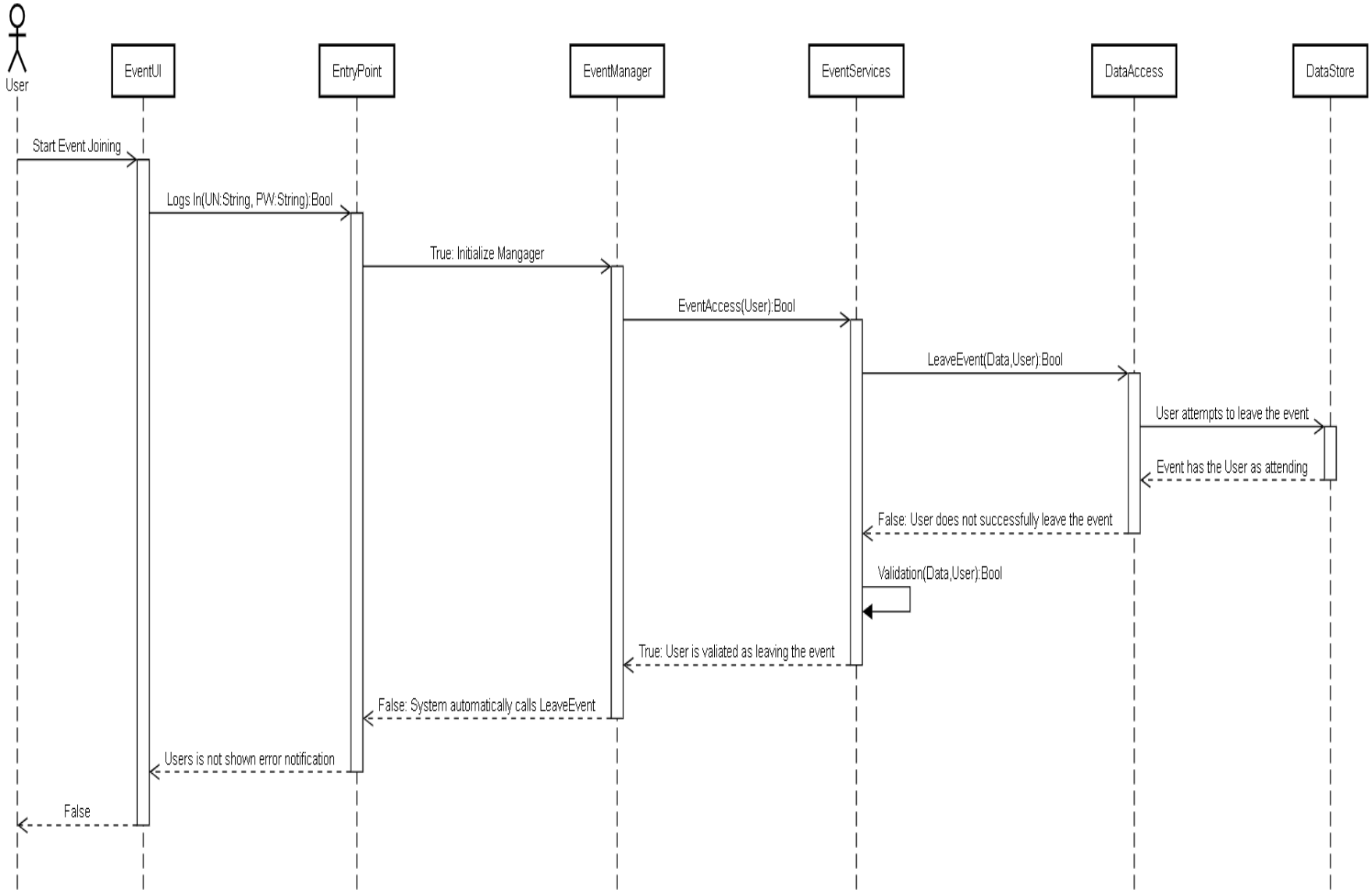
As a User, I have created an event, but I do not have permissions.



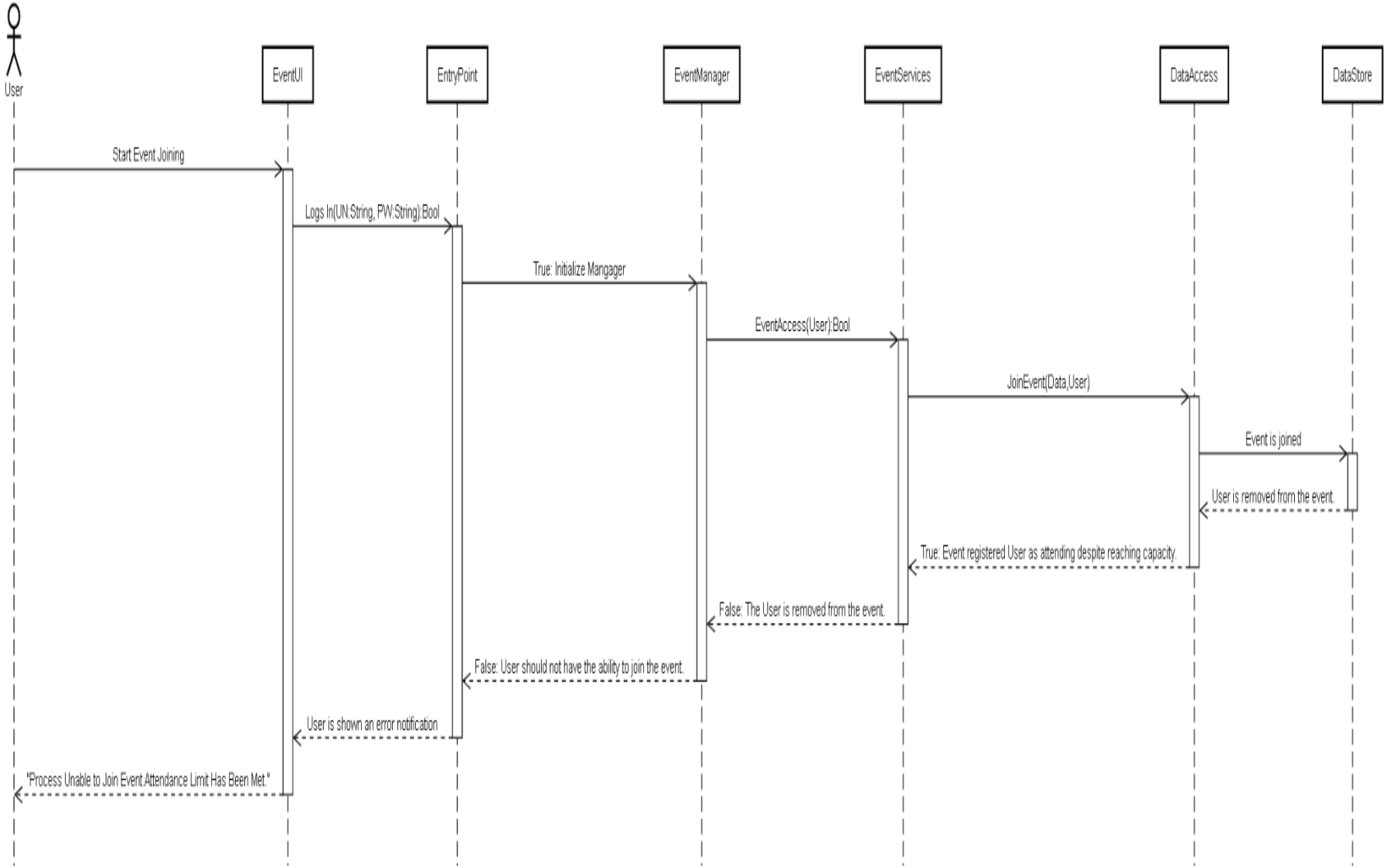
Event Joining Failure Conditions



As a User, I want to leave an event, but the system does not Log the interaction.

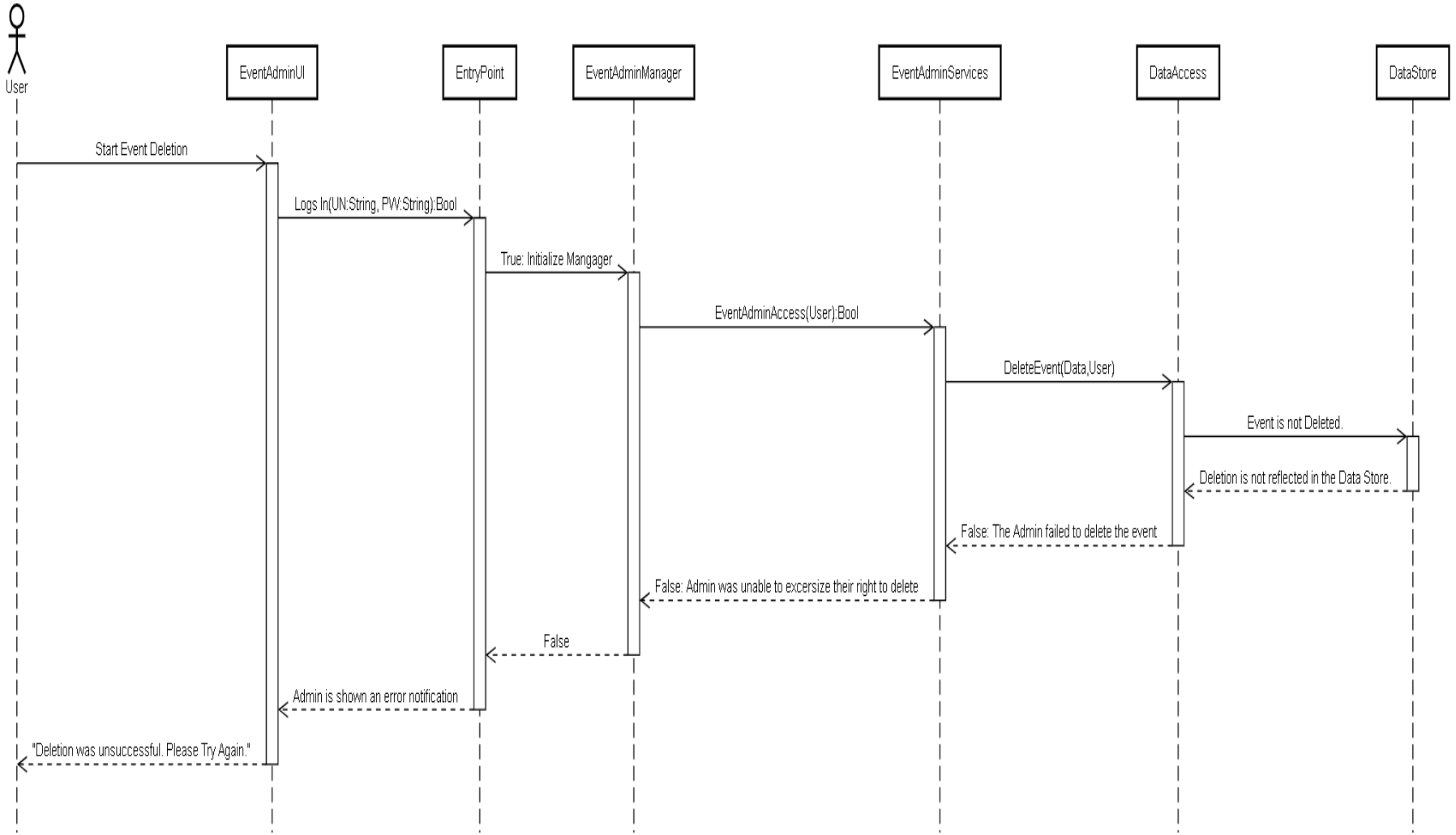


As a User, I want to join an event, but the system already has 100 Users attending.

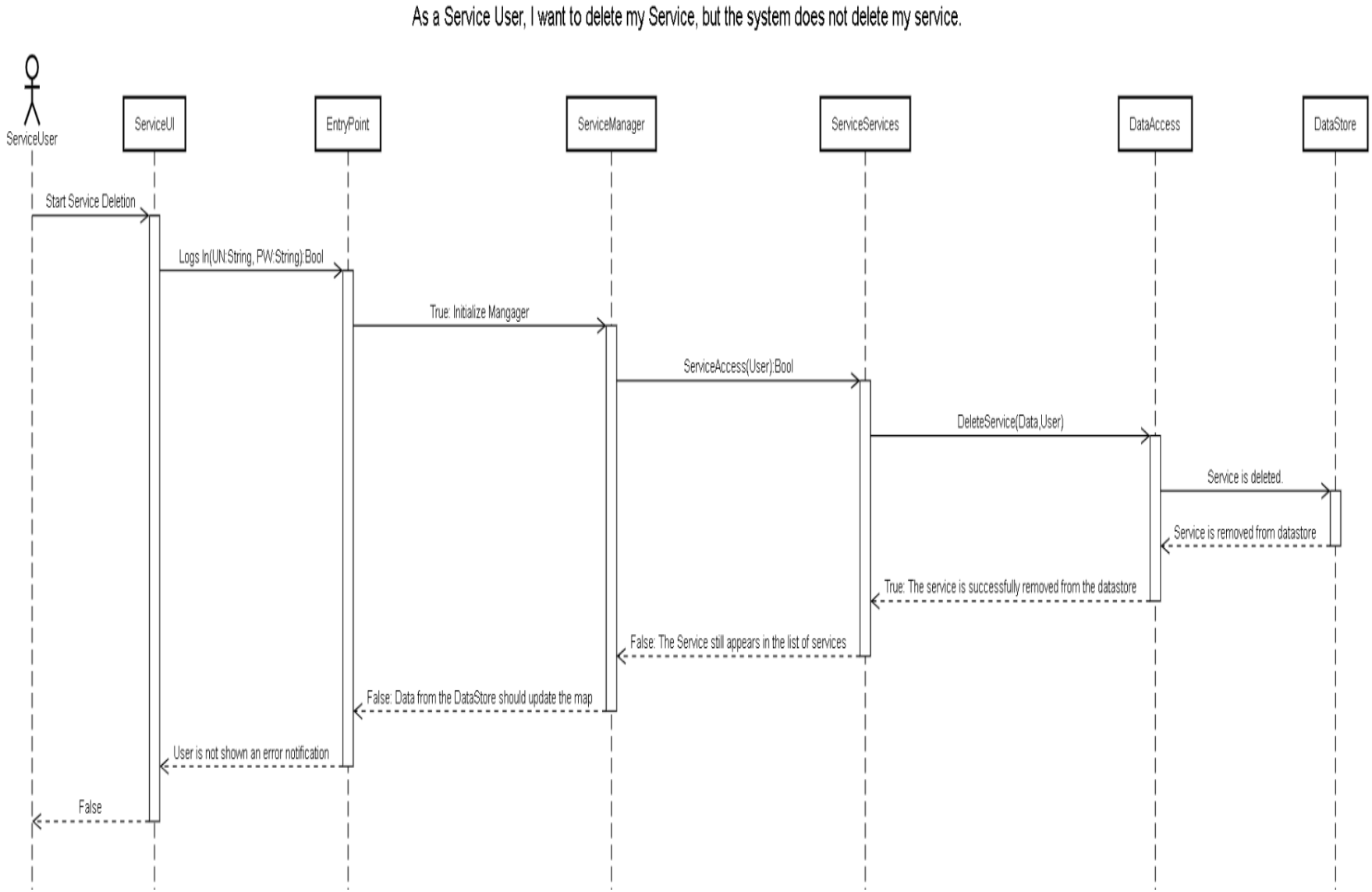


Events(Admin) Failure Conditions

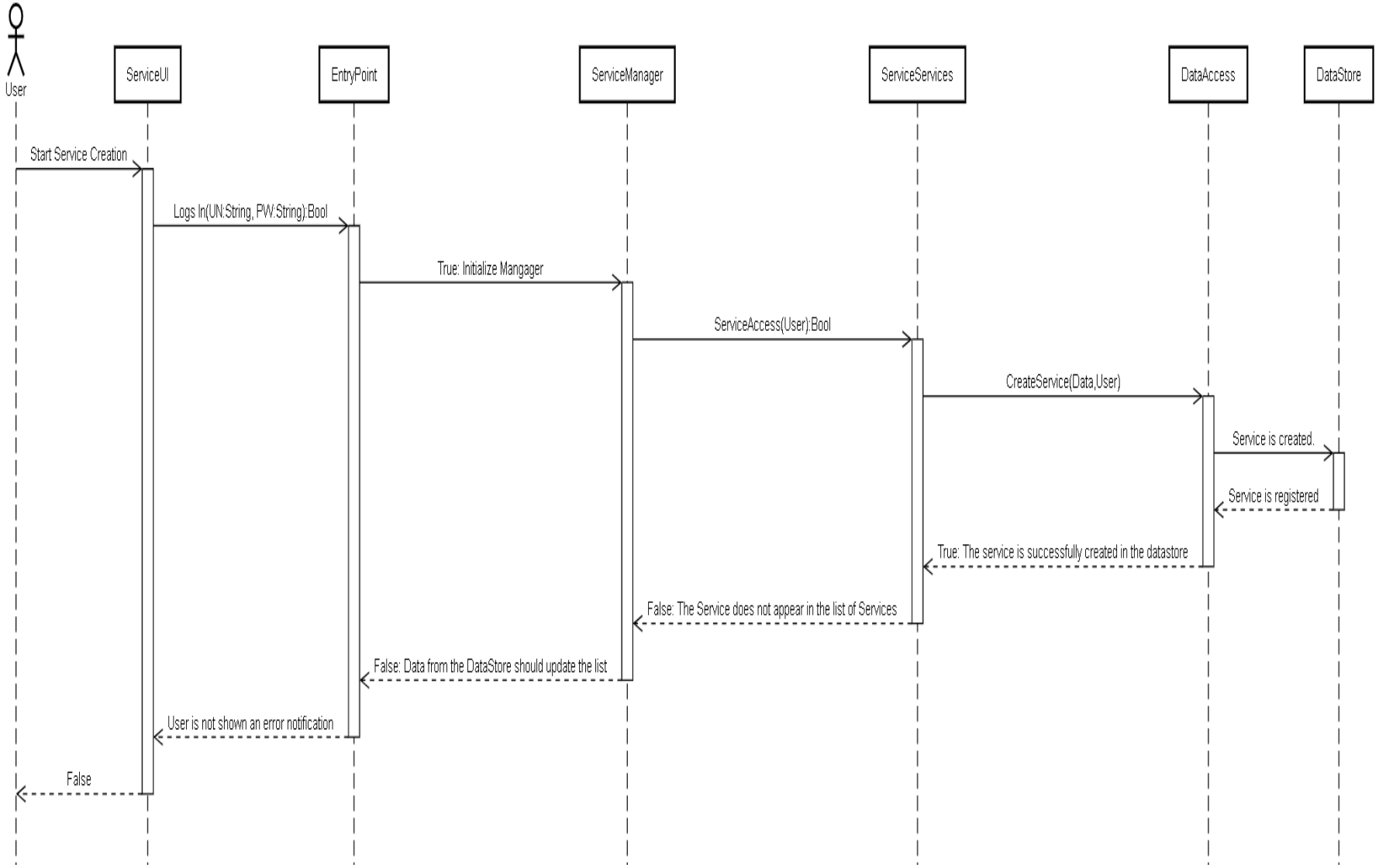
As an Admin, I want to remove events, but the system does not process the interaction.



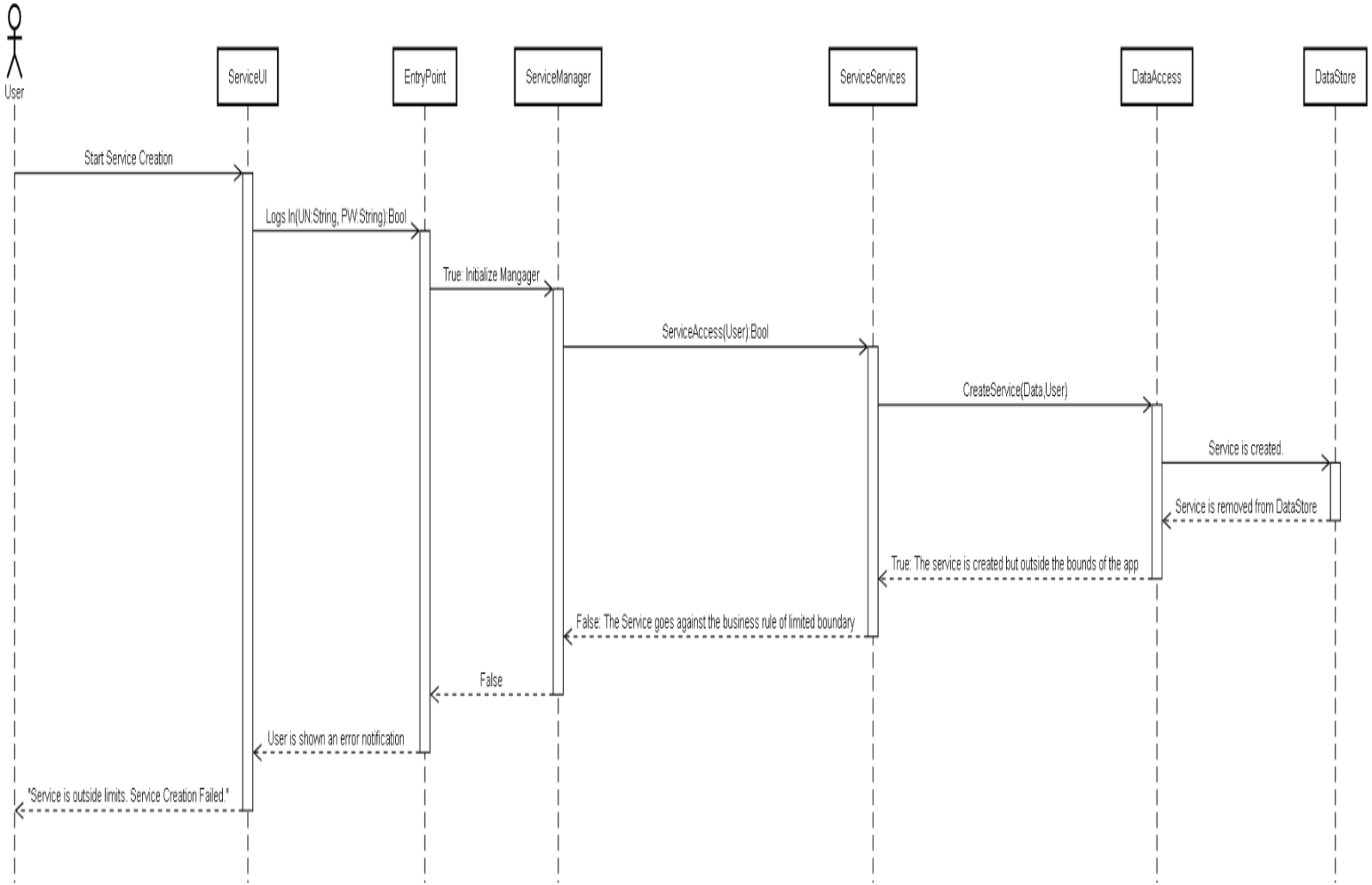
Service Creation Failure Conditions



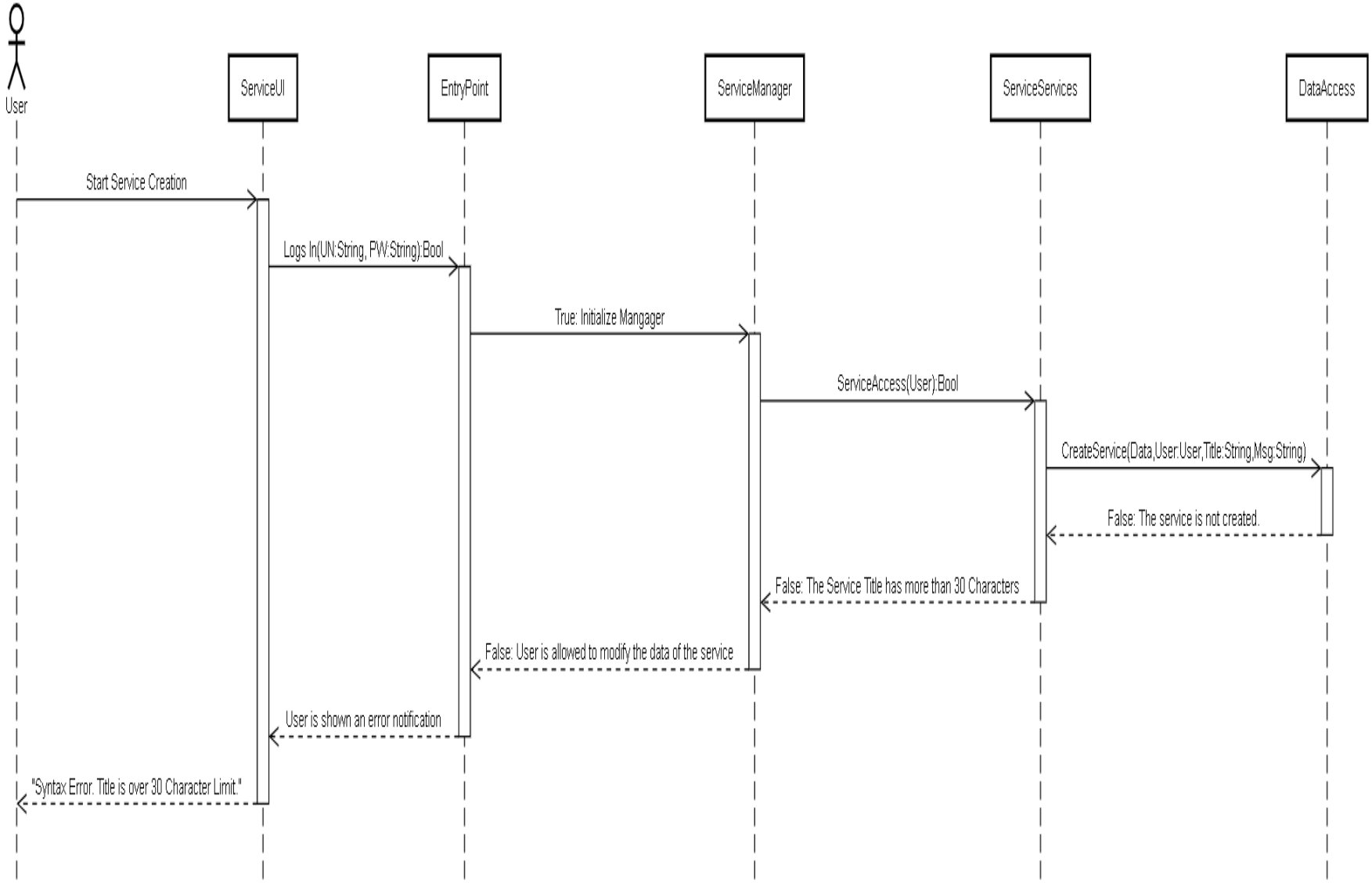
As a User, I want to add my Service, but the Service does not appear in the list of Services.



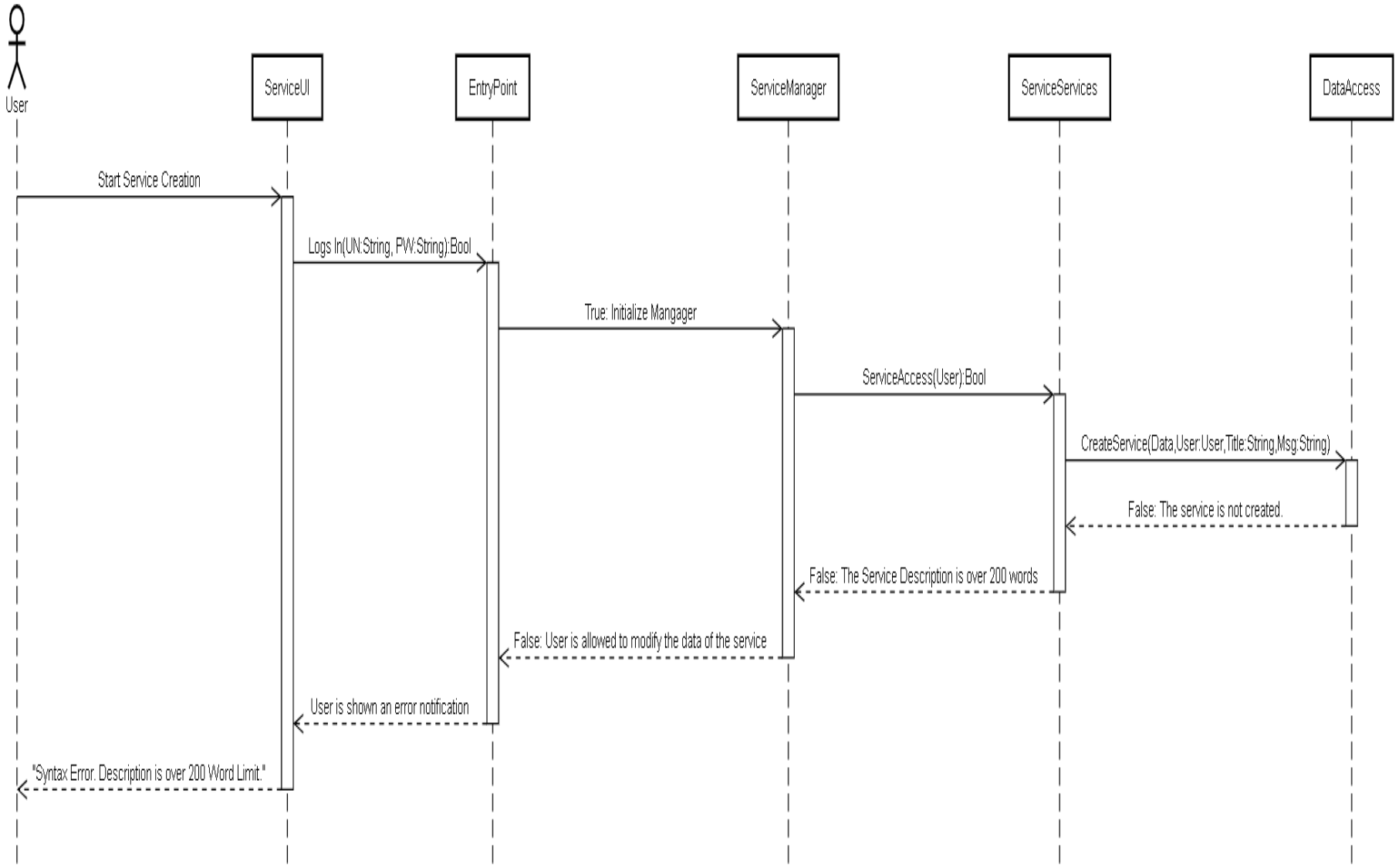
As a User, I want to add my Service, but the Service exists outside of California.



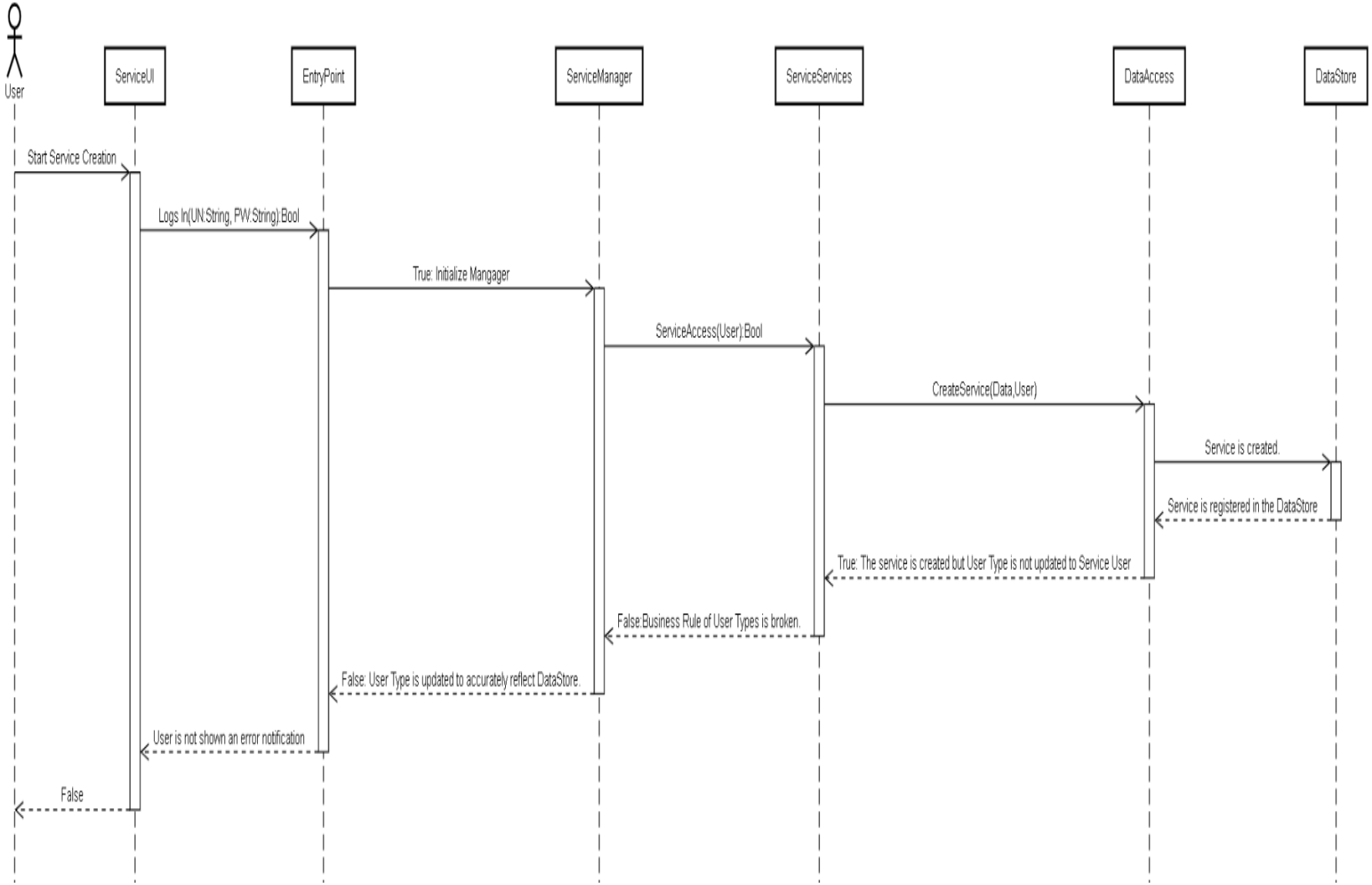
As a User, I want to add my Service, but the Service name is longer than 30 characters.



As a User, I want to add my Service, but the Service Description is over 200 Word Limit.

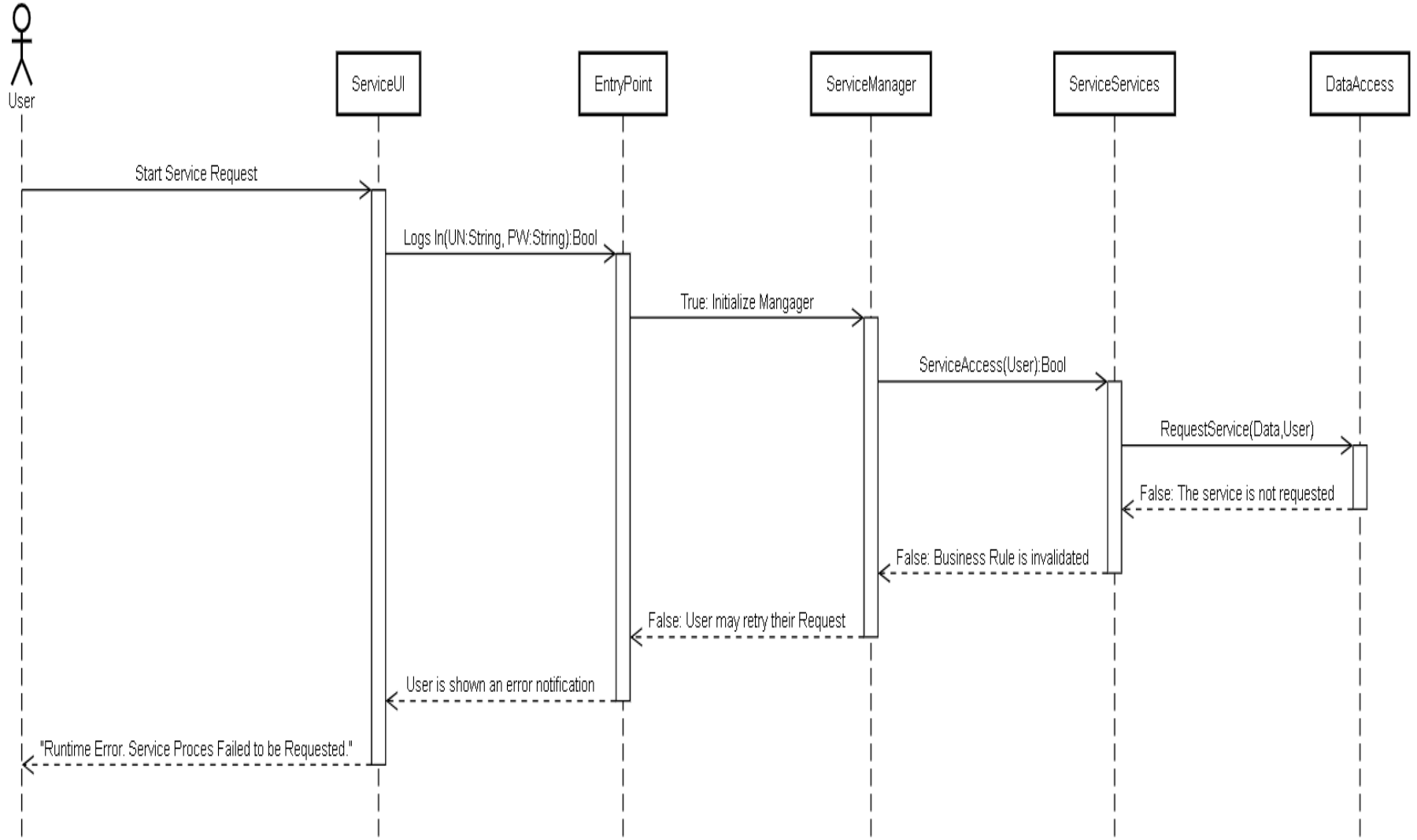


As a User, I want to add my Service, but the Service exists outside of California.

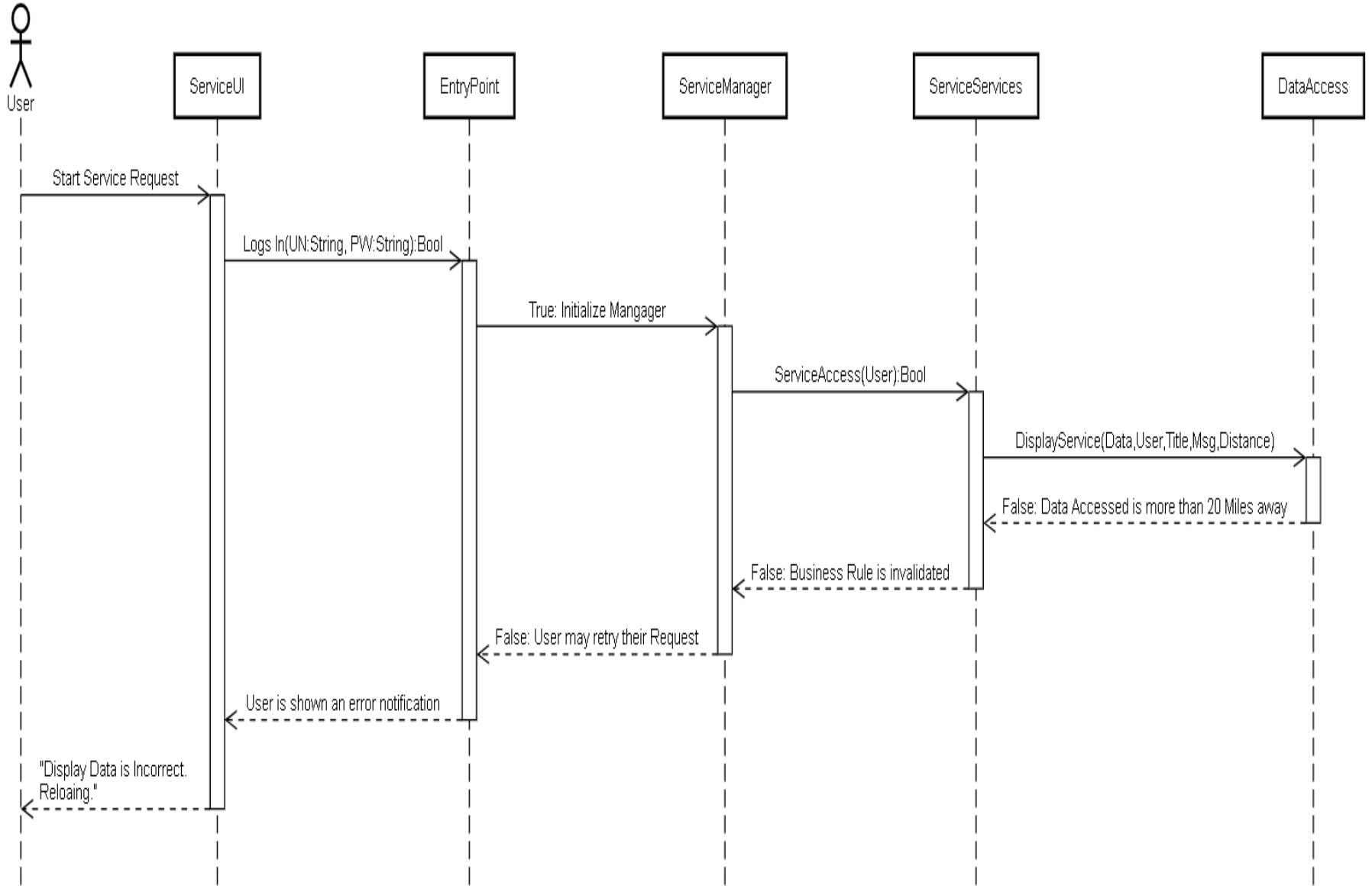


Service Requests Failure Conditions

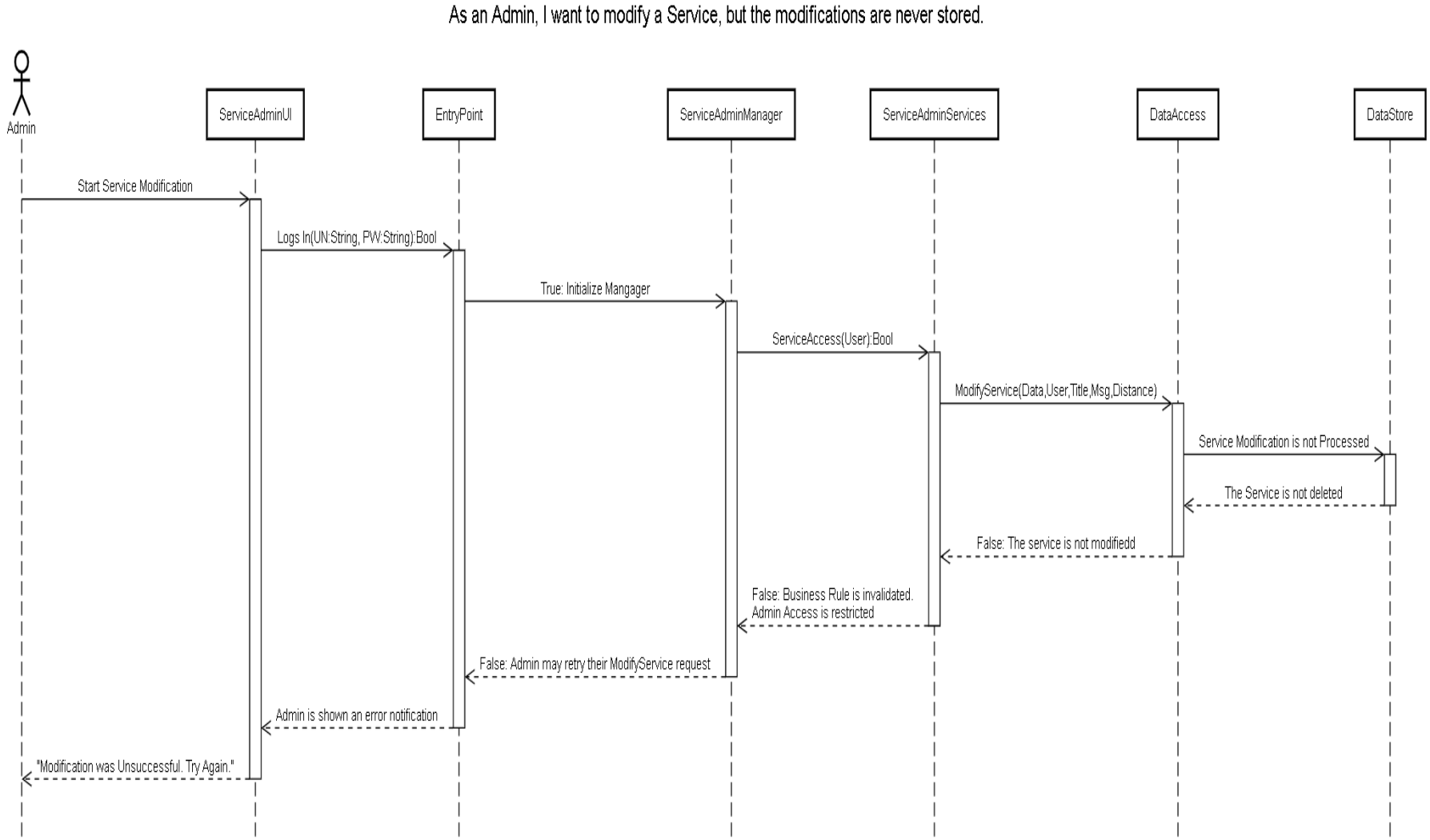
As a User, I want to request a Service, but the system fails to process the request.



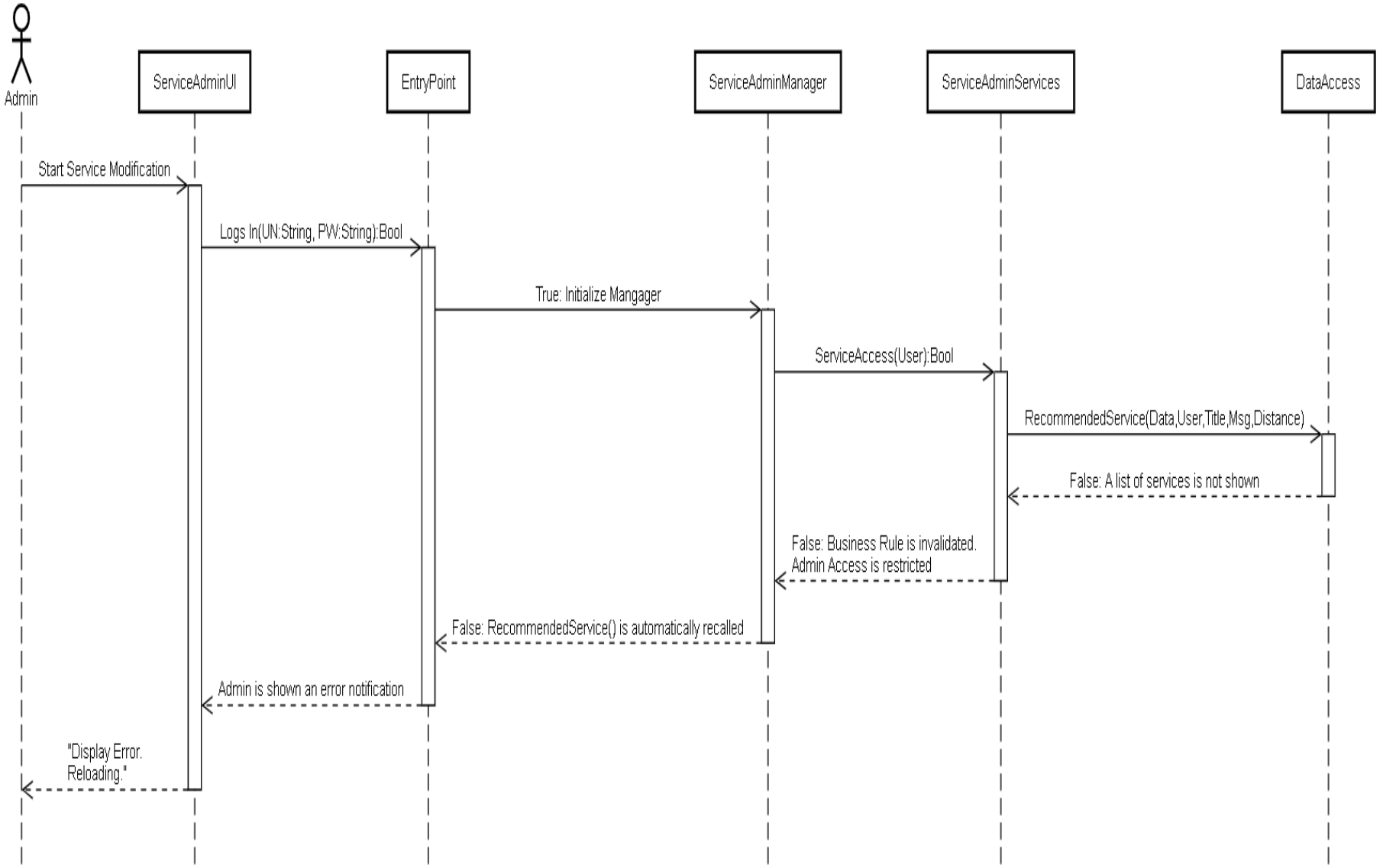
As a User, I want to request a Service, but Service shown is out of User's preferred range.



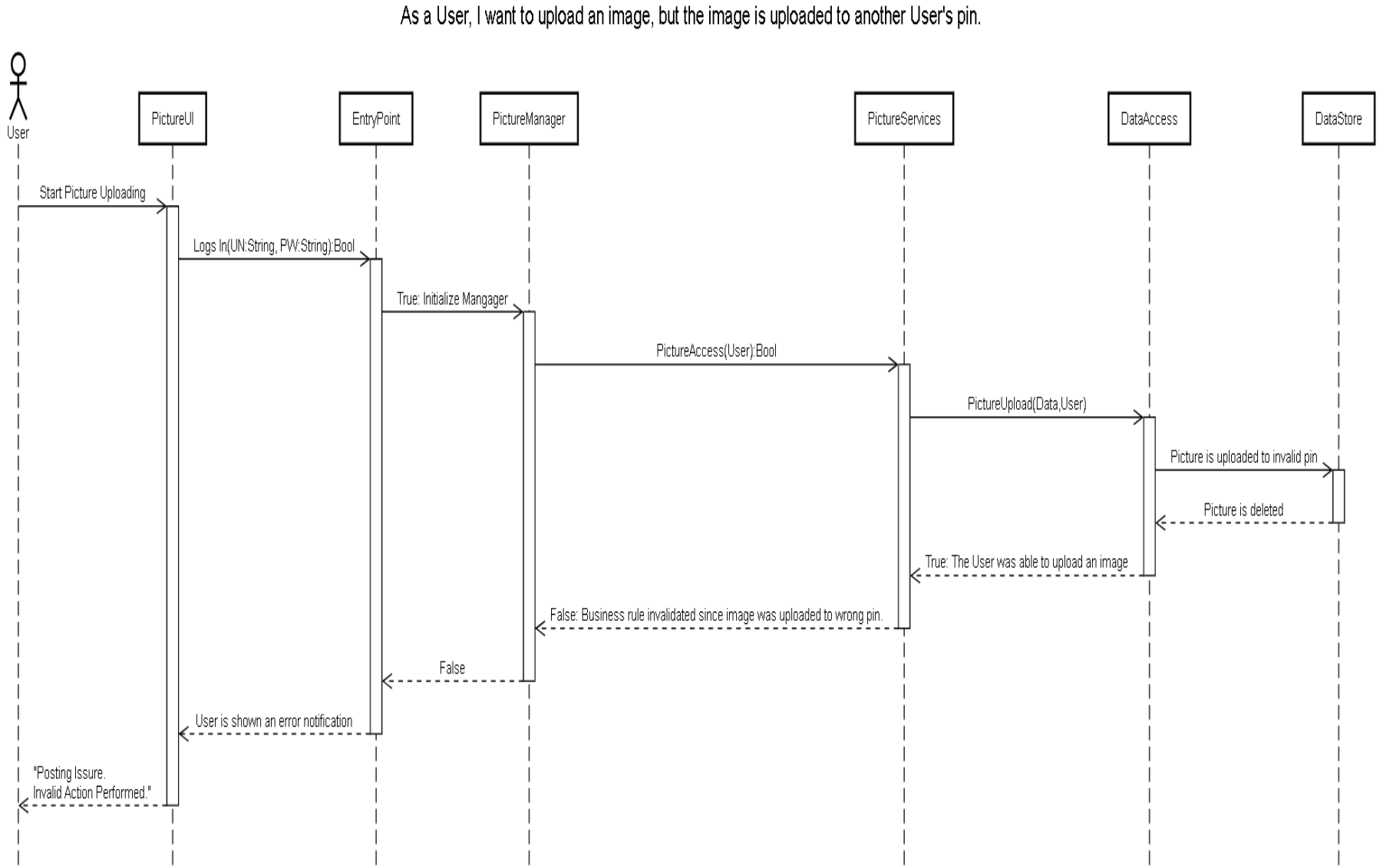
Service(Admin) Failure Conditions



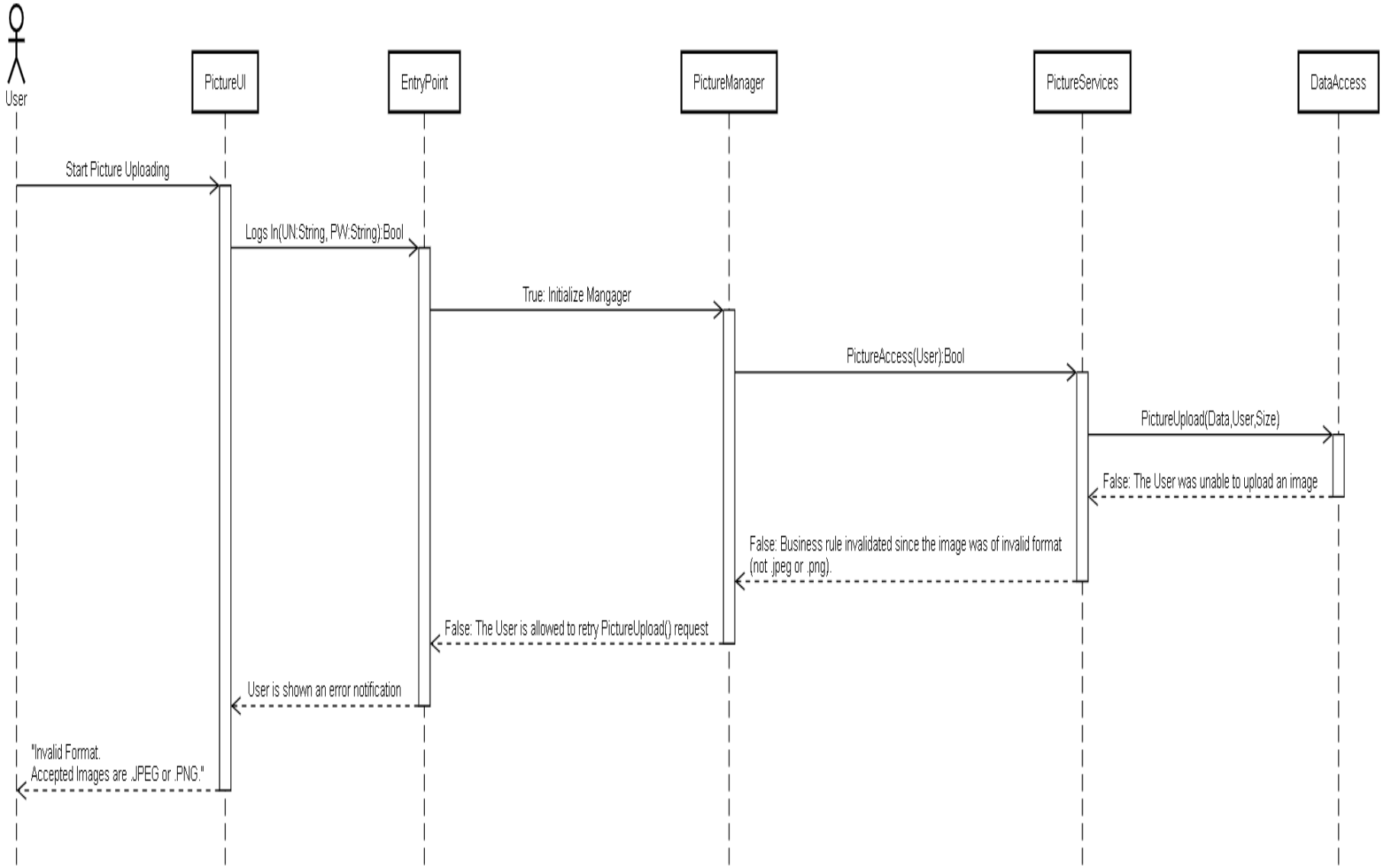
As an Admin, I want to view recommended Services, but I am unable to view a list of Services.



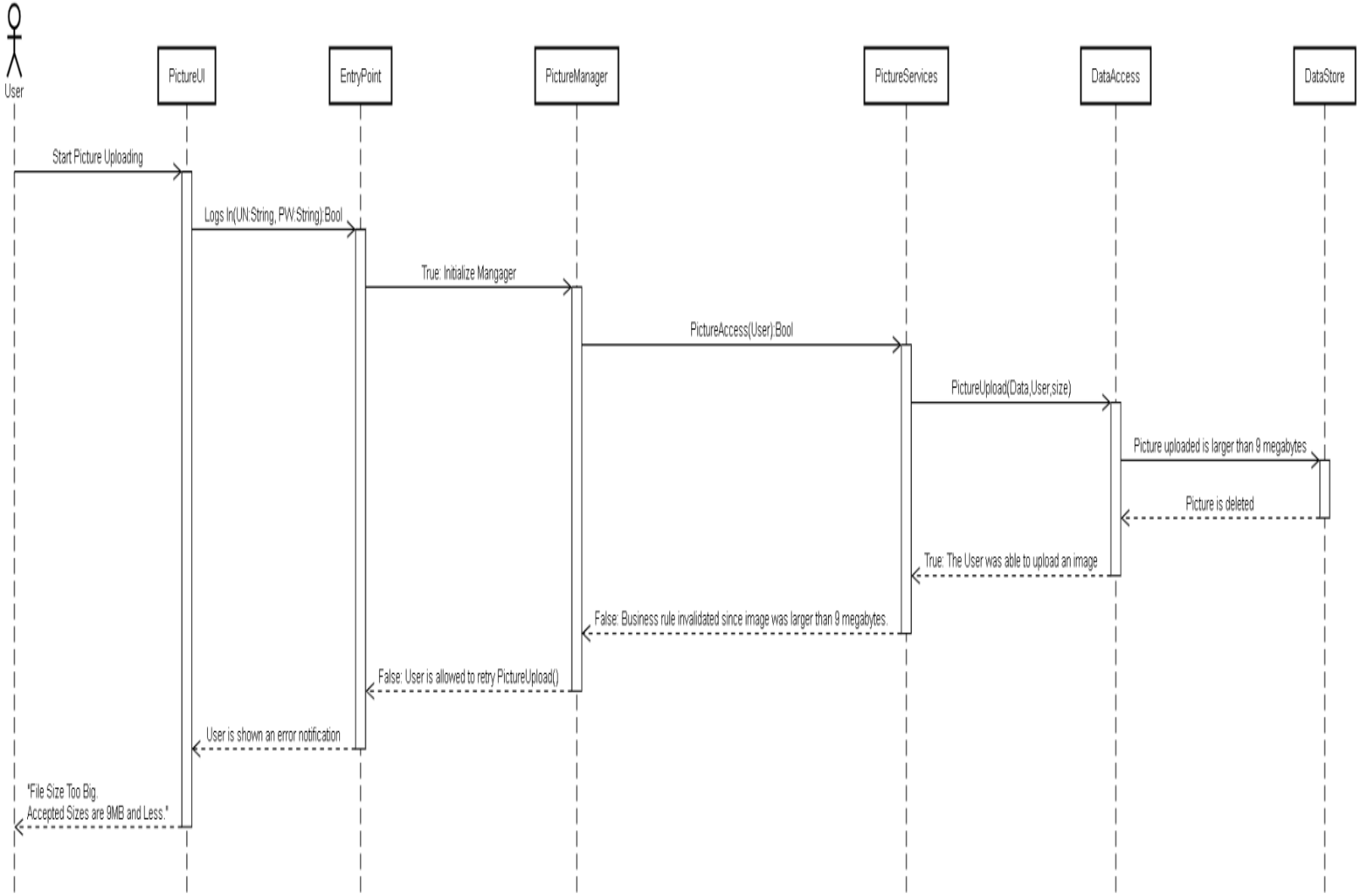
Picture Upload Failure Conditions



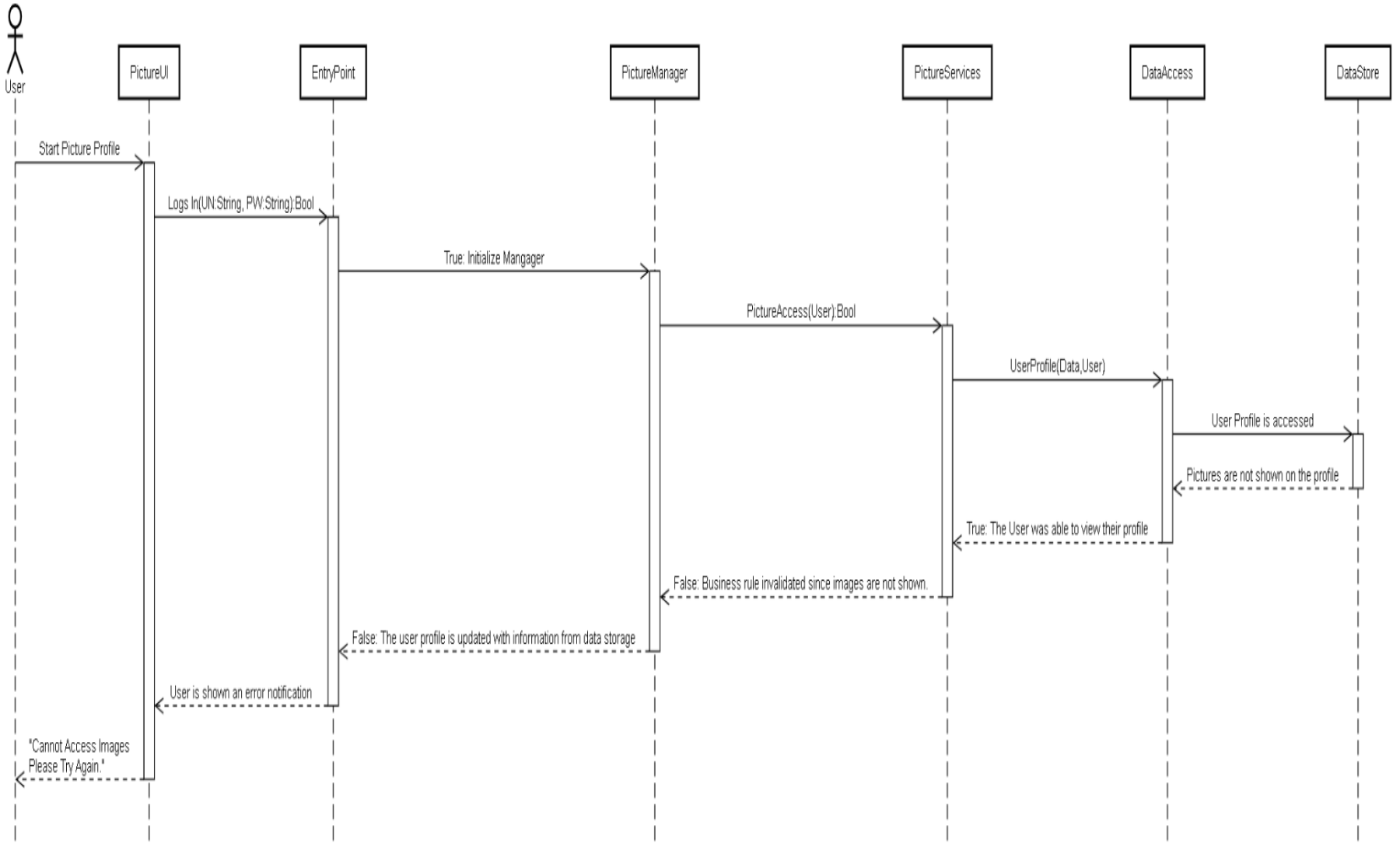
As a User, I want to upload an image, but the image is of invalid format (not .jpeg or .png).



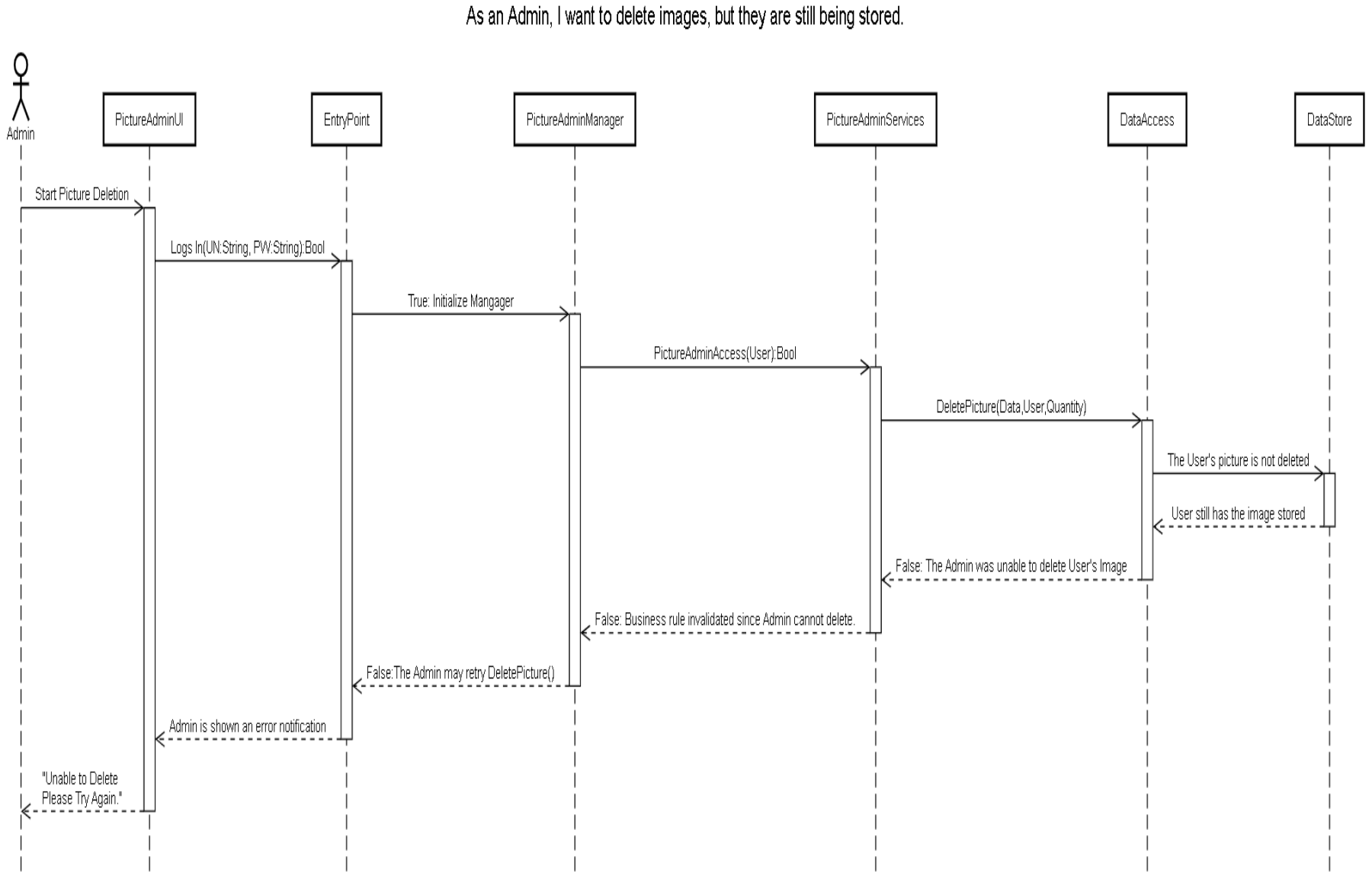
As a User, I want to upload an image, but the image is larger than 9 megabytes.



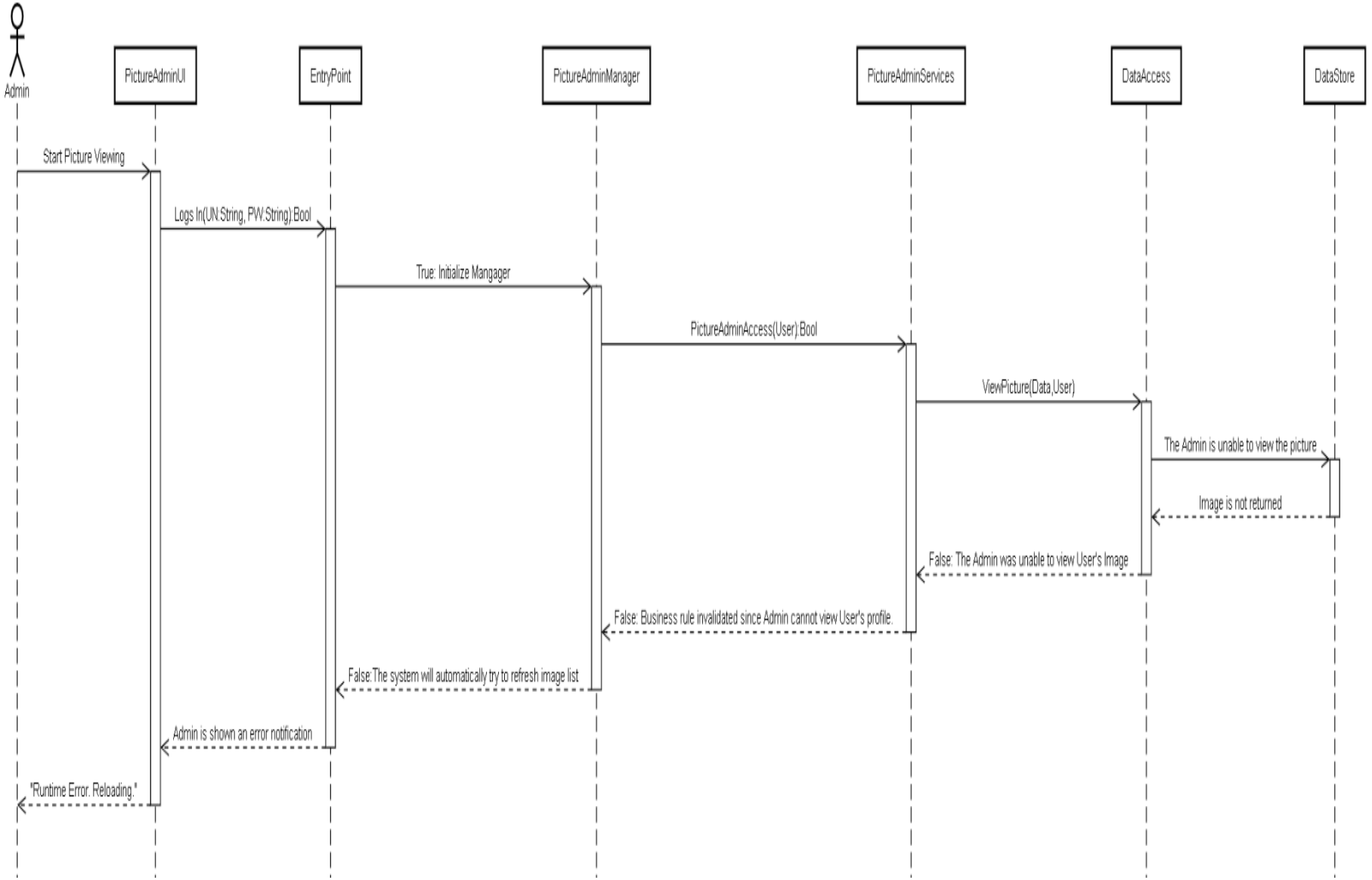
As a User, I want to access my images, but they are not on my User Profile.



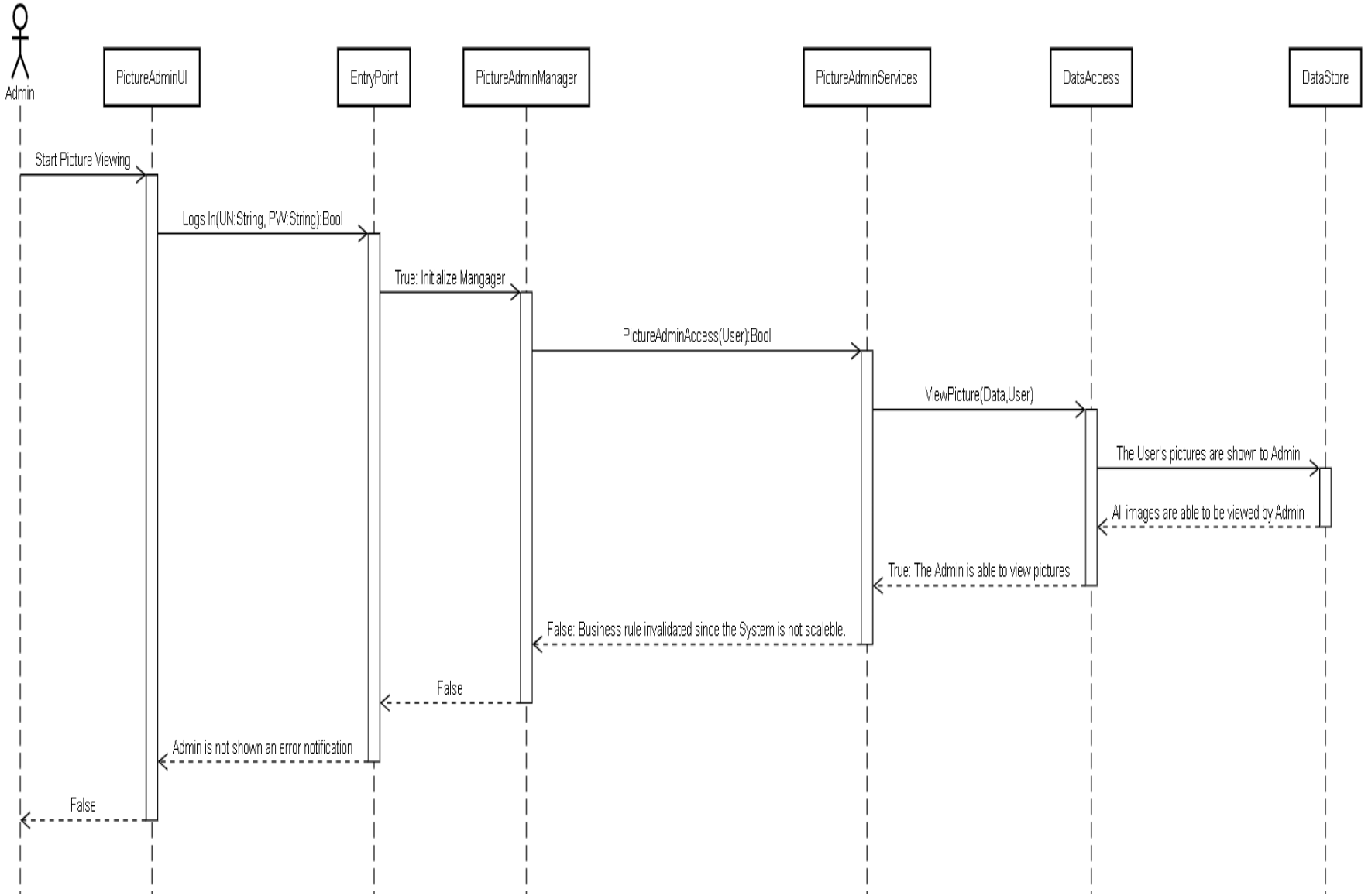
Picture Upload(Admin) Failure Conditions



As an Admin, I want to view images, but they take more than 7 seconds to load.



As an Admin, I want to access images, but the system slows due to too many images.



References

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