

DESIGN DOCUMENT

Hubba - Listing Profile

Version 2.4

Prepared By: Development Hell

Class: CECS 491B-05

Date: April 12, 2023

Github Repository:

<https://github.com/DevelopmentHellaHell/SeniorProject>

Team Leader

Kevin Dinh

Members

Garrett Tsumaki

Bryan Tran

Jett Sonoda

Tien Nguyen

Darius Koroni

POC: Jett.Sonoda@student.csulb.edu

Revision History

Version	Overview	Date
1.0	Requirements Established, Draft Relational Tables	March 6, 2023
1.1	High-Level Diagrams Finished	March 14, 2023
1.2	LLD Success Diagrams 1-3 Completed	March 19, 2023
1.3	LLD Success Diagrams 7-9 Completed	March 23, 2023
1.4	LLD Success Diagram 5 Completed	March 27, 2023
1.5	LLD Success Diagrams 4, 6, 10 Completed	March 31, 2023
2.0	LLD Success Diagrams Refractored	April 2, 2023
2.1	LLD Failure Diagrams Finished	April 8, 2023
2.2	Relation Tables Updated	April 10, 2023
2.3	LLD Success and Failure Diagrams Update	April 11, 2023
2.4	LLD Final Diagrams	April 12, 2023

Table of Contents

Table of Contents	3
Overview	4
Requirements to Satisfy	5
Low-Level Design	6
Relational Table(s)	6
Successful Use Case(s)	7
1. Listing Initialization (does not have an account)	7
2. Listing Initialization (has an account)	8
3. View all my listings	9
4. Edit a Listing/Listing Draft	10
5. Delete a Listing/Listing Draft	13
6. Publish a Listing/Listing Draft	14
7. Listing Rating and Commenting	16
8. Edit a Listing Review/Comment	17
9. Delete a Listing Review	18
10. View a listing	19
Failure Use Case(s)	21
Listing Initialization (has an account)	21
View all owned listings	25
Editing a listing/listing draft Pt. I	30
Editing a listing/listing draft Pt. II	35
Editing a listing/listing draft Pt. III	41
Delete a listing/listing draft	48
Publish a listing	53
Listing Rating and Commenting	67
Edit Listing Rating	74
Delete Listing Review	81
View a listing	86
References	93

Overview

This document is intended to provide all need-to-know sources of the design of the Listing Profile System feature for potential cases of fixing, improving, debugging, and understanding all components of this feature. This document contains multiple abstraction levels of design, including use cases and database tables.

Requirements to Satisfy

Taken directly from the BRD.

Business Rules:

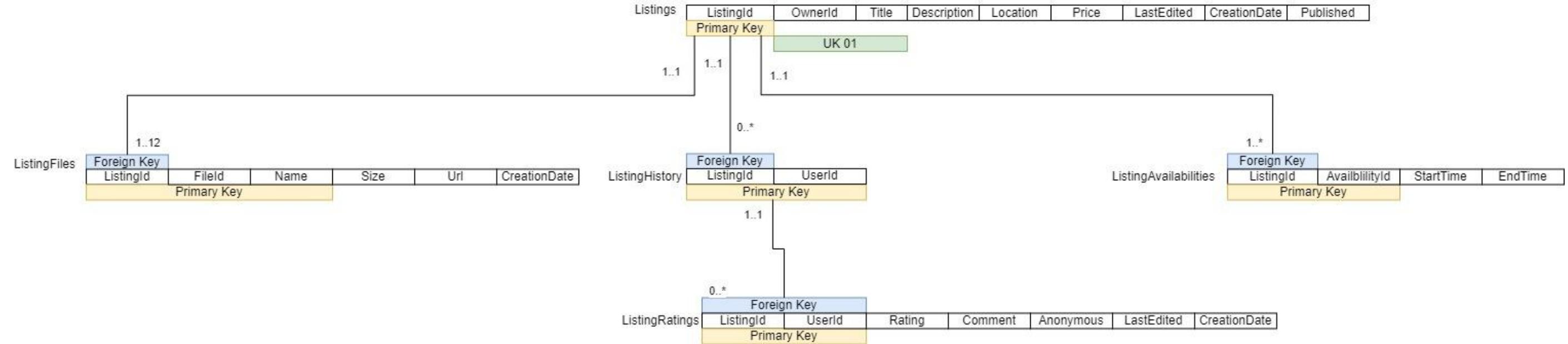
- Ratings must be of integer values 1, 2, 3, 4, or 5.
- All user input text is to be plain text, without formatting.
- Listing indicates when it was last edited by the Host by date
- Comments and ratings display their star rating, the date created/edited, and the name of the user
 - The user can elect to appear anonymous
 - Comments are limited to a certain amount of characters, default is 250
- A user will only view the calendar on a month-to-month basis, starting with the last week of the previous month and extending to the first week of the next month.
 - Changing the currently viewed month is limited to the current month and 6 months in advance.

Requirements (list):

1. Listing Initialization (Does not have an account)
2. Listing Initialization (Has an account)
3. View all owned Listings
4. Edit a Listing/Listing Draft
5. Delete a Listing/Listing Draft
6. Publish a Listing/Listing Draft
7. Listing Rating and Commenting
8. Edit Listing Review
9. Delete Listing Review
10. View a listing (Open a result)

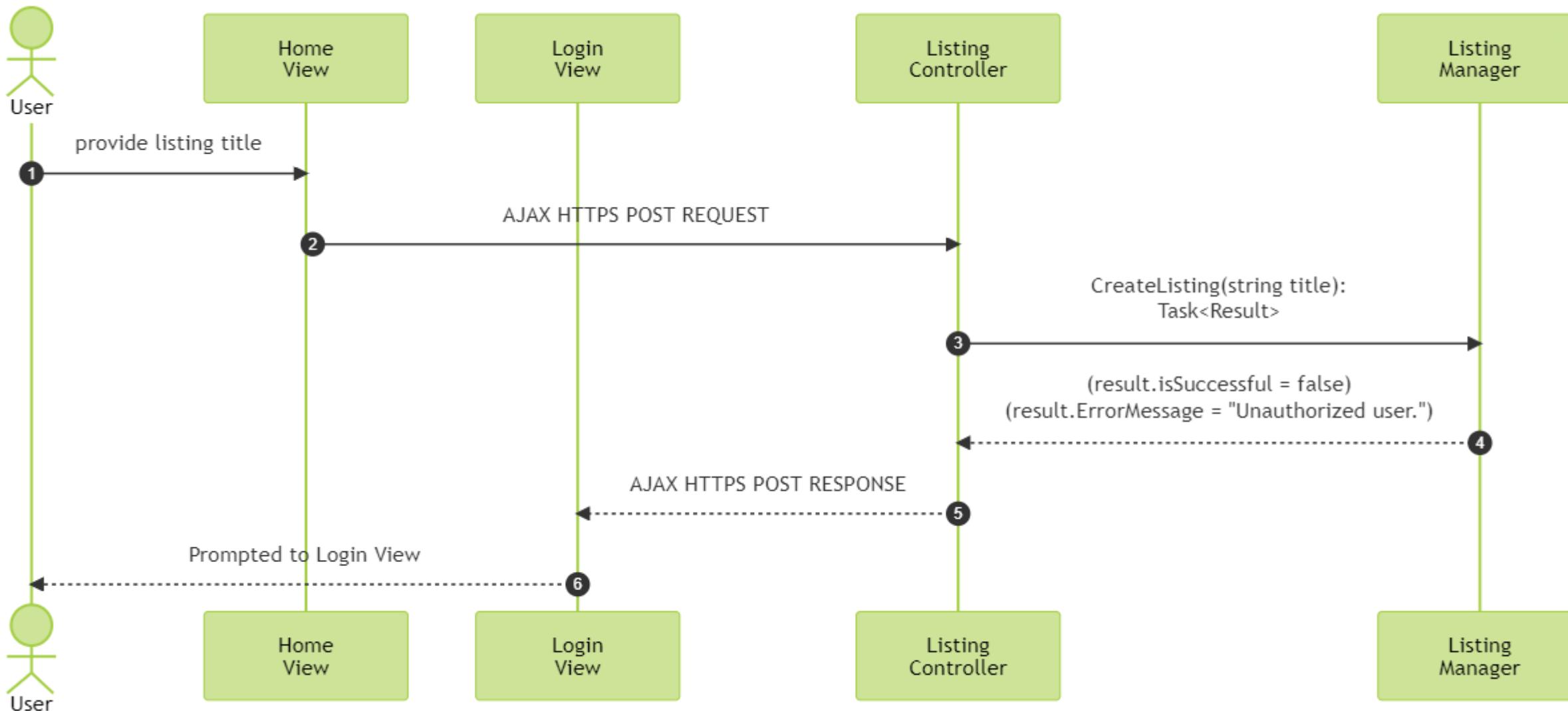
Low-Level Design

Relational Table(s)

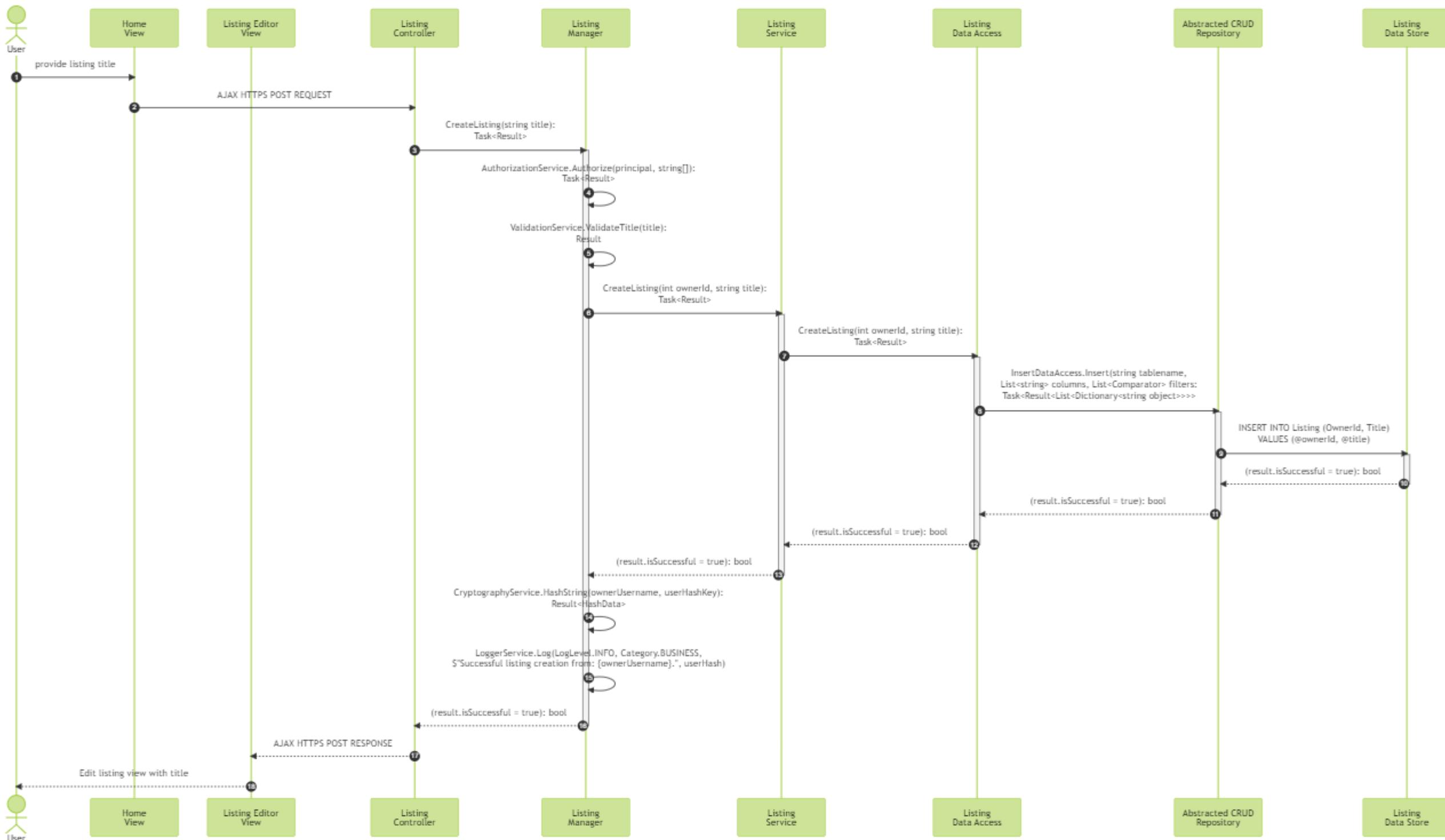


Successful Use Case(s)

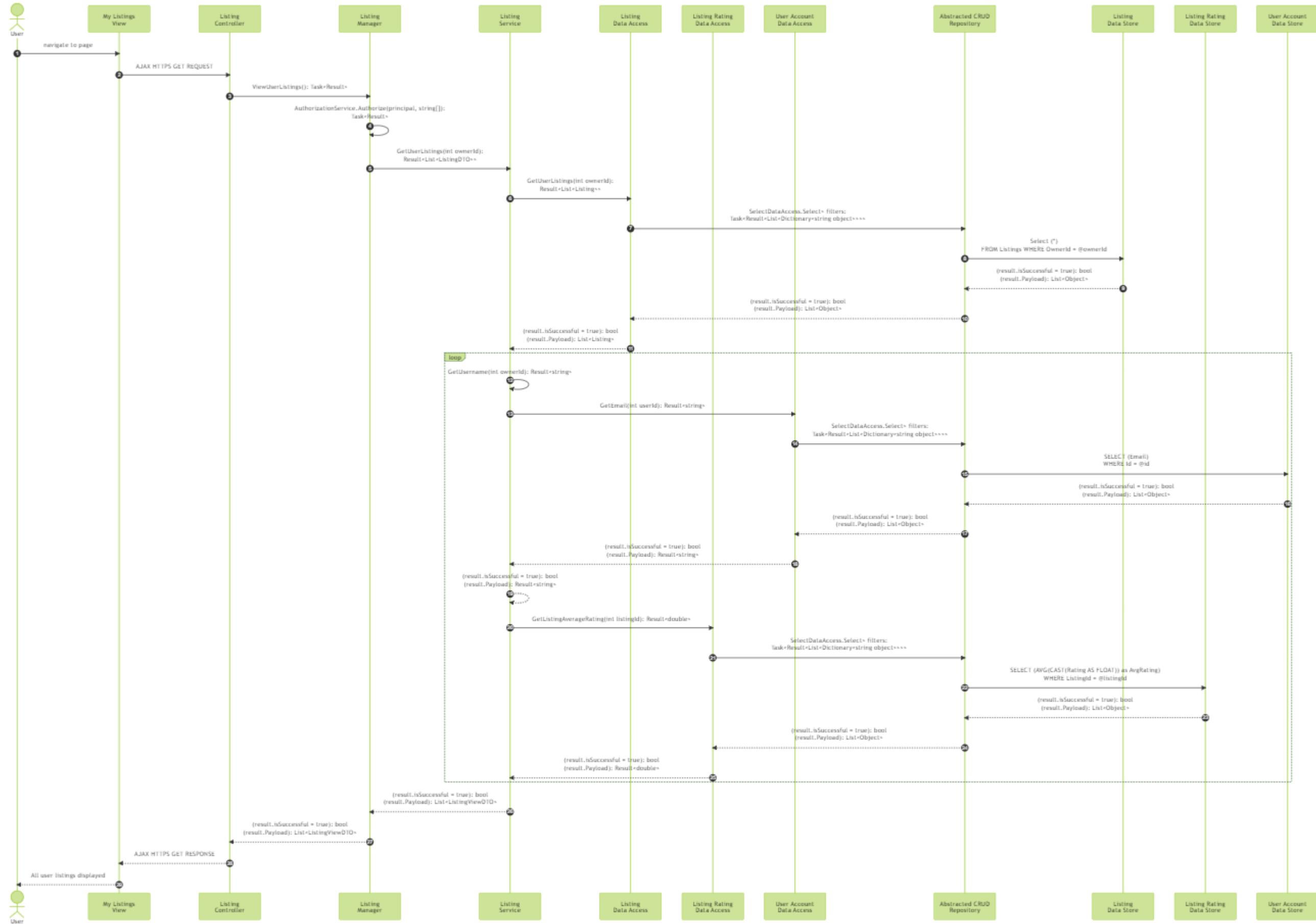
1. Listing Initialization (does not have an account)



2. Listing Initialization (has an account)



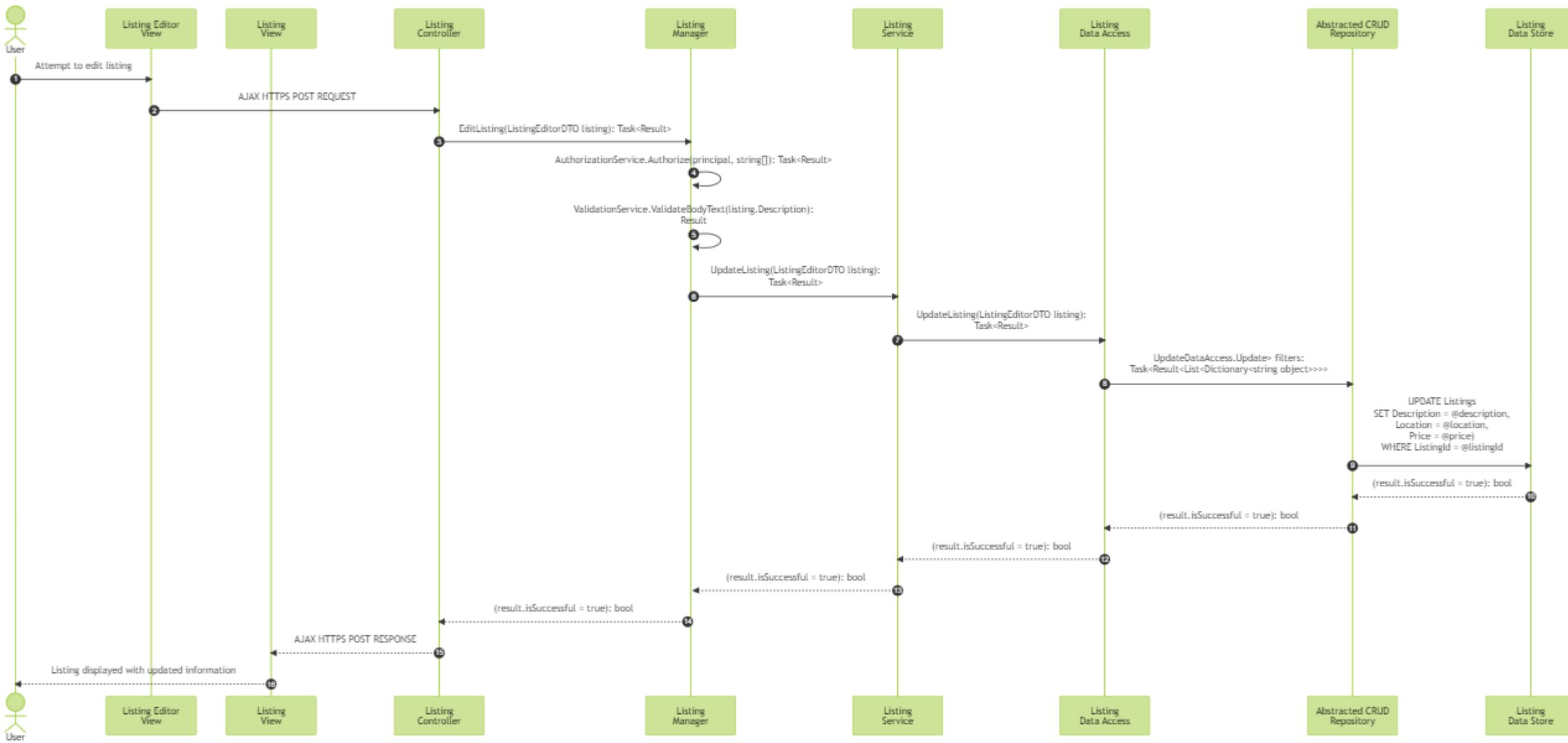
3. View all my listings



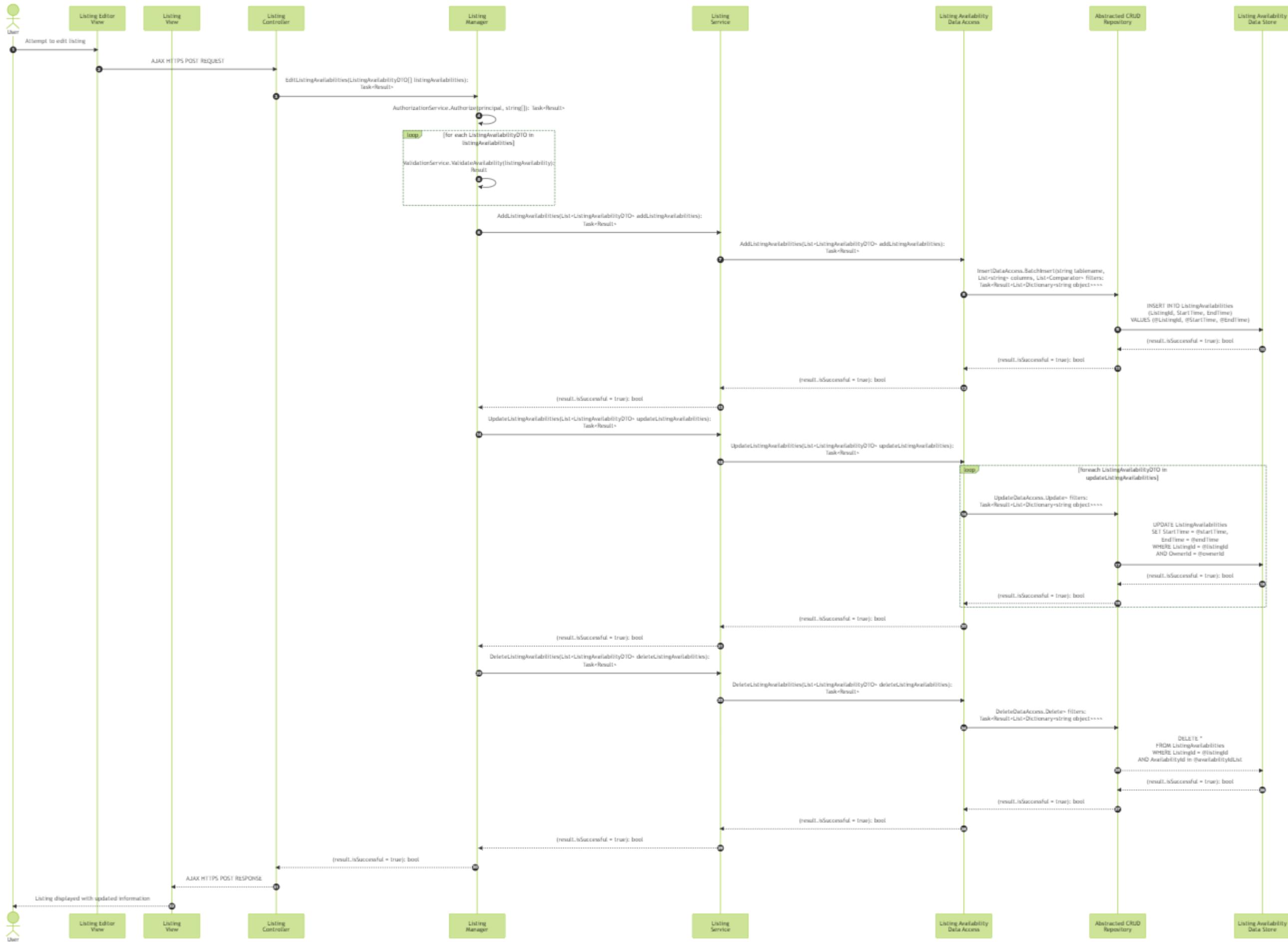
4. Edit a Listing/Listing Draft

This requirement is broken down into three diagrams. Each diagram is called based upon if the fields' states were changed on the frontend and passed to the backend.

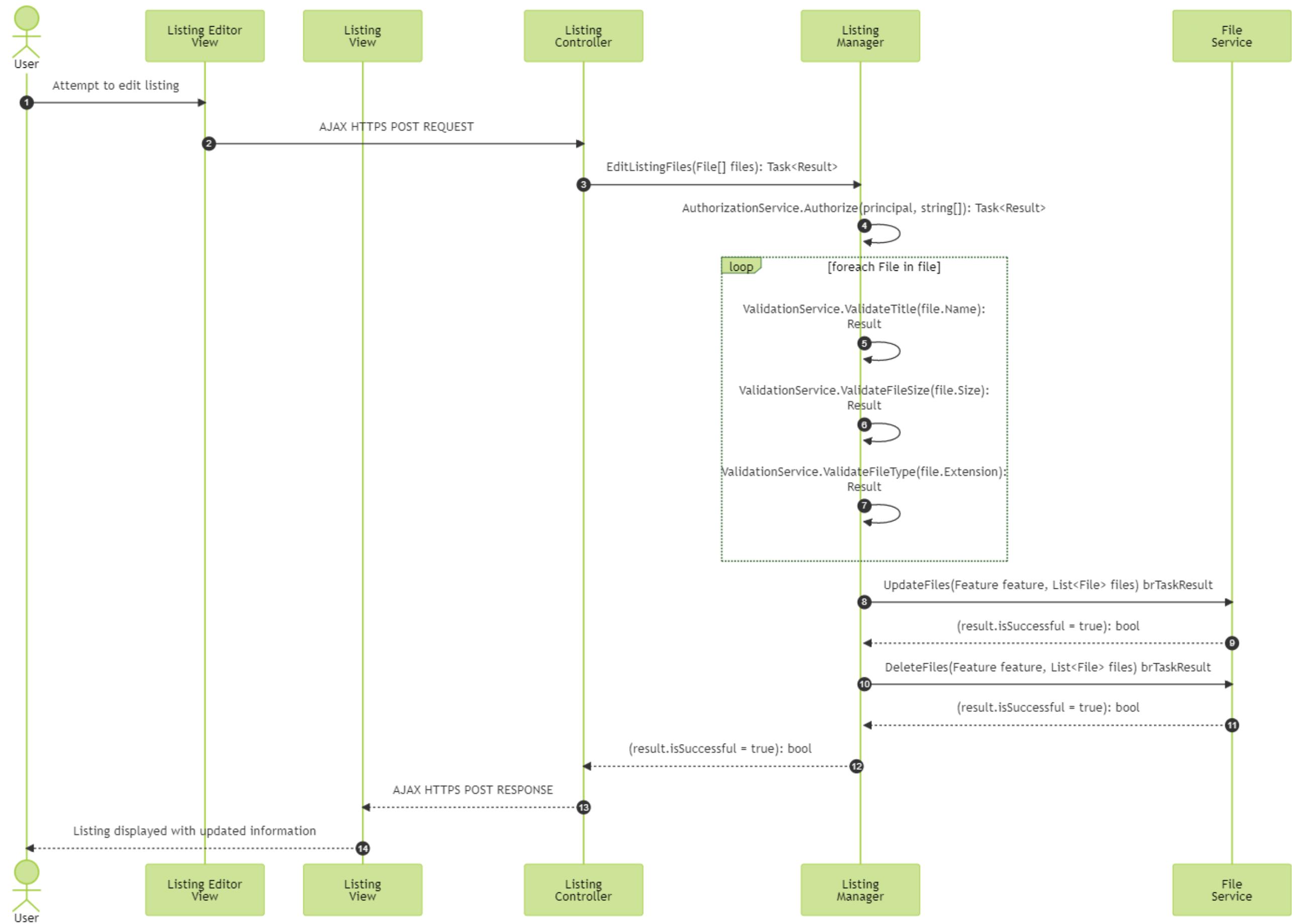
Part I:



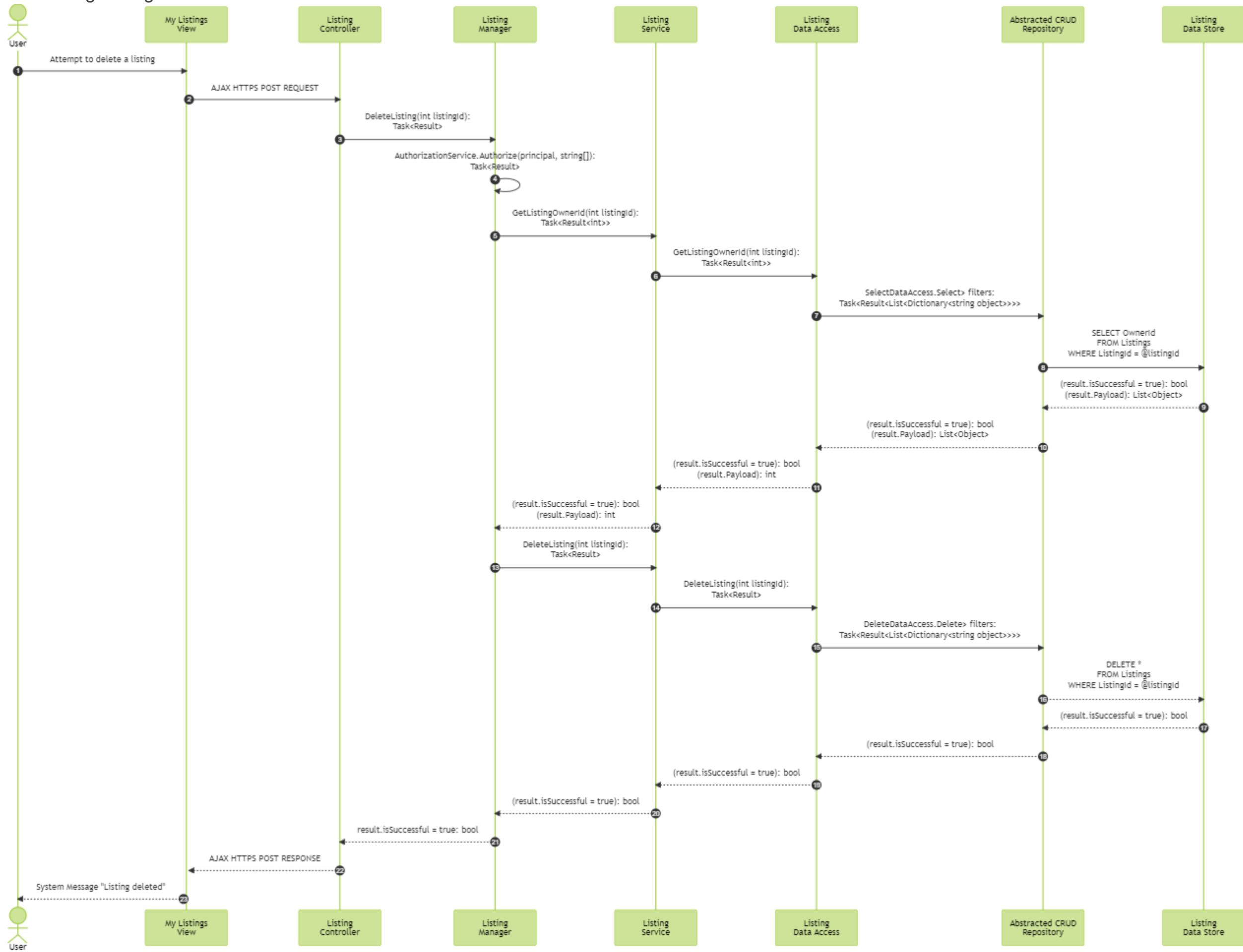
Part II:



Part III:



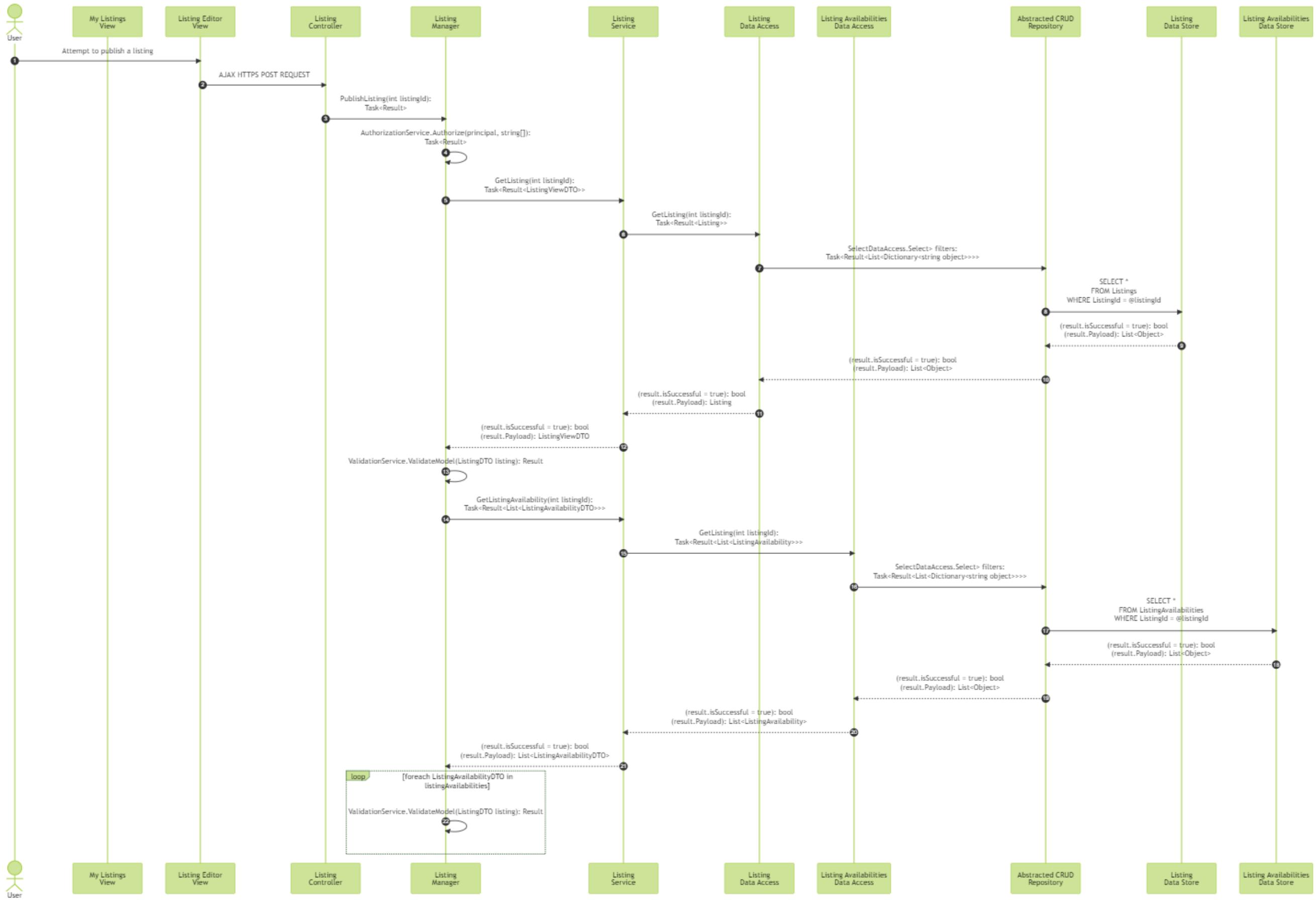
5. Delete a Listing/Listing Draft



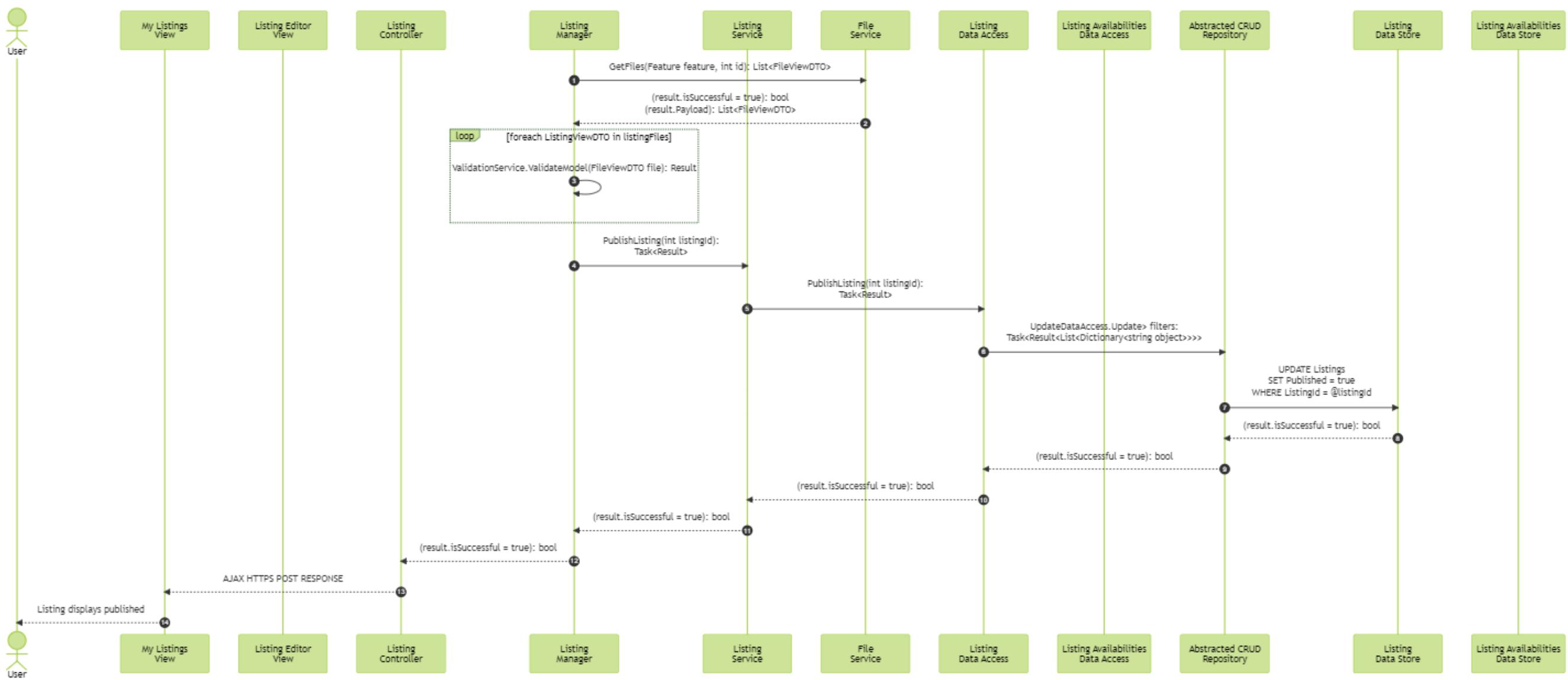
6. Publish a Listing/Listing Draft

Due to formatting restrictions, this requirement is broken into multiple parts. Each part is a continuation of the previous.

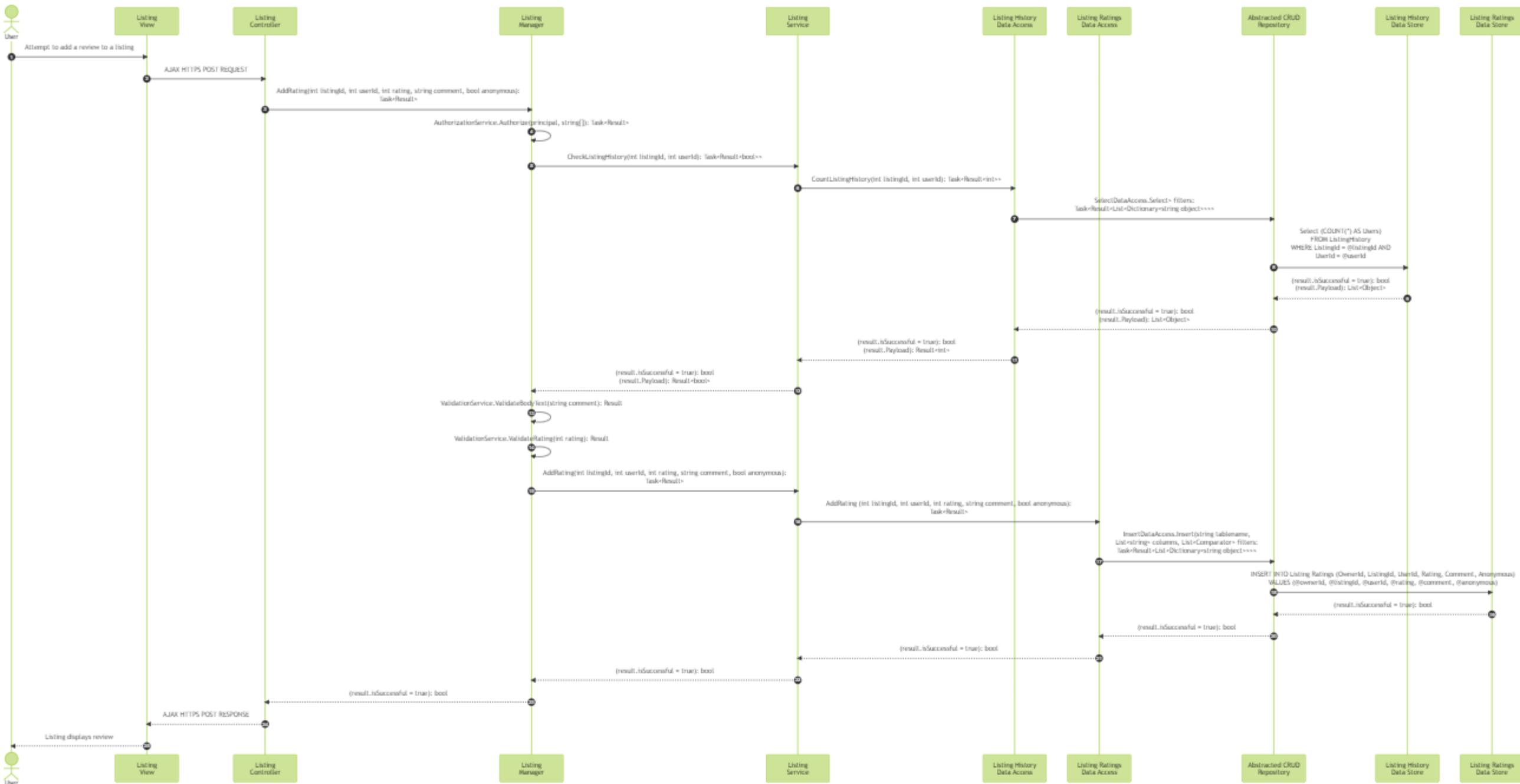
Part I:



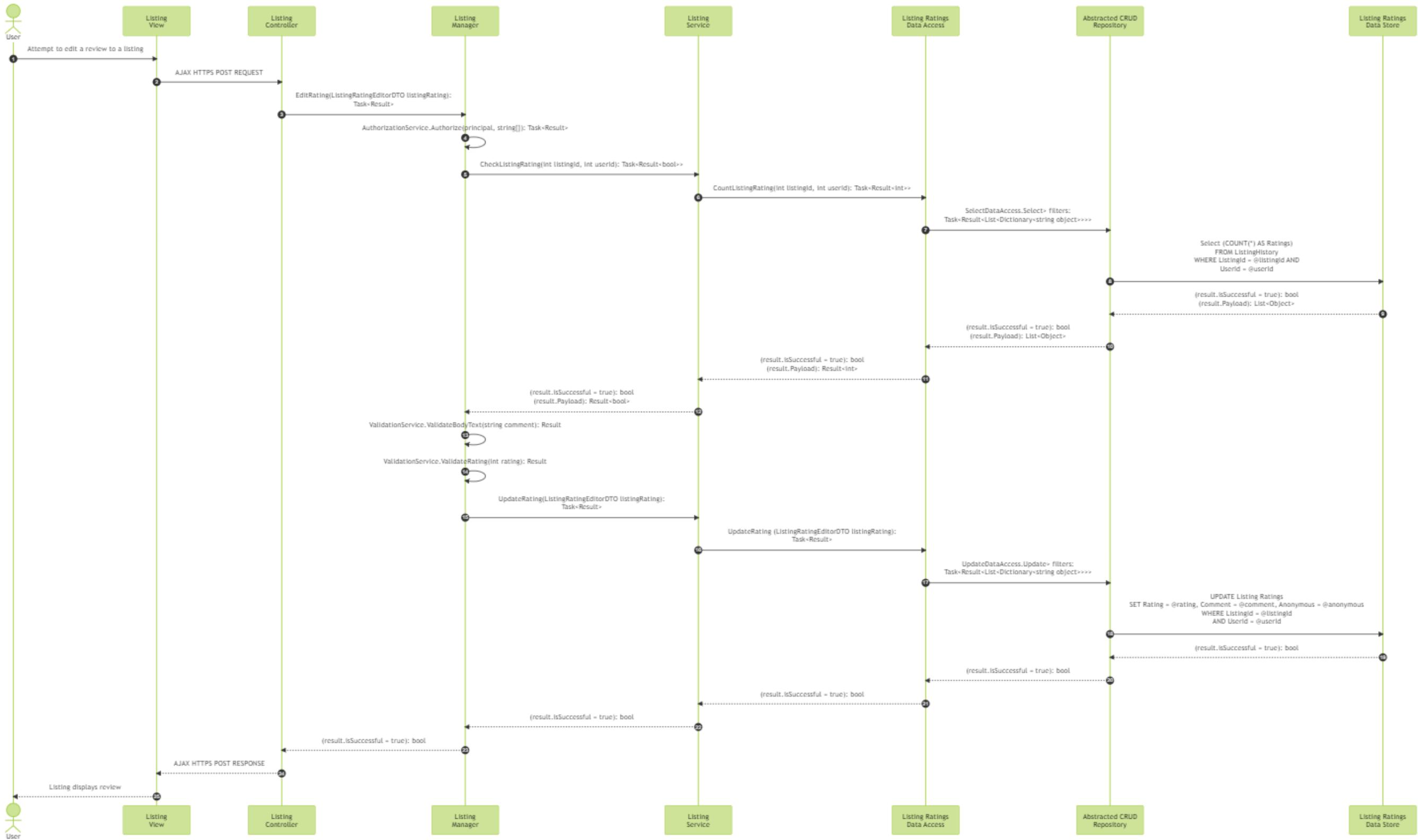
Part II:



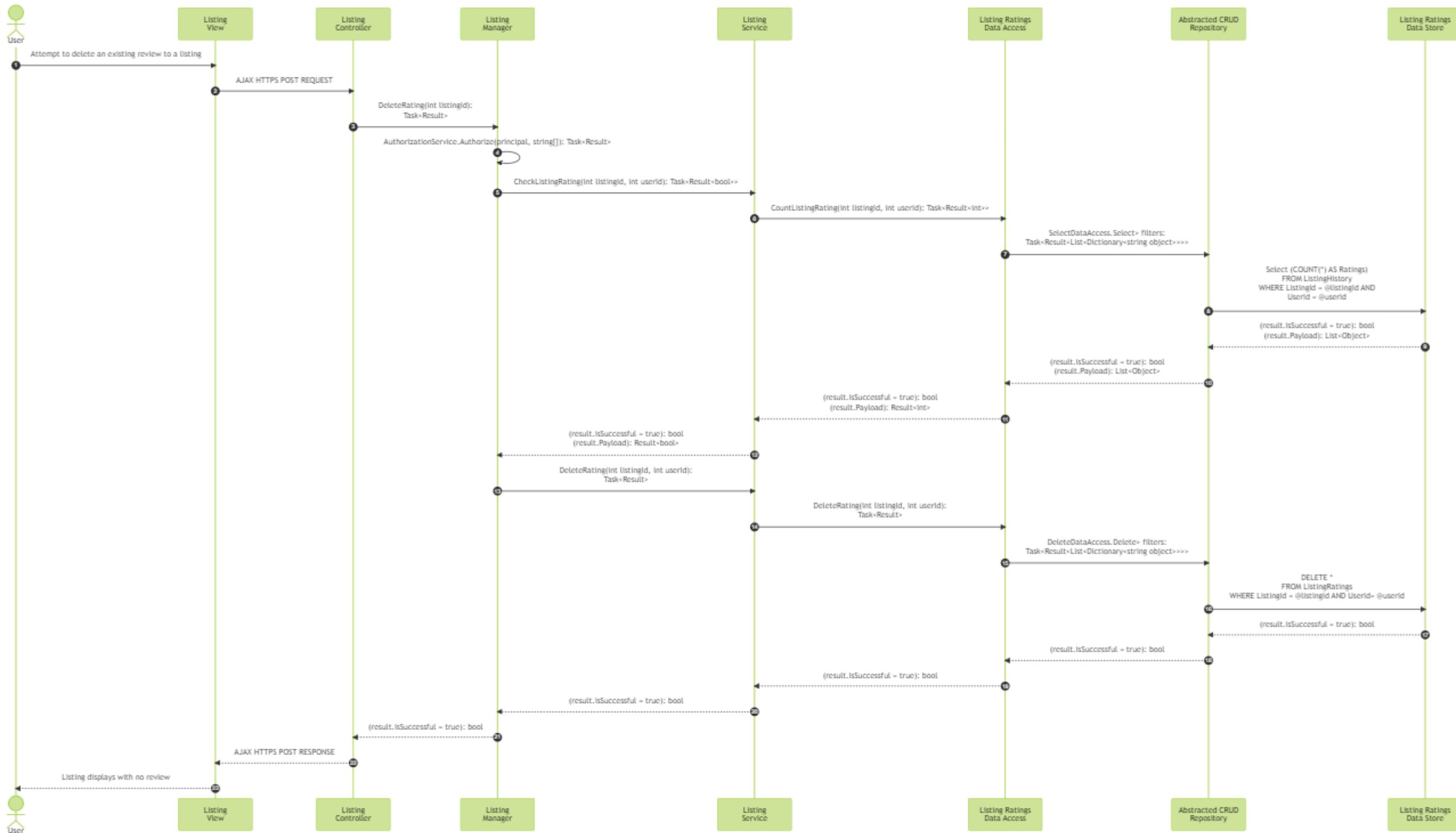
7. Listing Rating and Commenting



8. Edit a Listing Review/Comment



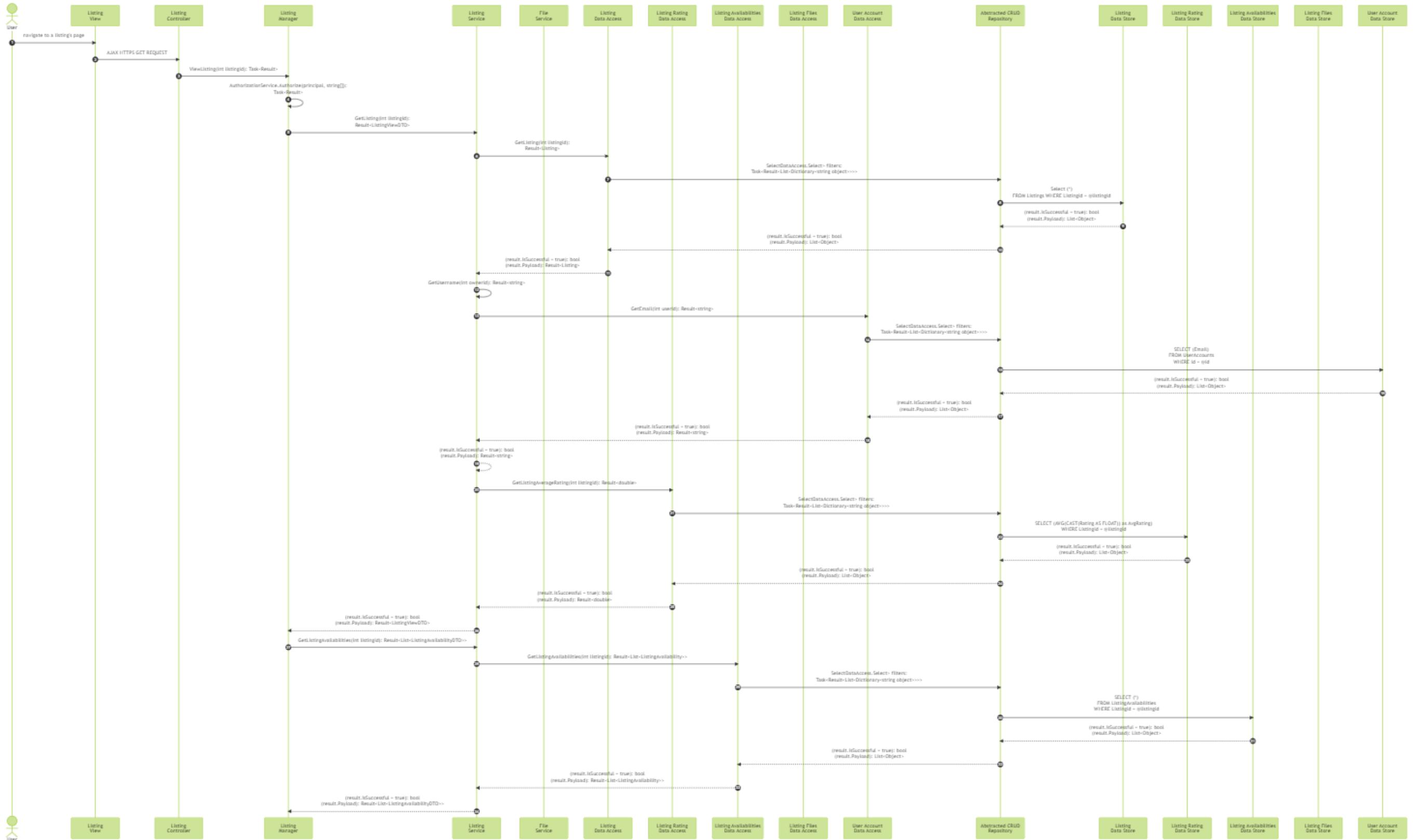
9. Delete a Listing Review



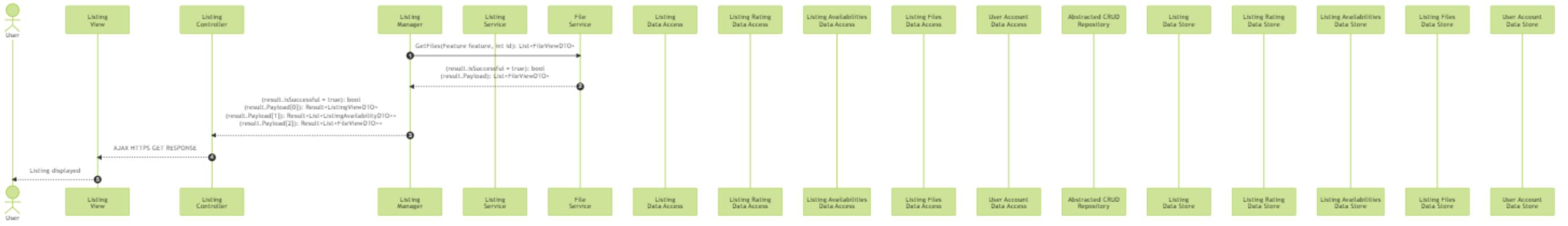
10. View a listing

Due to formatting restrictions, this requirement is broken into multiple parts. Each part is a continuation of the previous.

Part I:



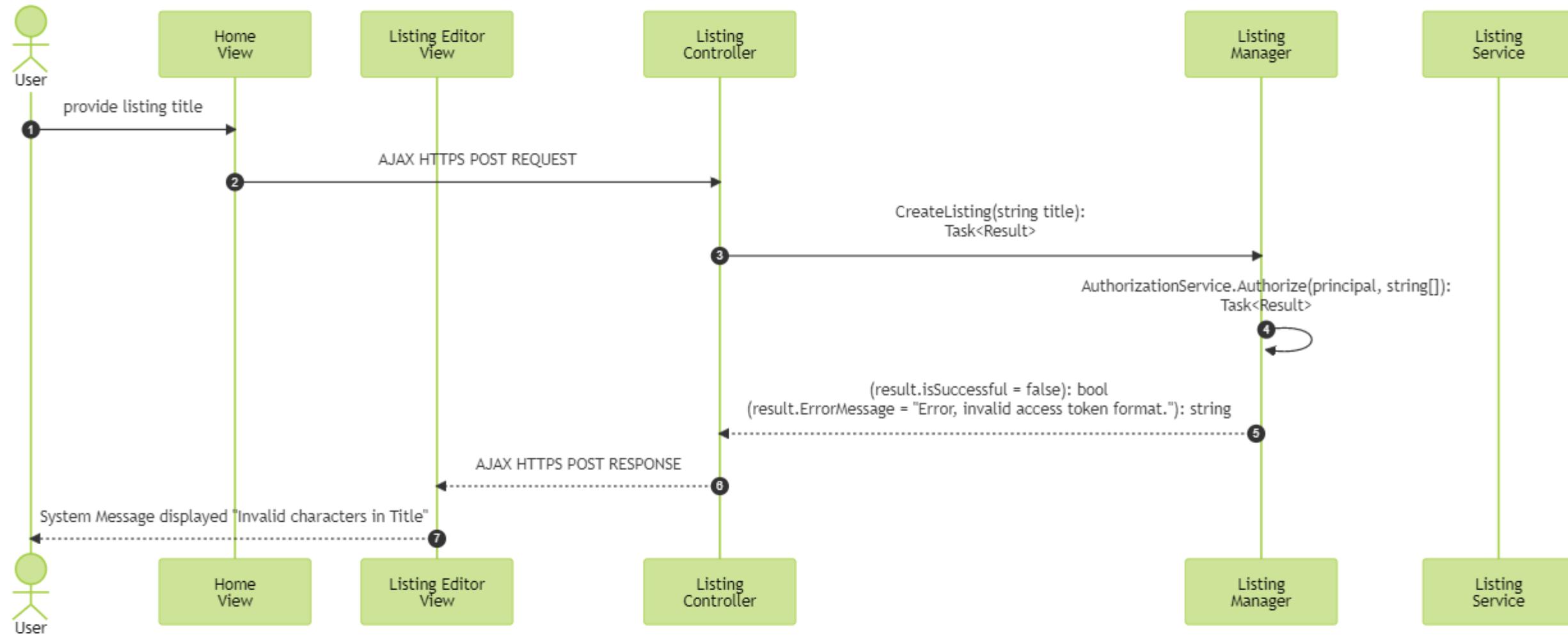
Part II:



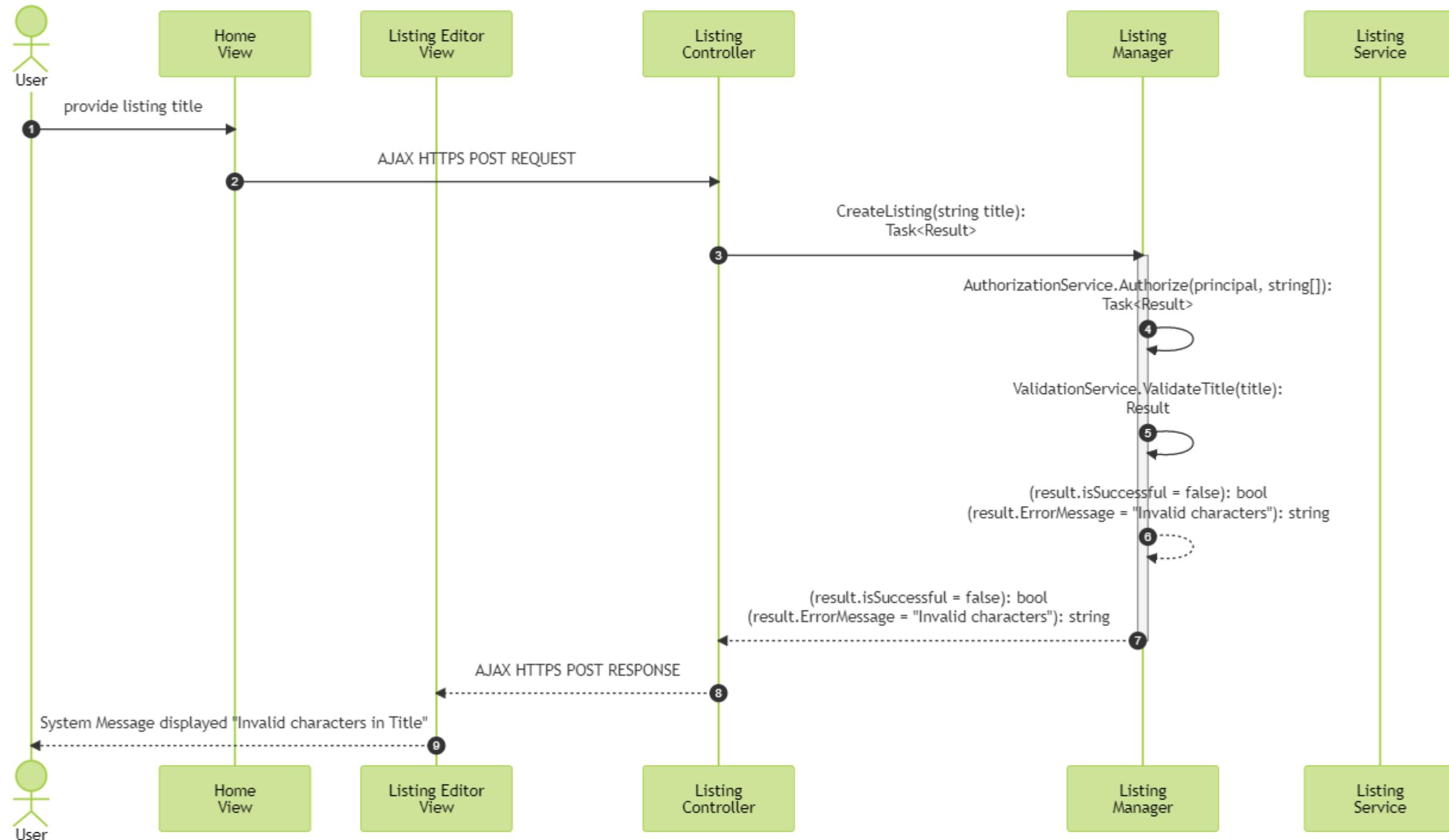
Failure Use Case(s)

Listing Initialization (has an account)

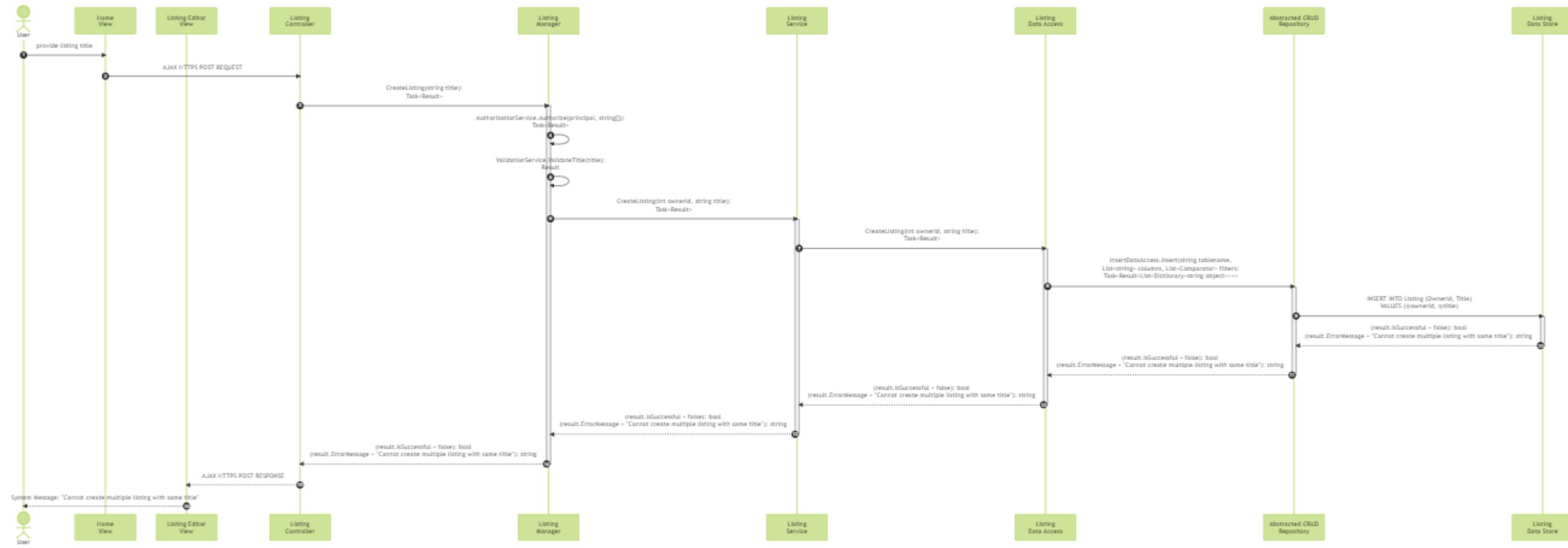
1. Security token either contains no ID or Username



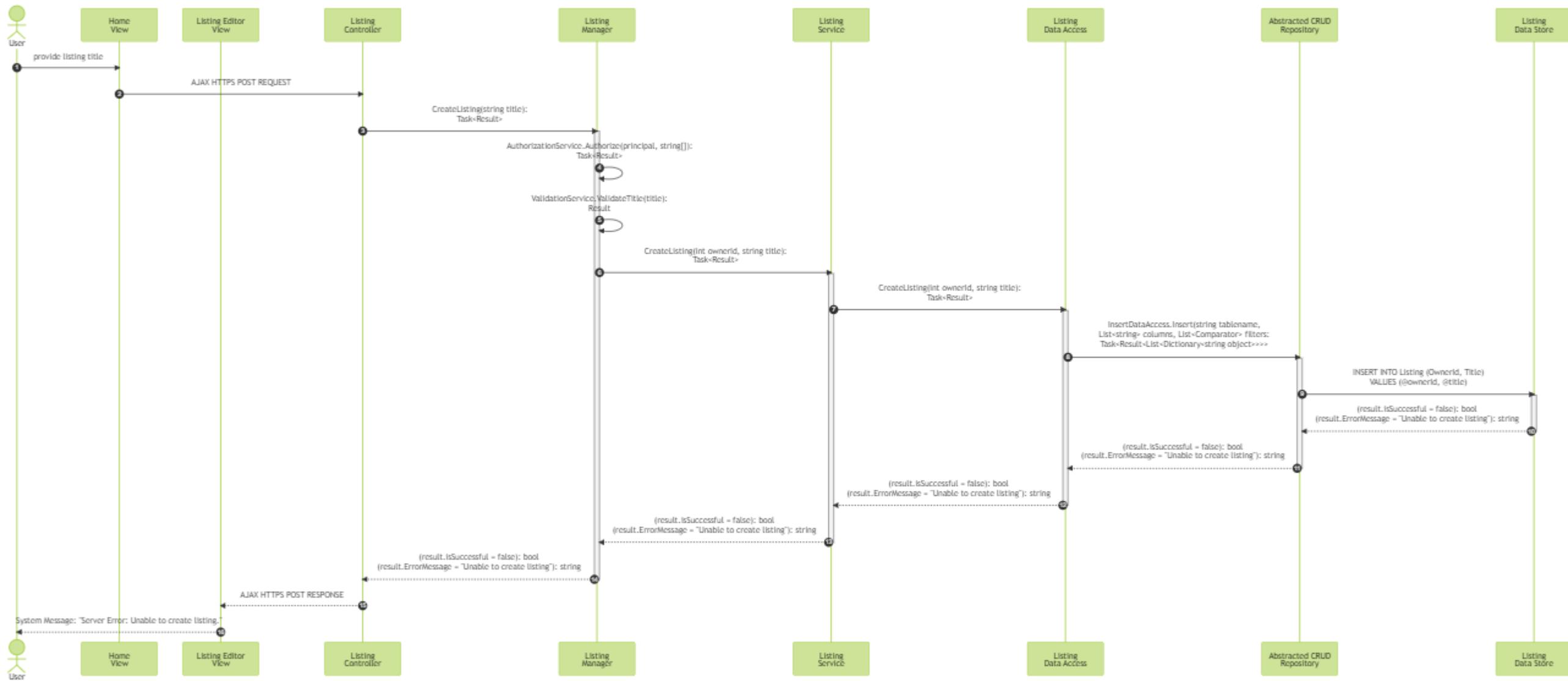
2. Title contains invalid characters



3. User attempts to create more than one listing with the same title

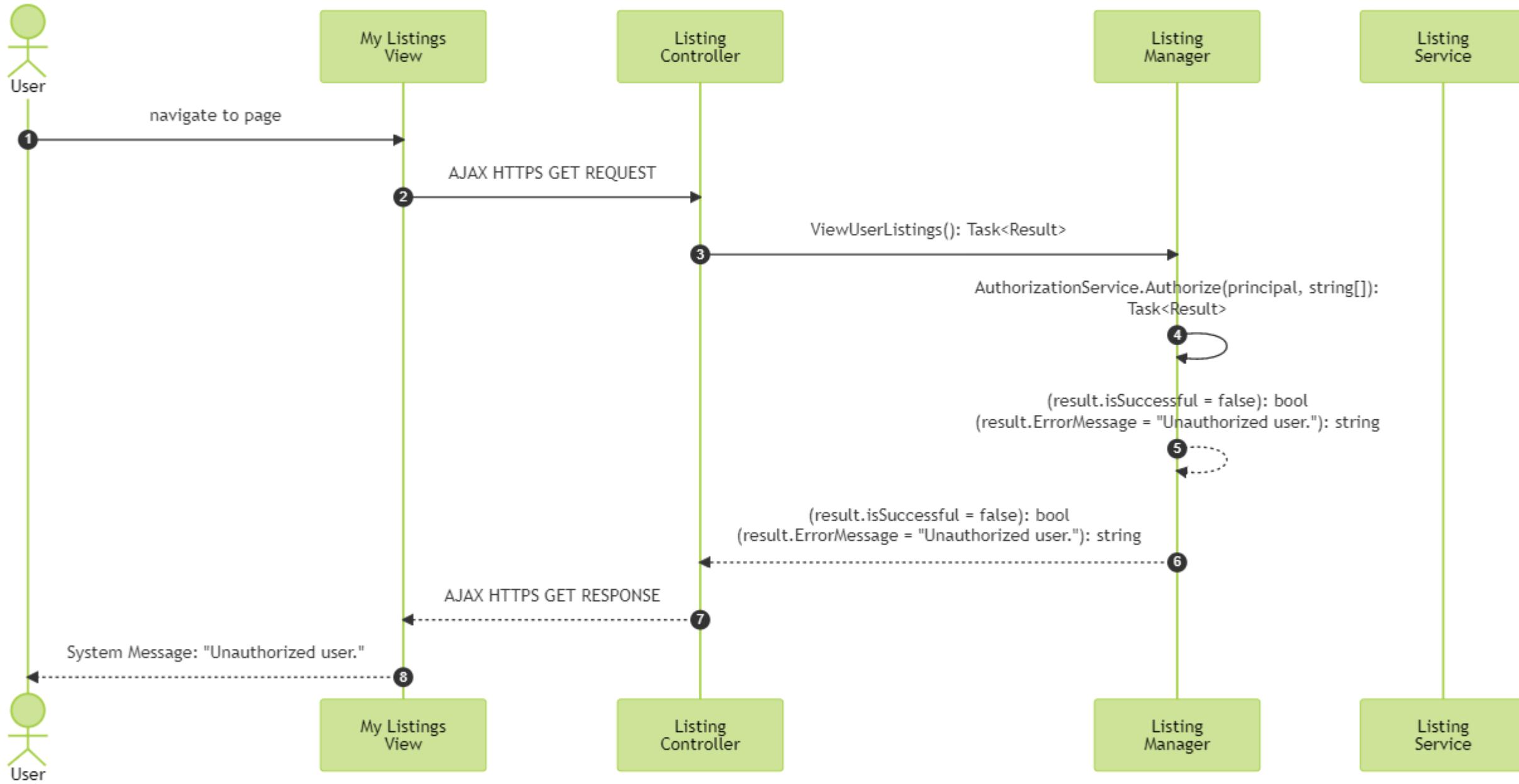


4. Datastore insert failure into Listings datastore

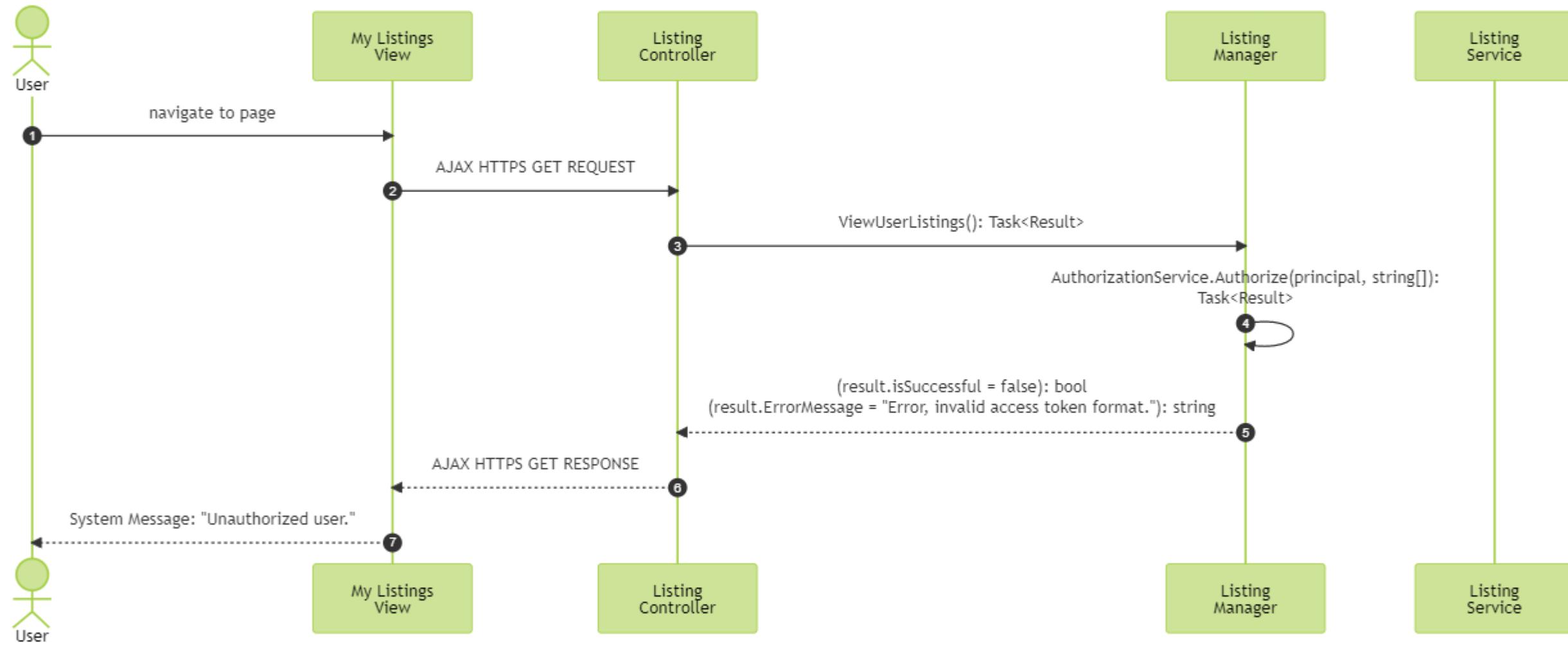


View all owned listings

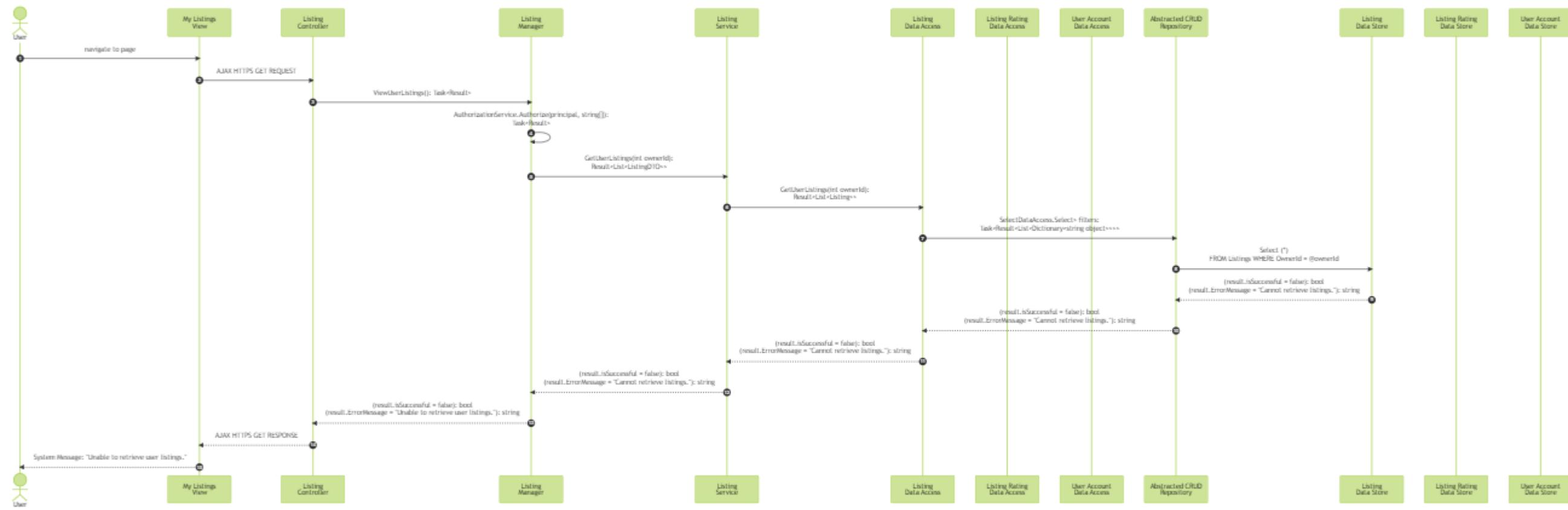
1. User does not have a security token



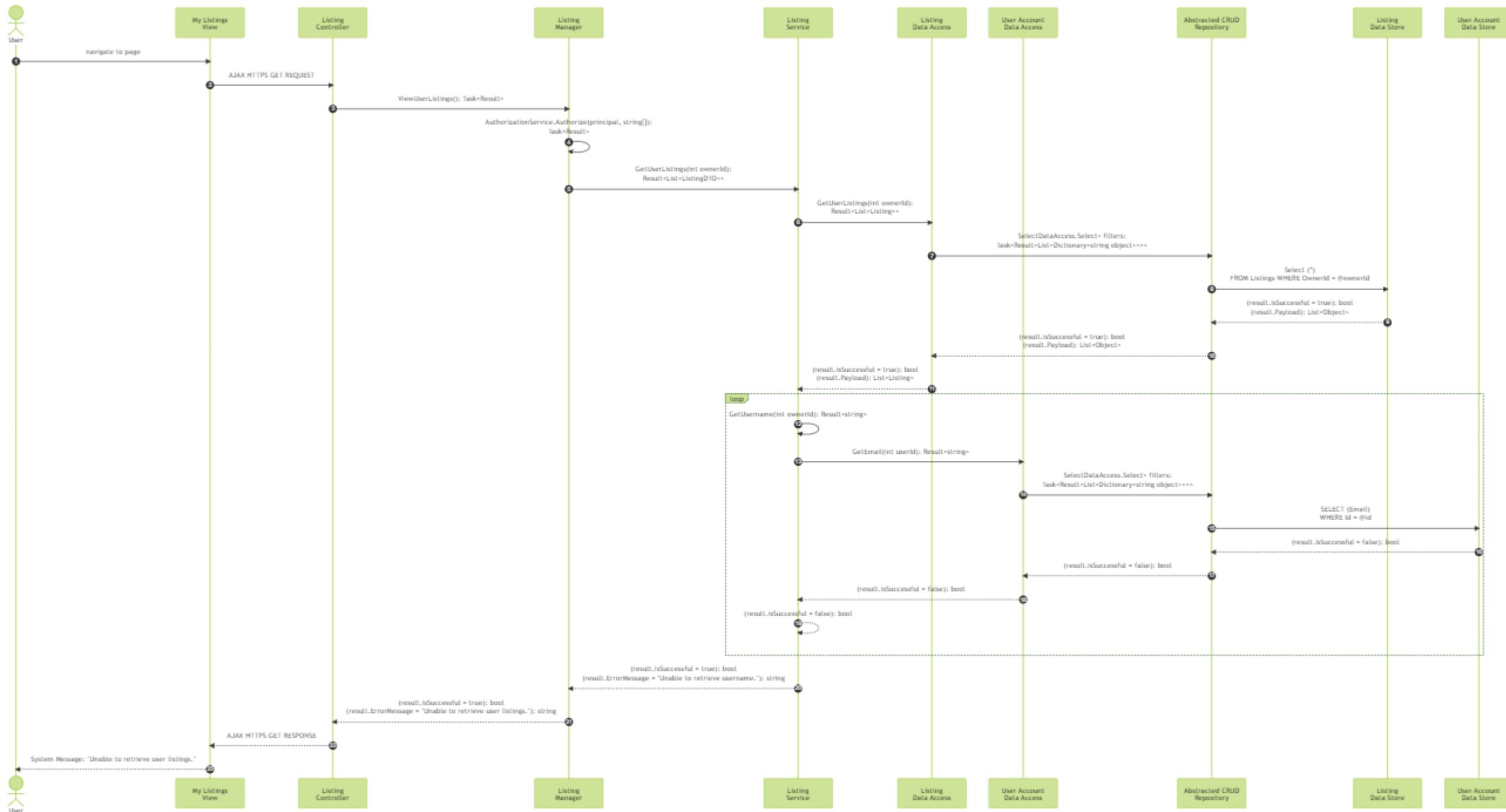
2. Security token contains no ID



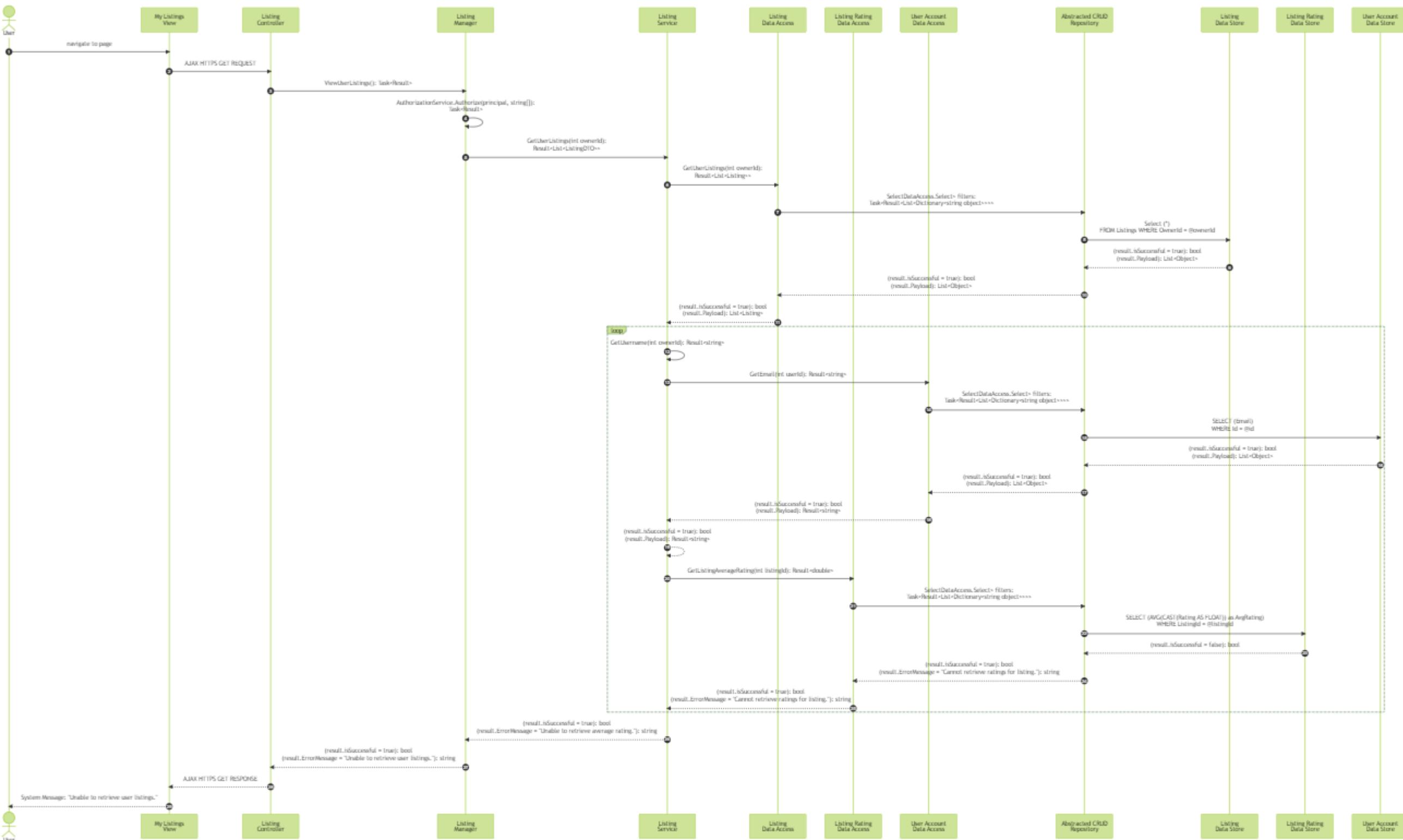
3. Database select failure for listings from Listings datastore



4. Unable to retrieve username for each listing

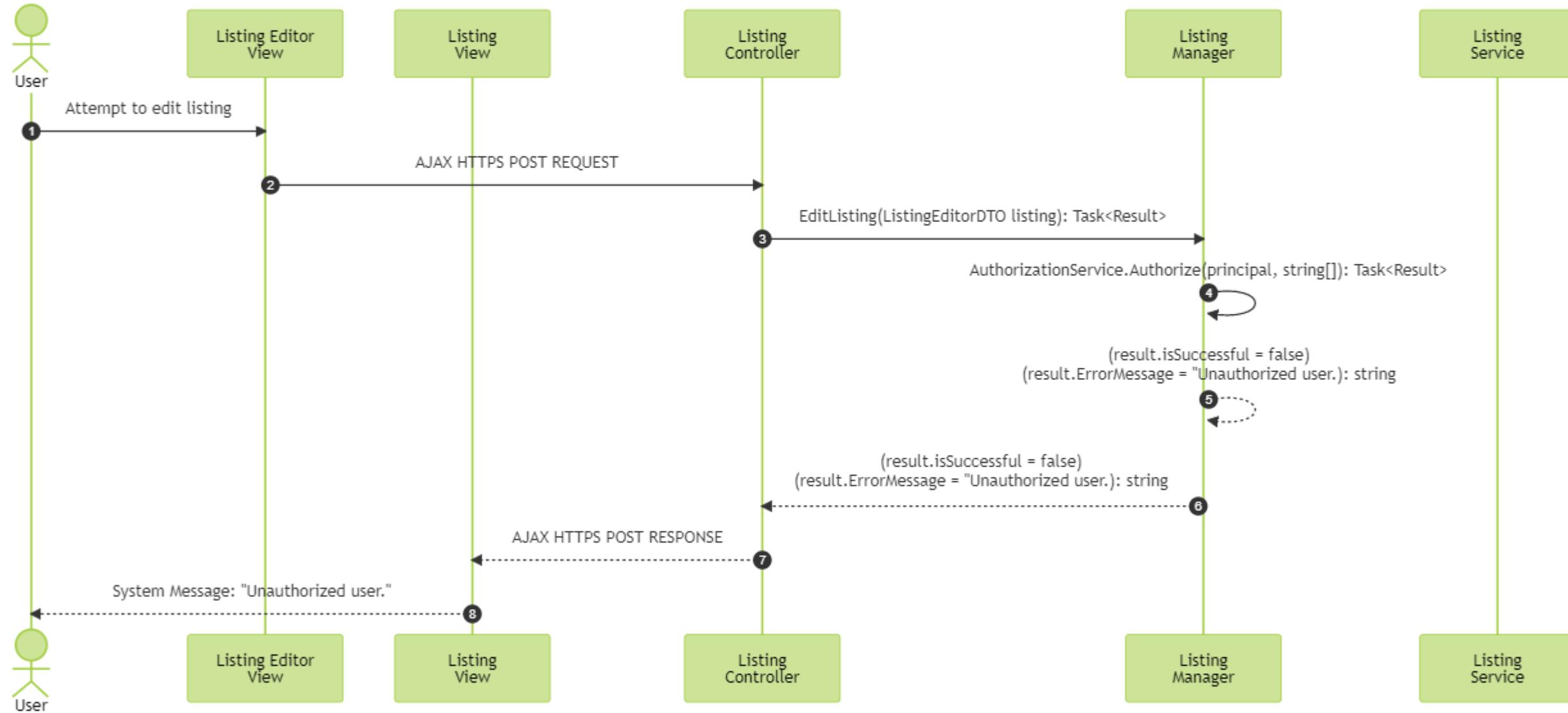


5. Unable to retrieve average rating for listing

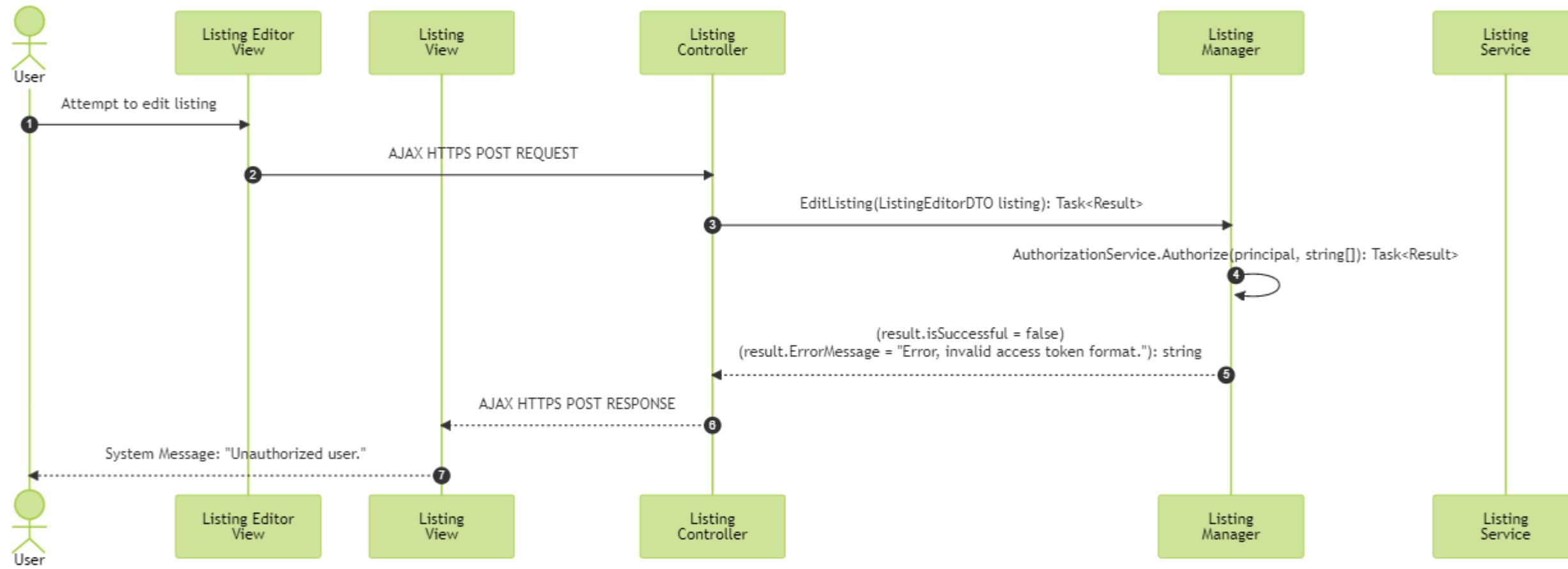


Editing a listing/listing draft Pt. I

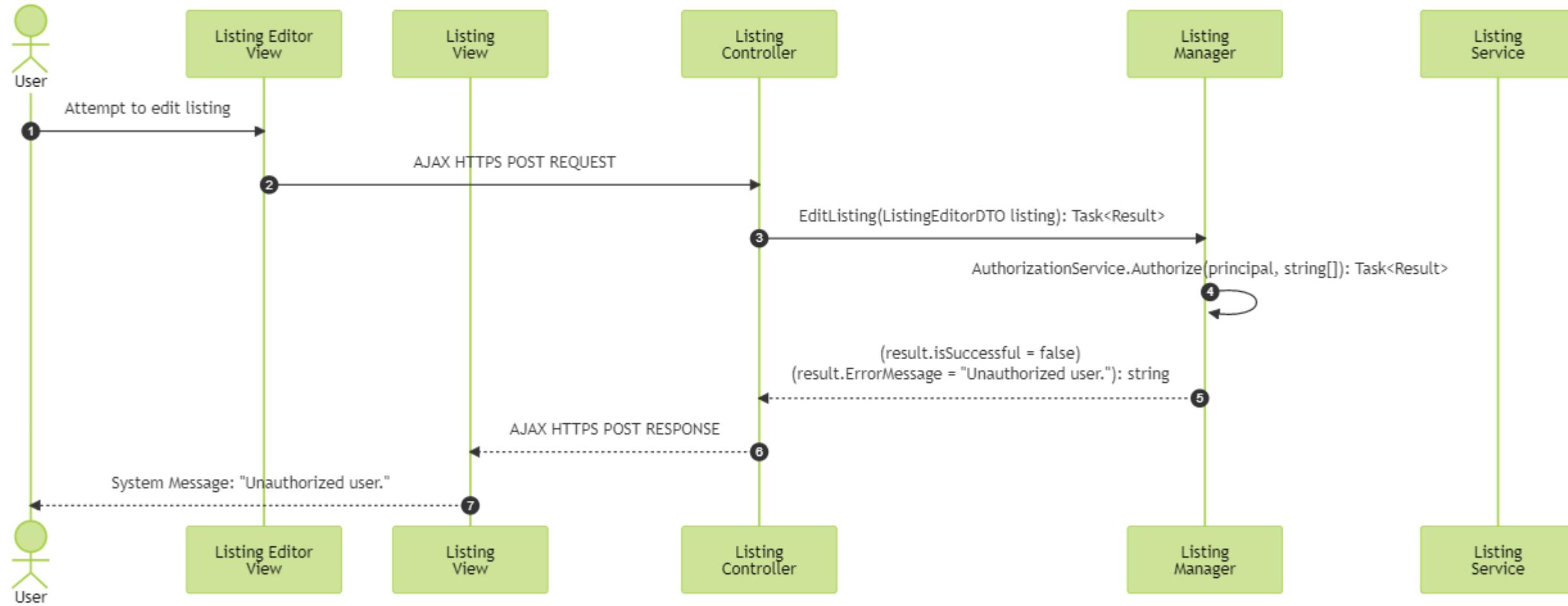
1. User does not have a security token



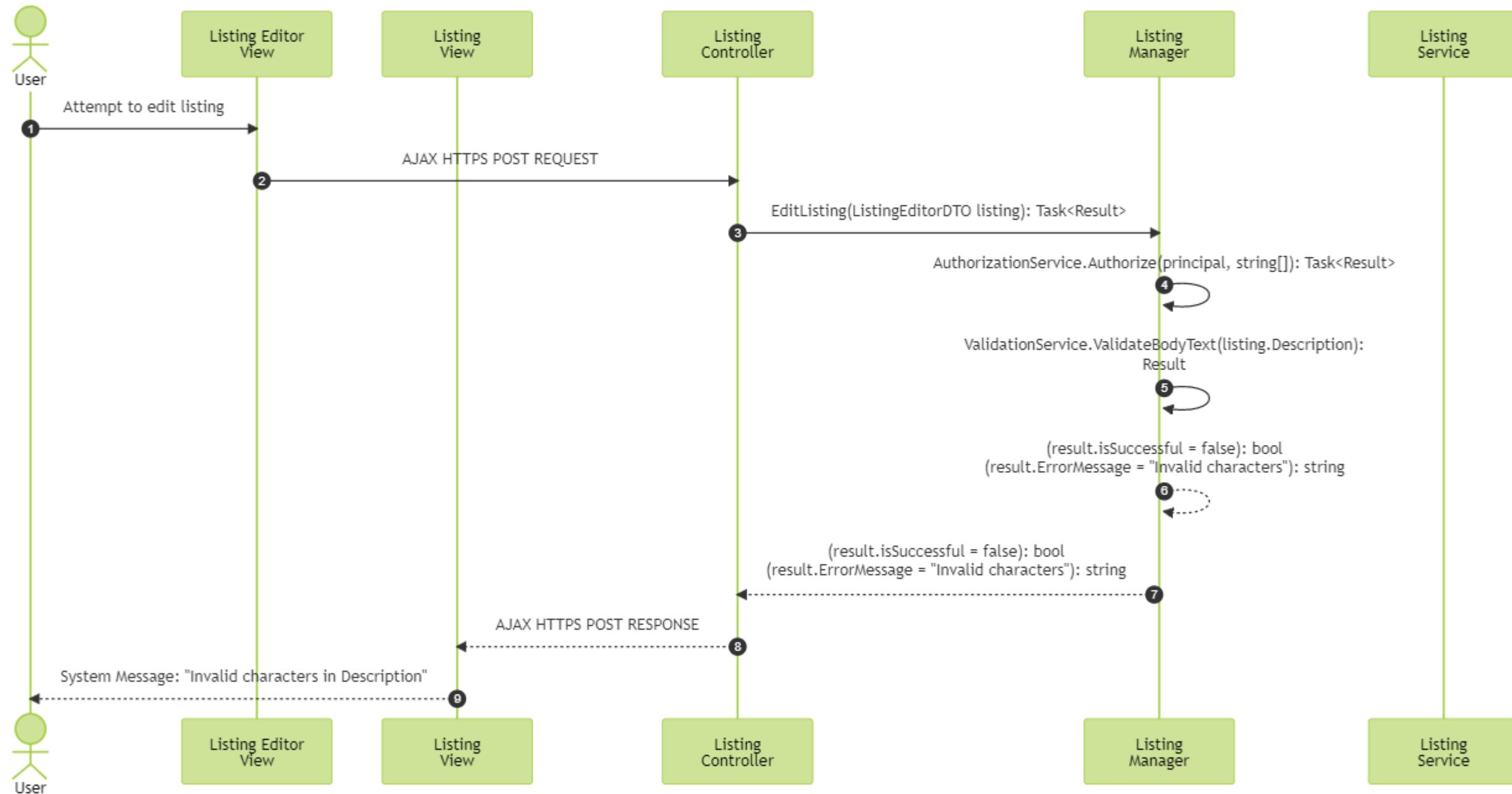
2. Security token contains no ID



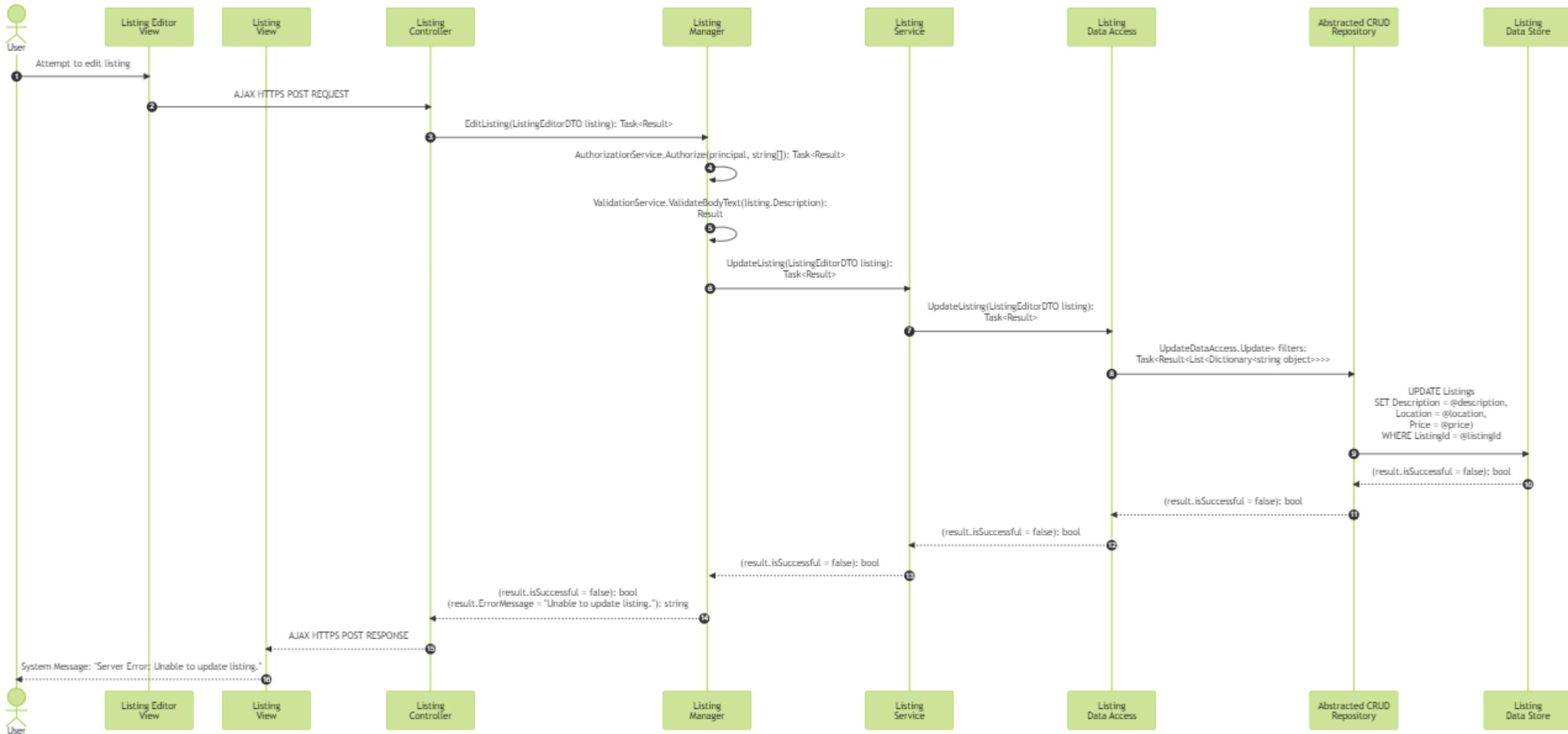
3. User is not the owner of the listing



4. Invalid description

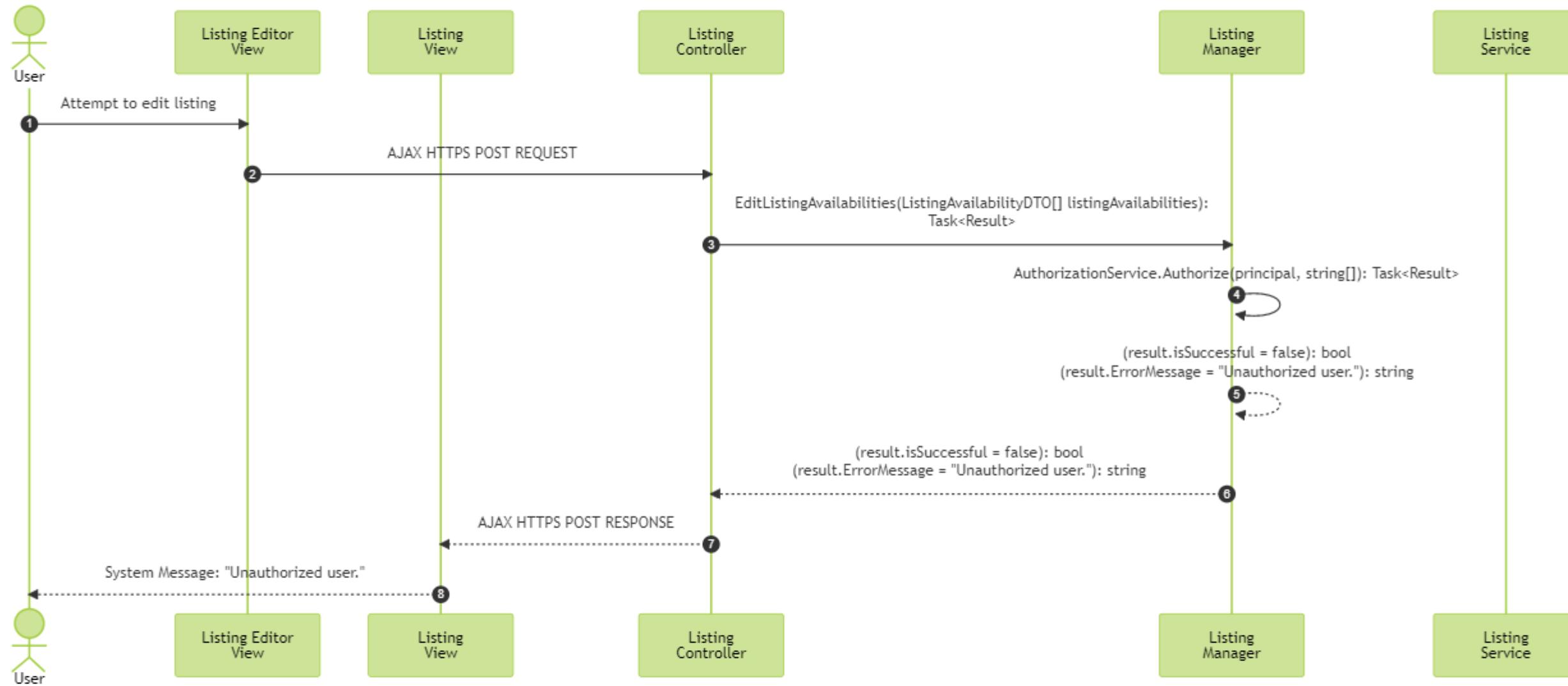


5. Datastore update failure for Listings datastore

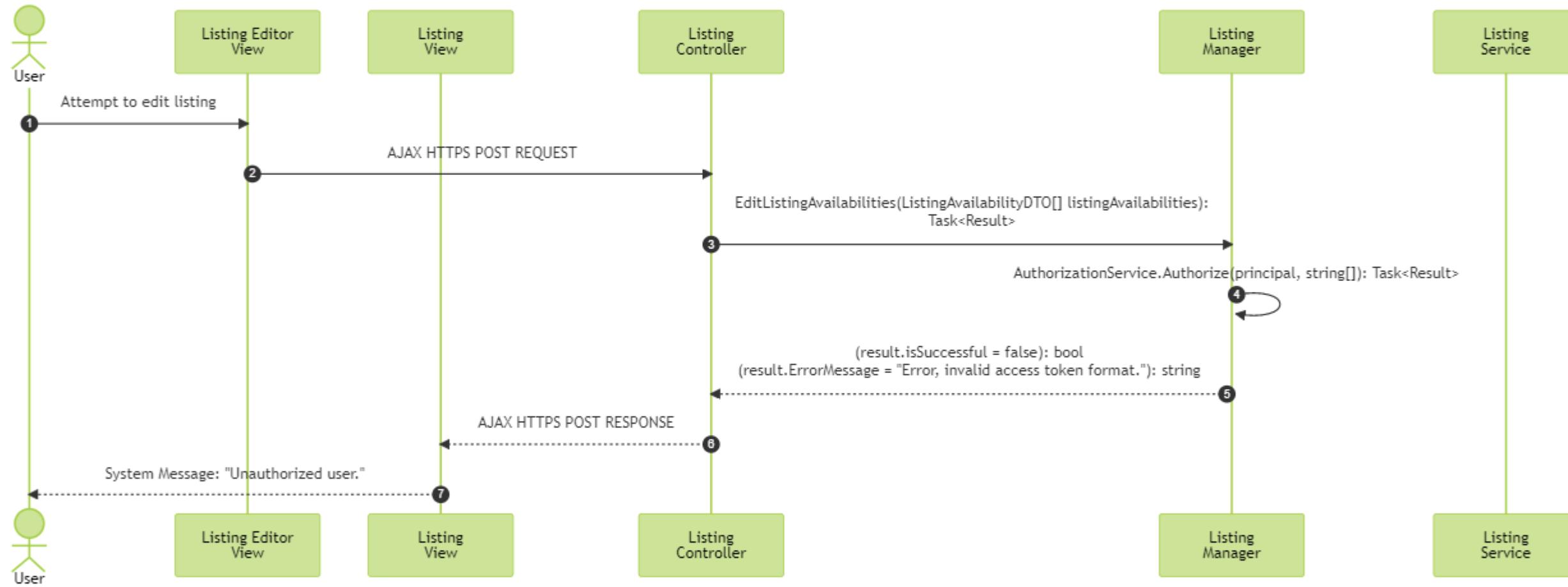


Editing a listing/listing draft Pt. II

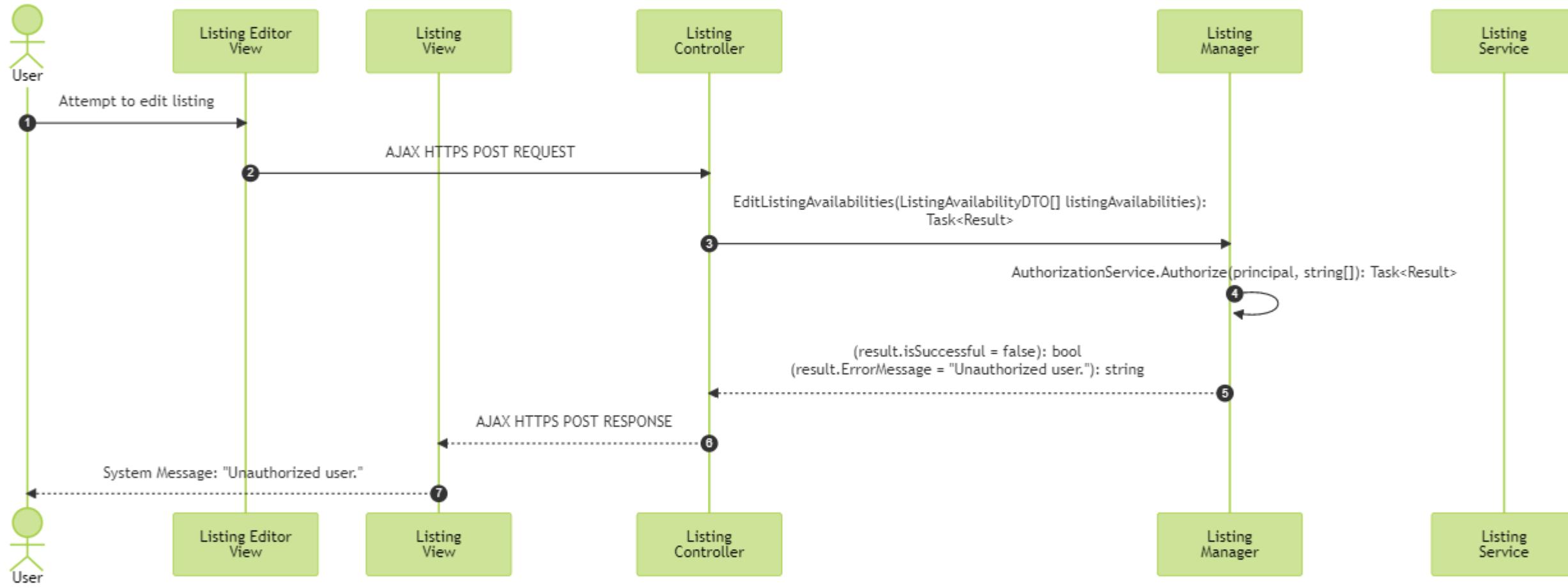
1. User does not have a security token



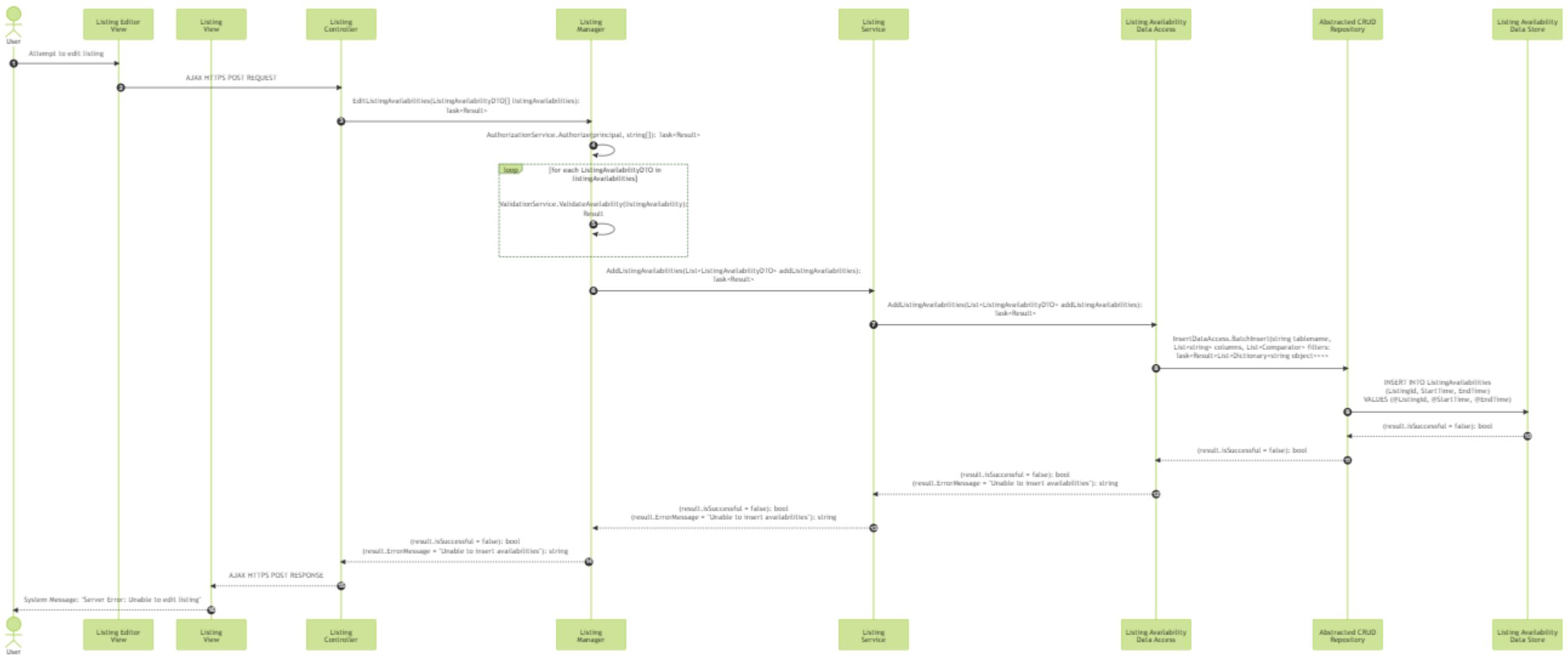
2. Security token contains no ID



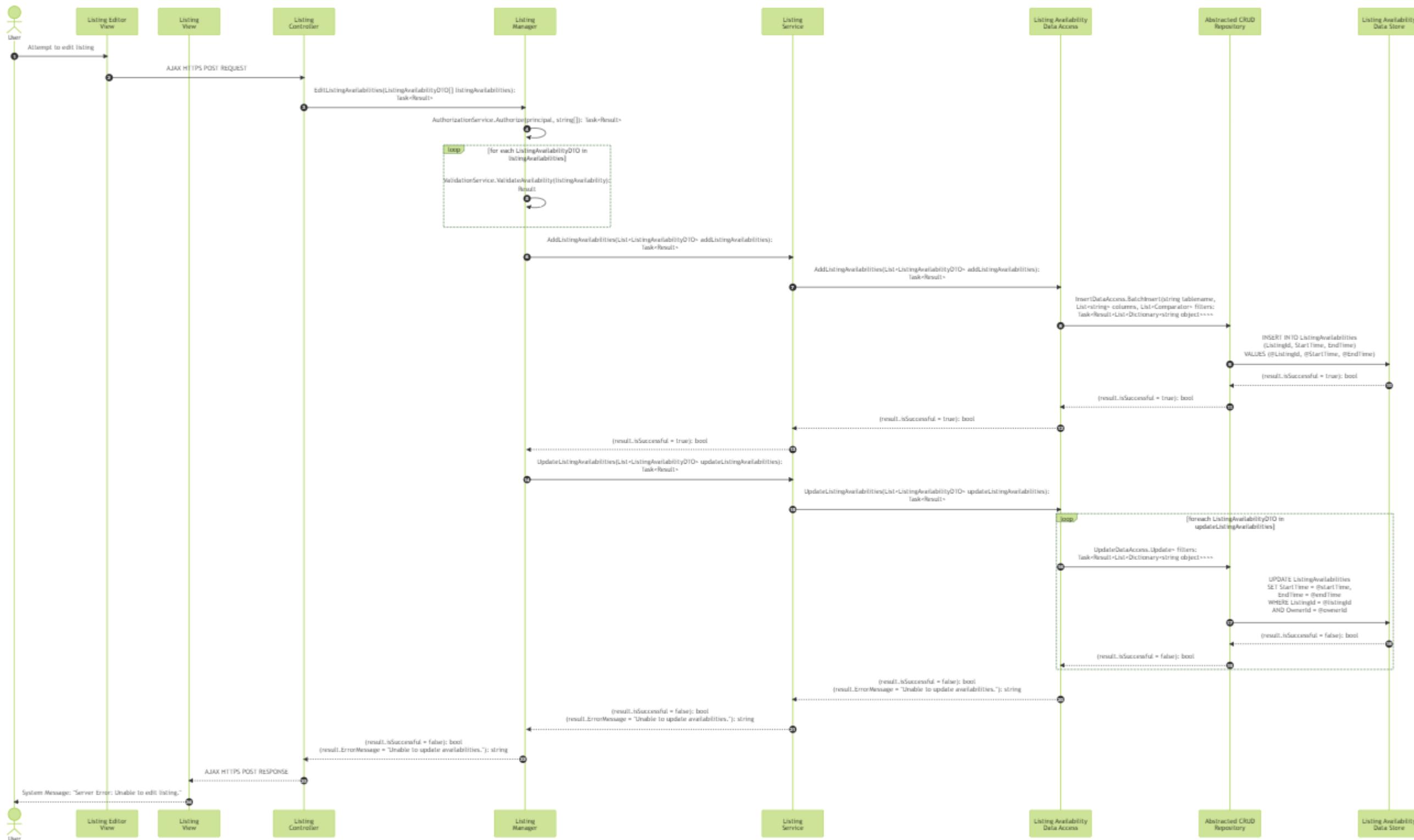
3. User is not the owner of the listing



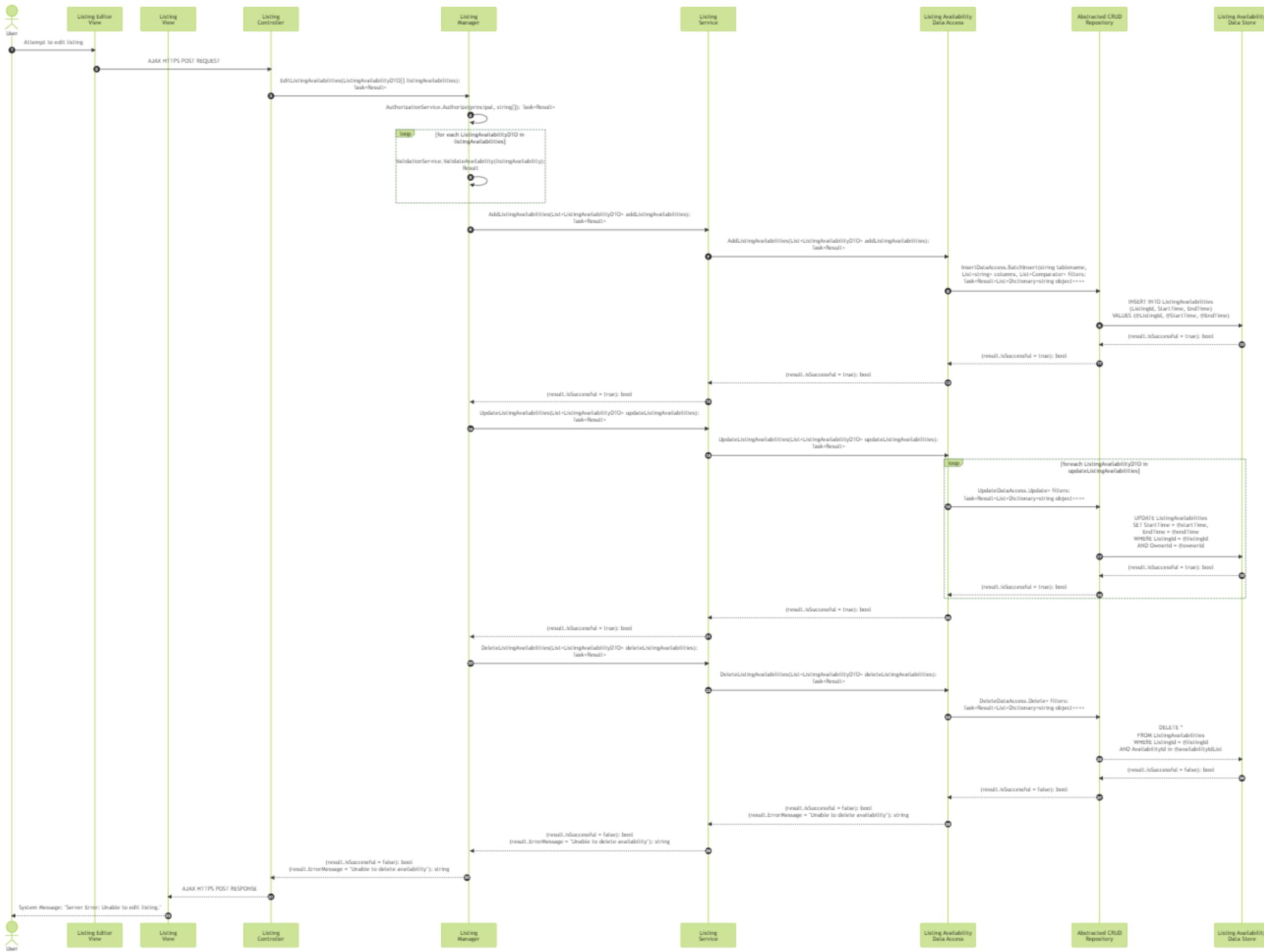
4. Datastore insert failure in ListingAvailabilities datastore



5. Datastore update failure in ListingAvailabilities datastore

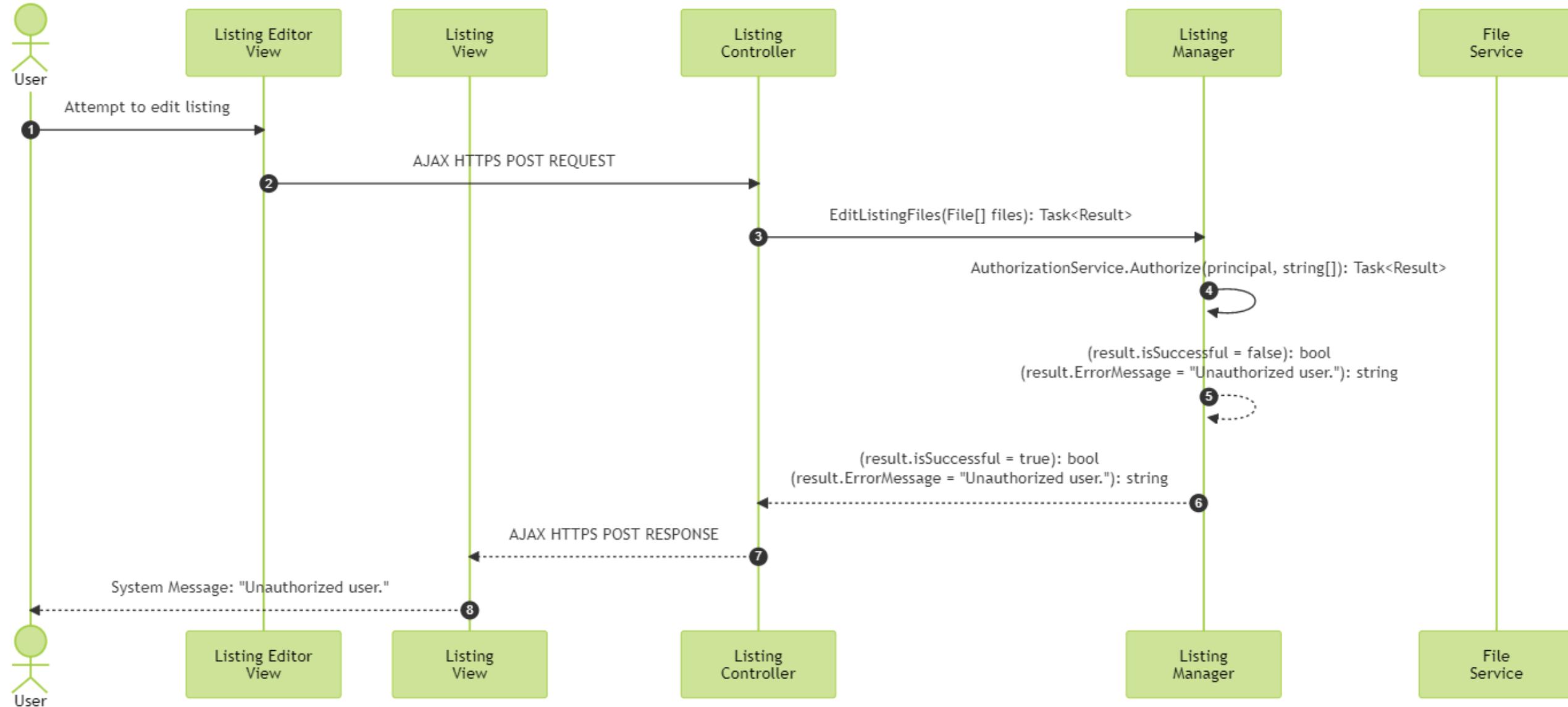


6. Datastore delete failure in ListingAvailabilities datastore

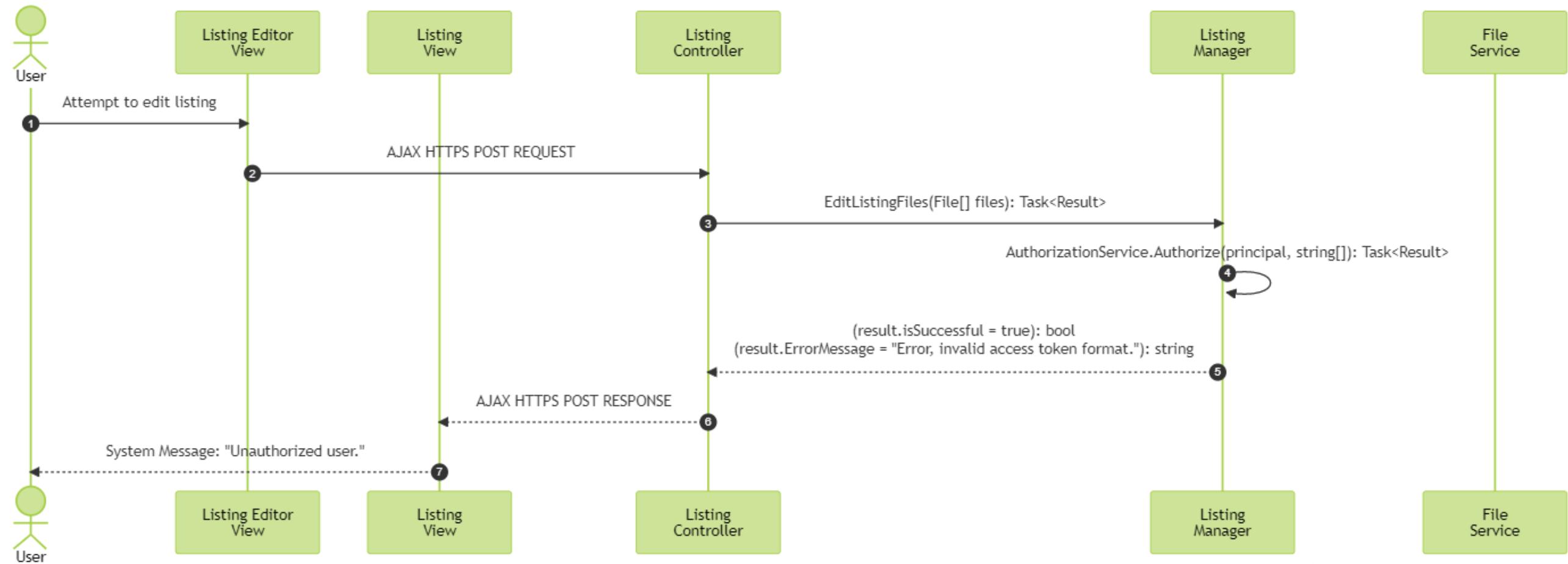


Editing a listing/listing draft Pt. III

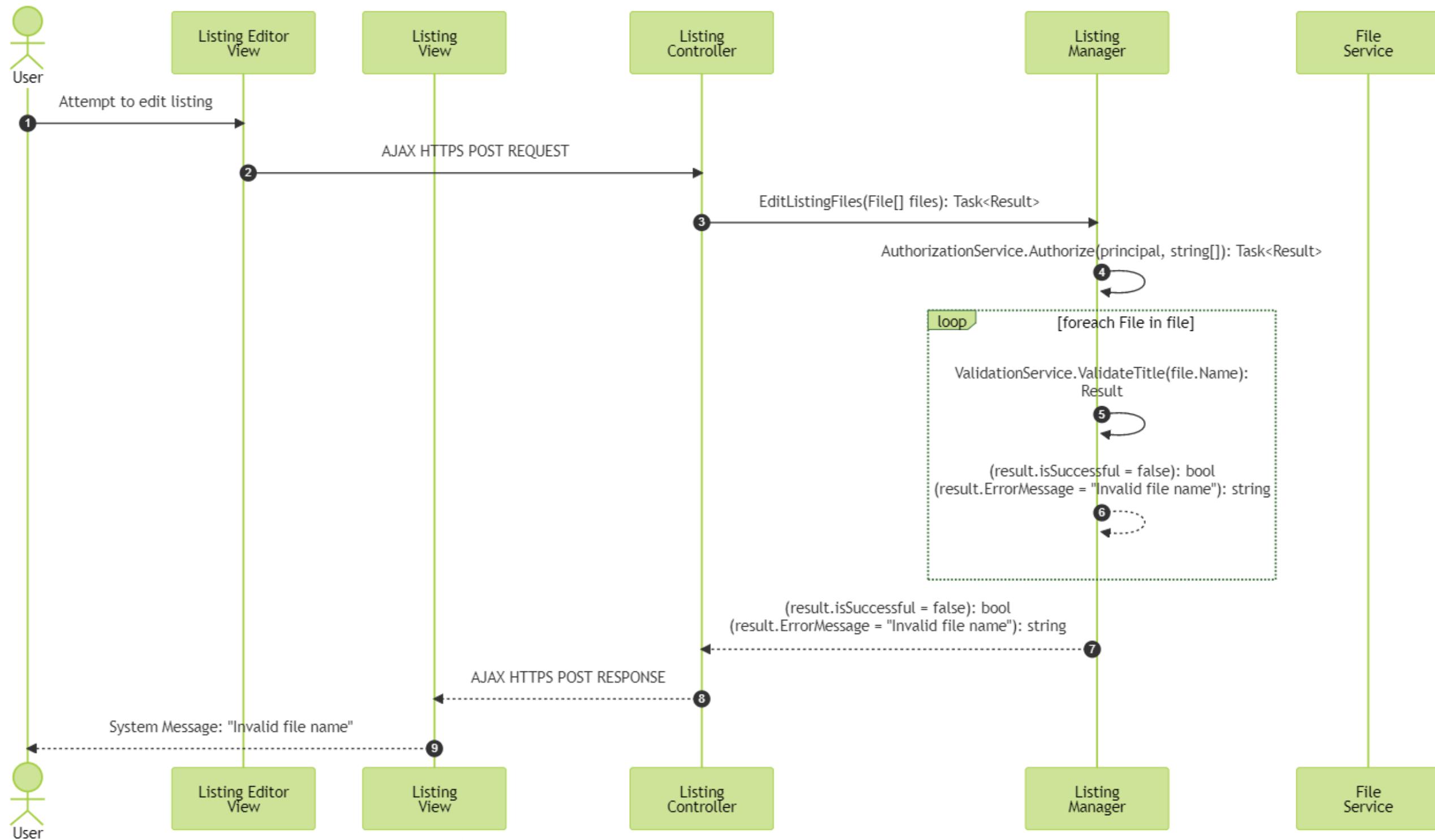
1. User does not have a security token



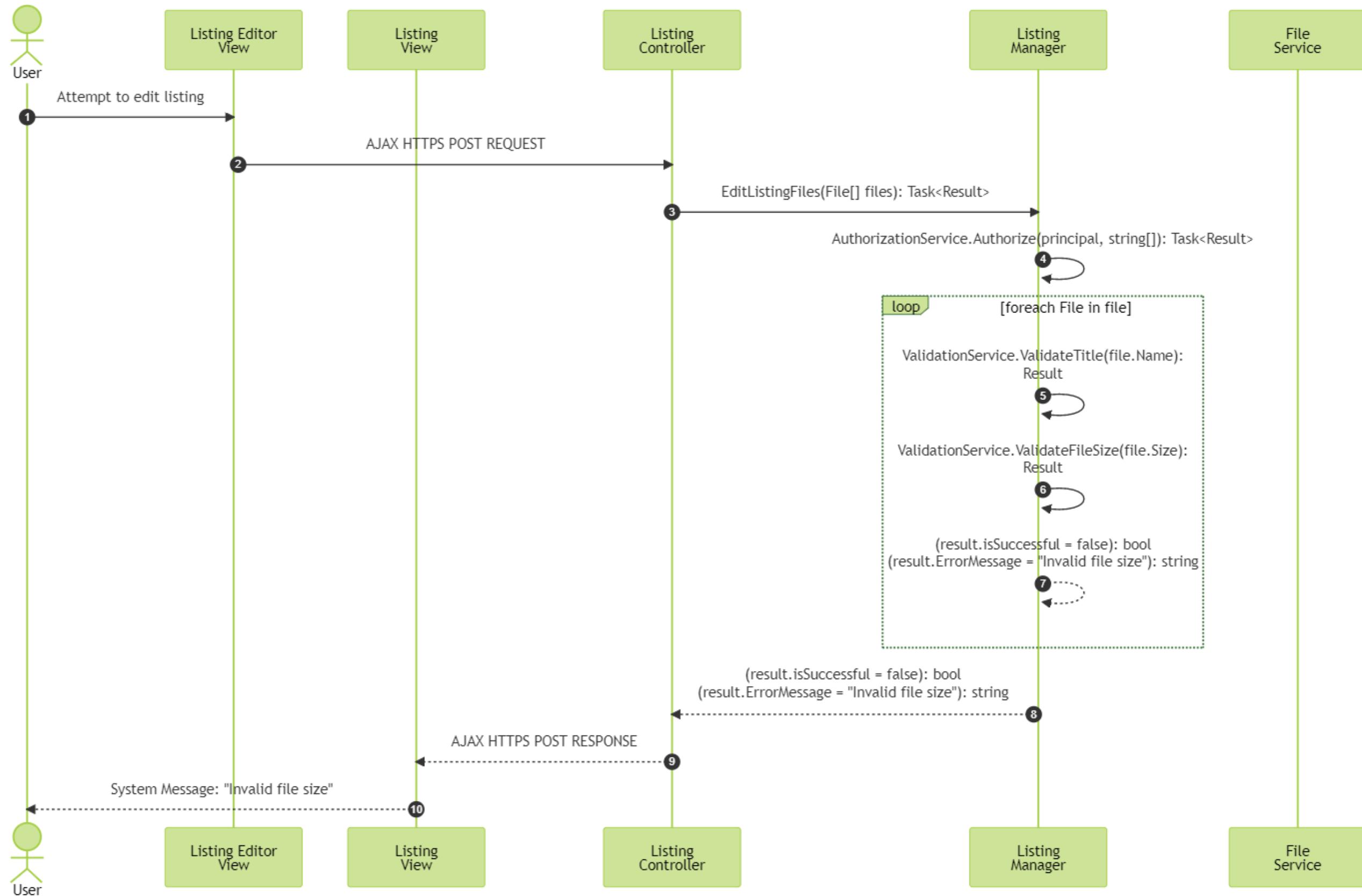
2. Security token contains no ID



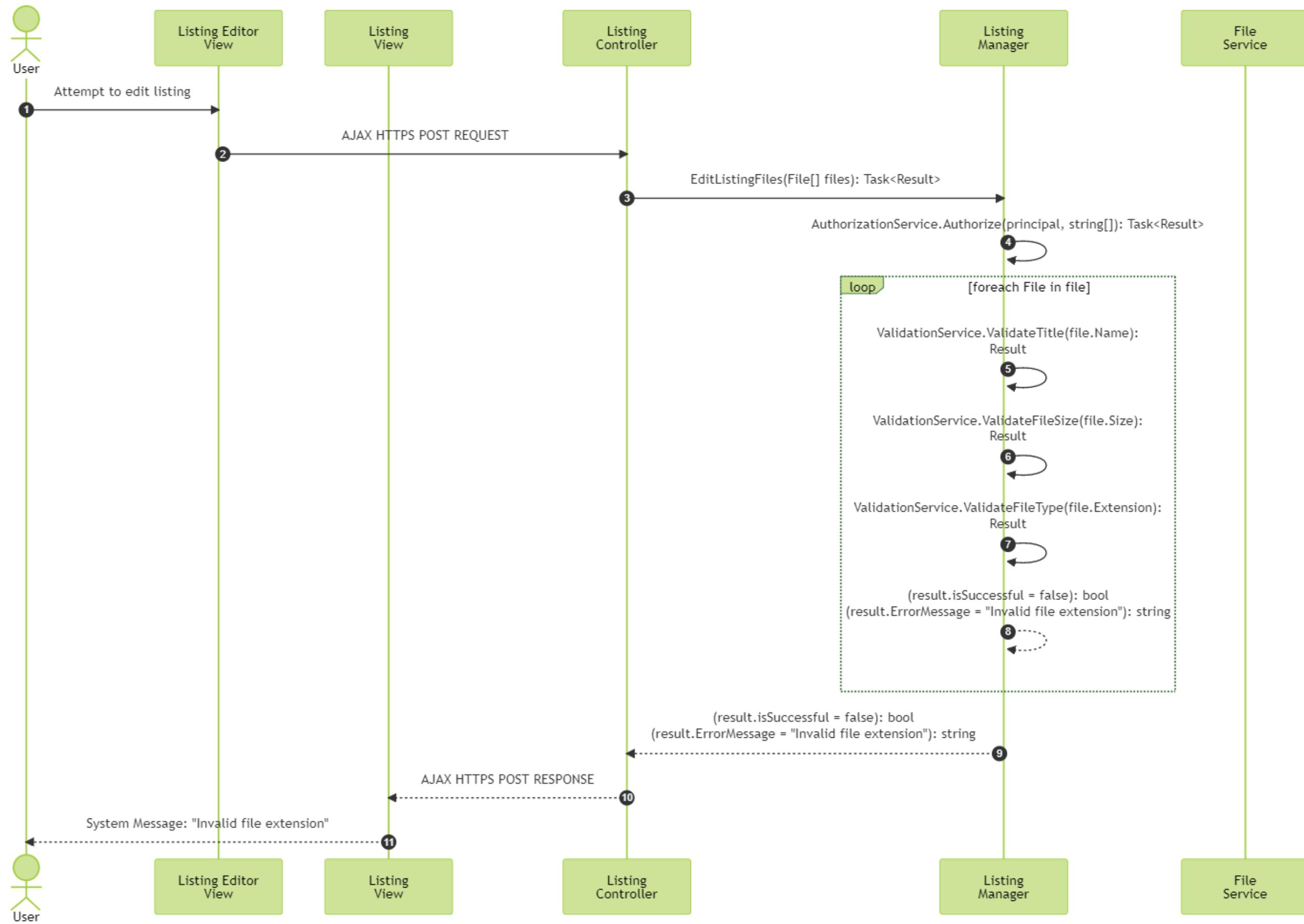
3. Invalid file name



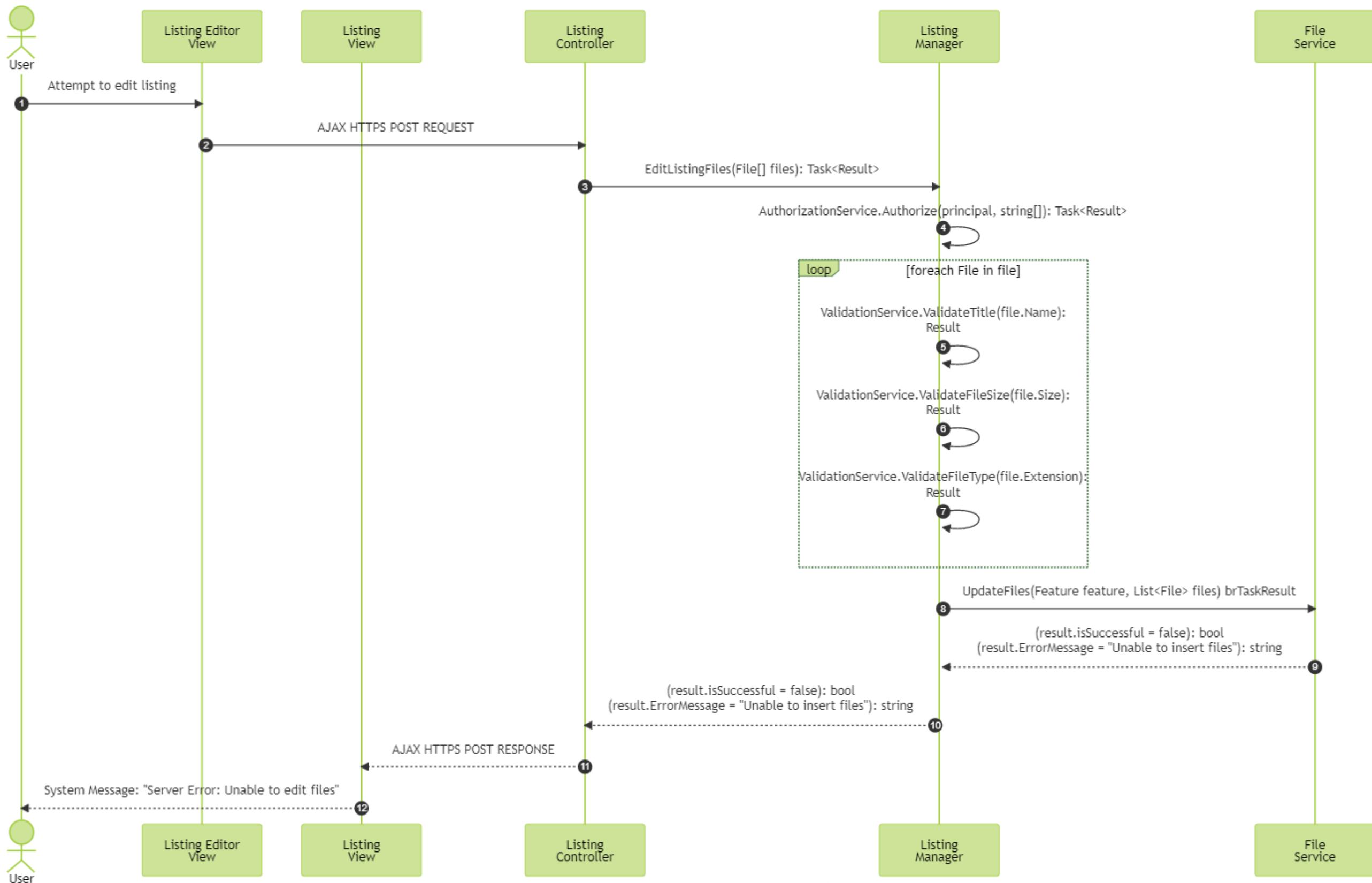
4. Invalid file size



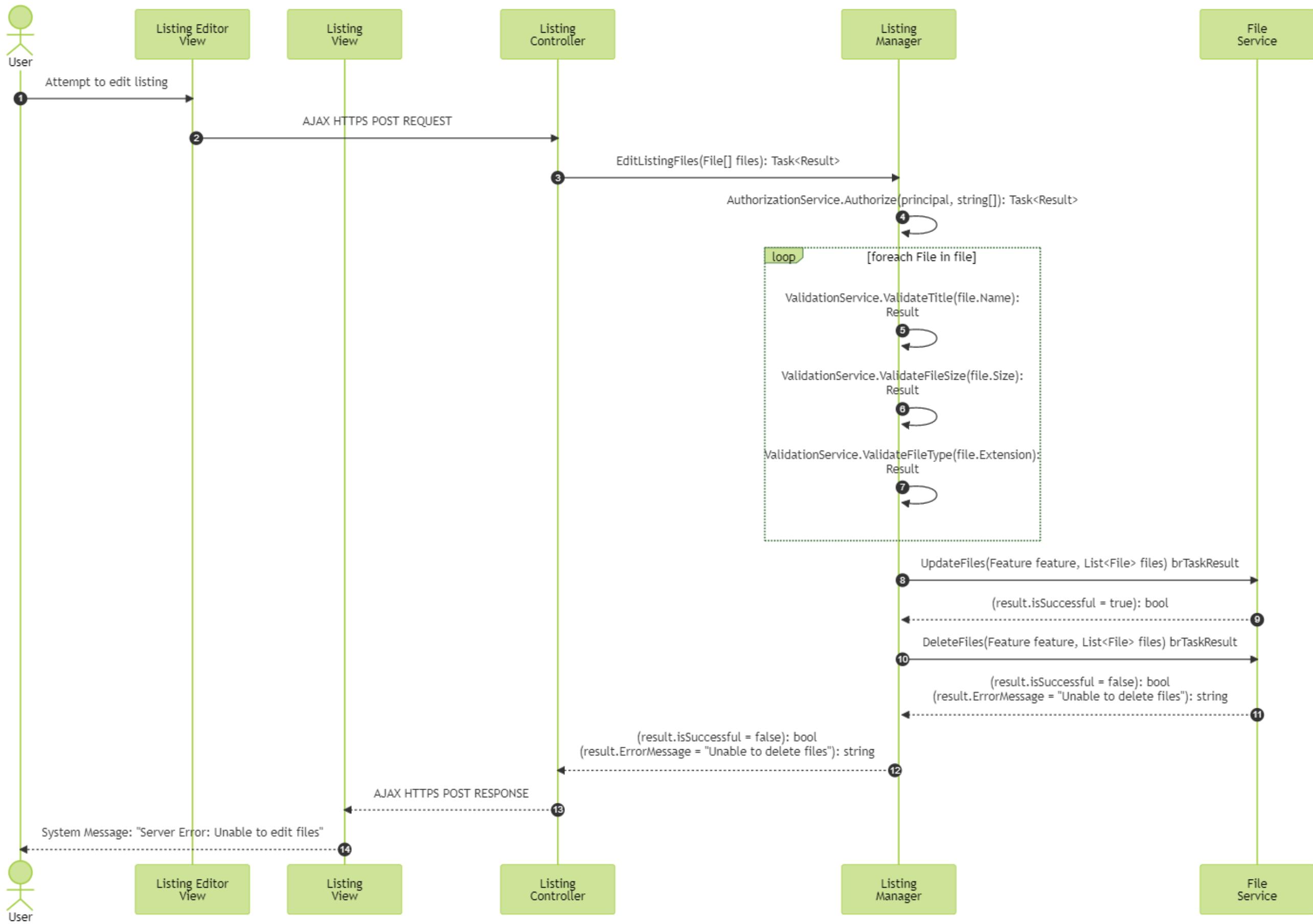
5. Invalid file extension/type



6. Datastore insert failure in File datastore

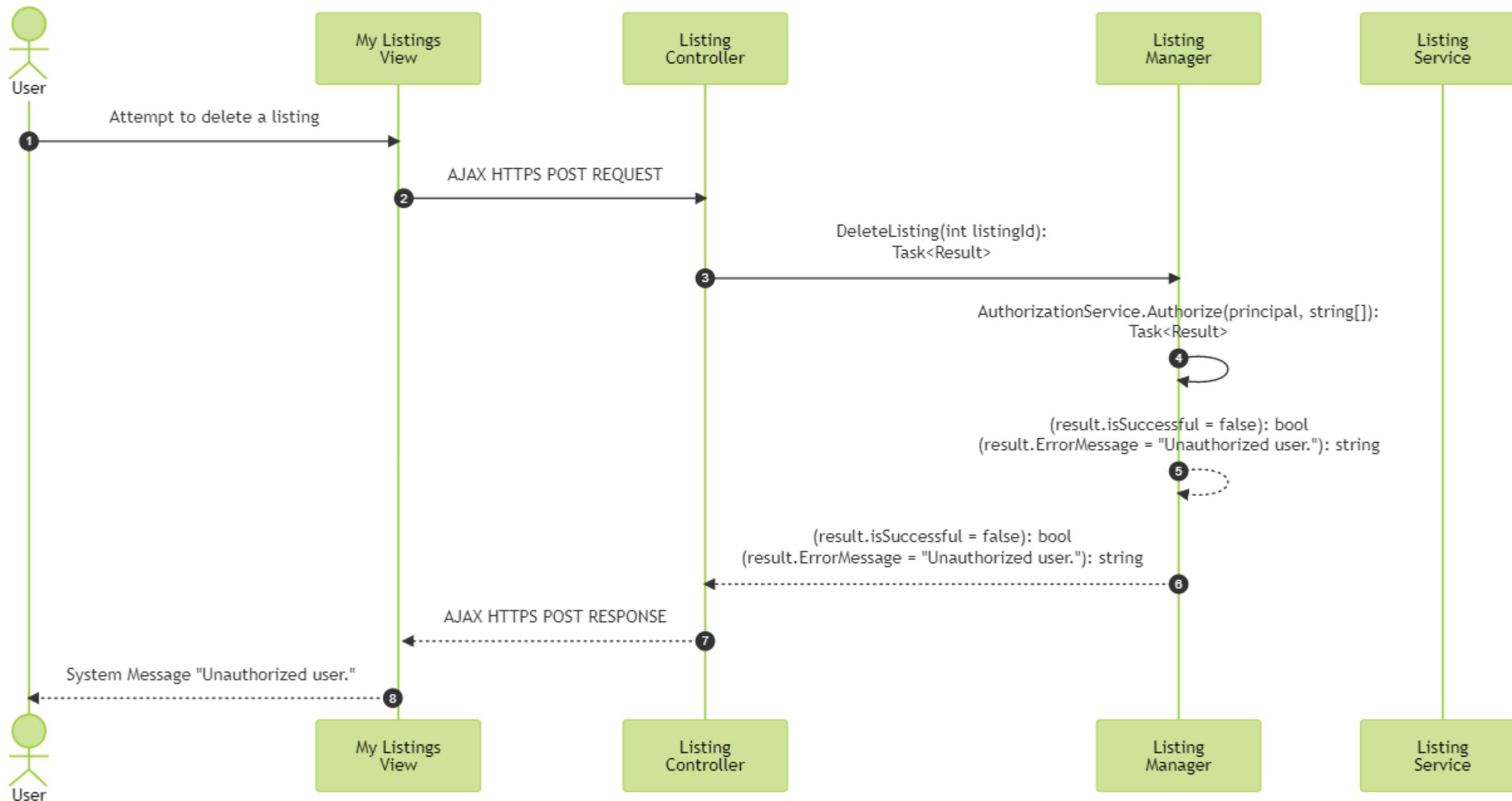


7. Datastore delete failure in File datastore

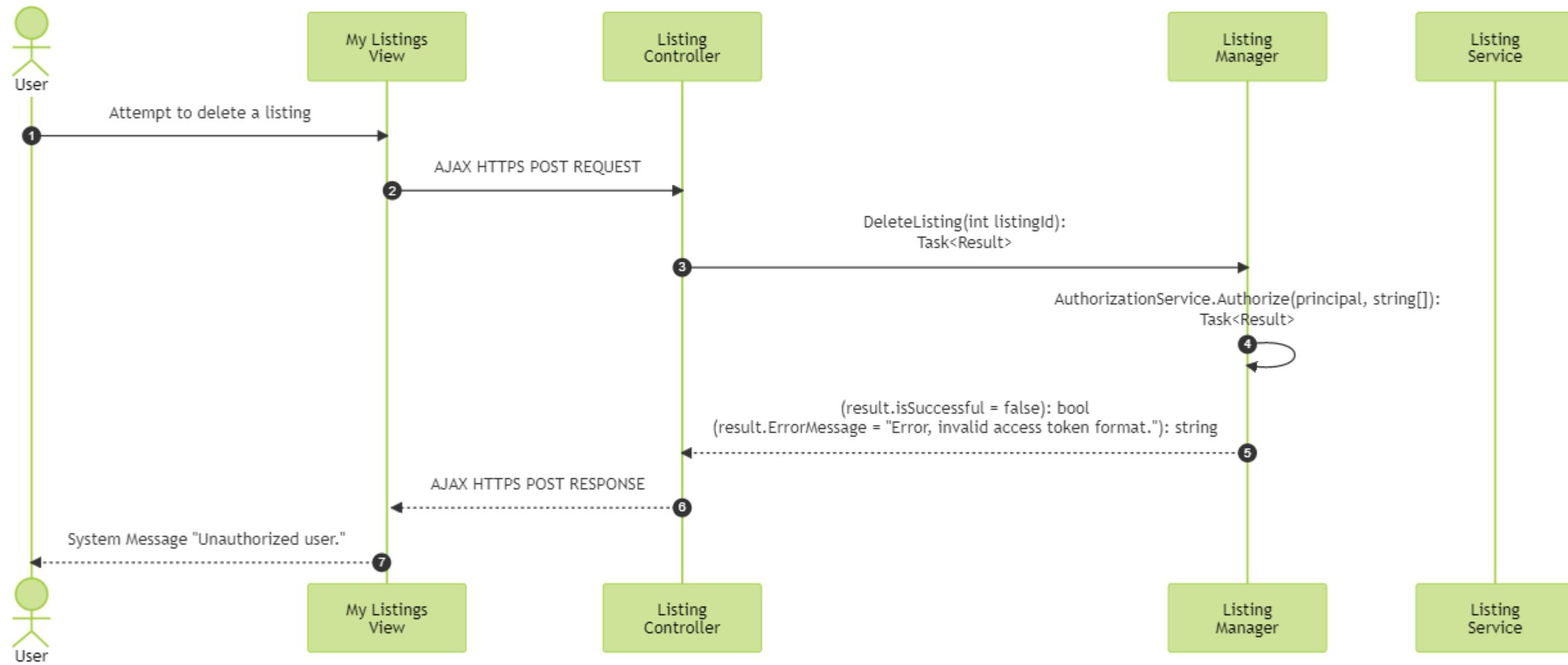


Delete a listing/listing draft

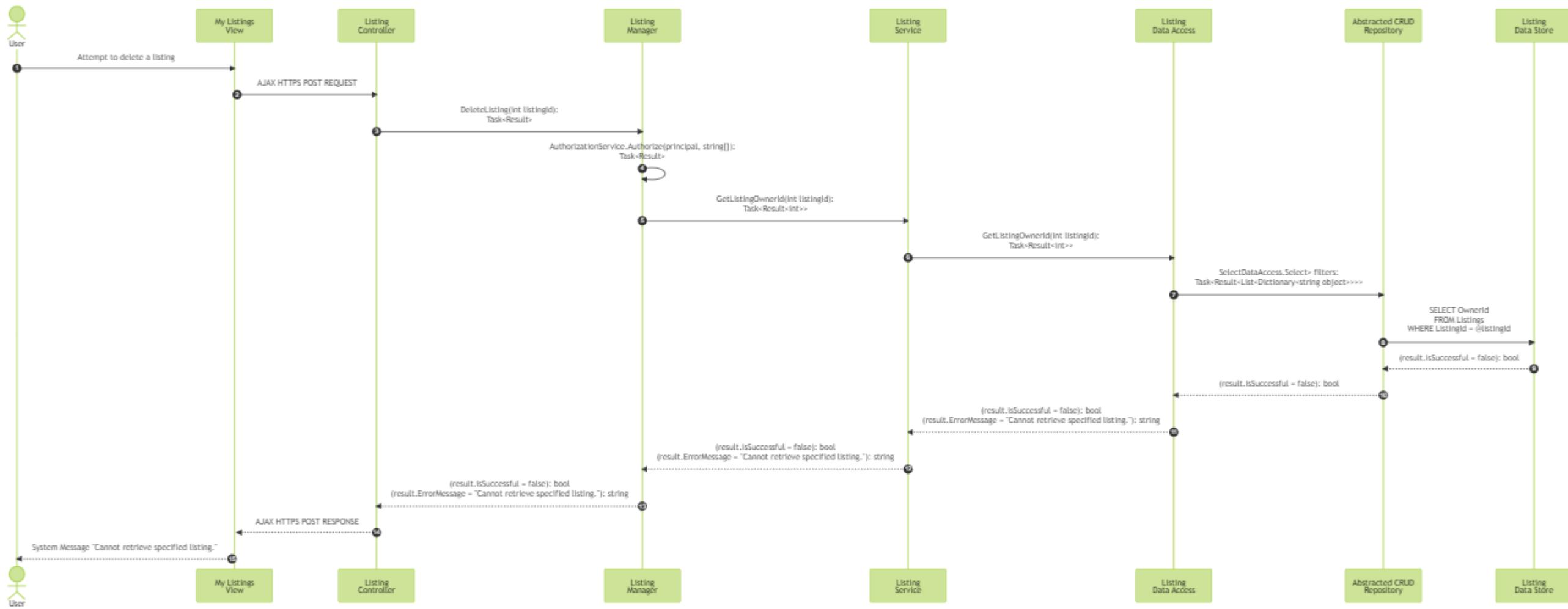
1. User does not have a security token



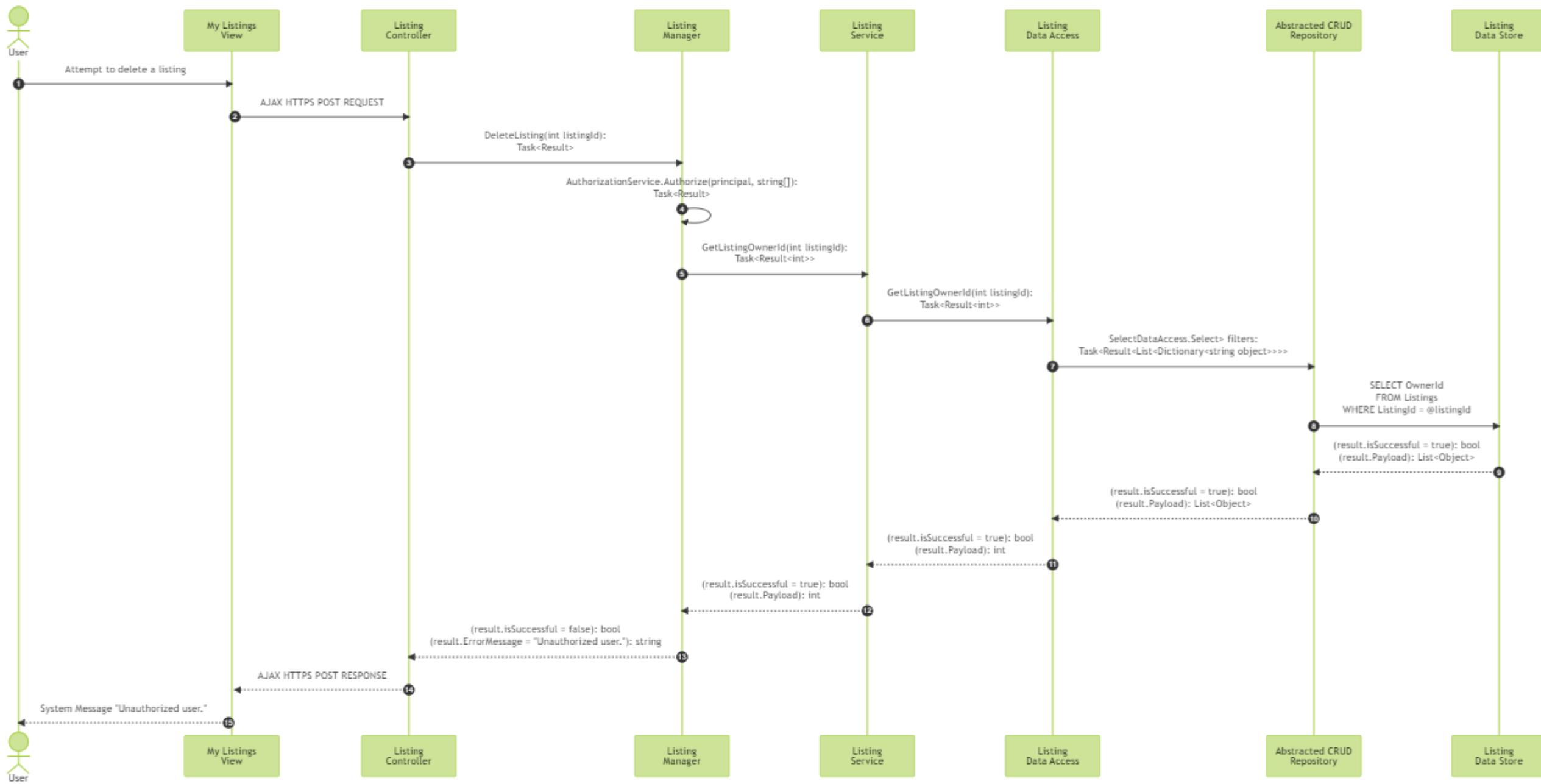
2. Security token contains no ID



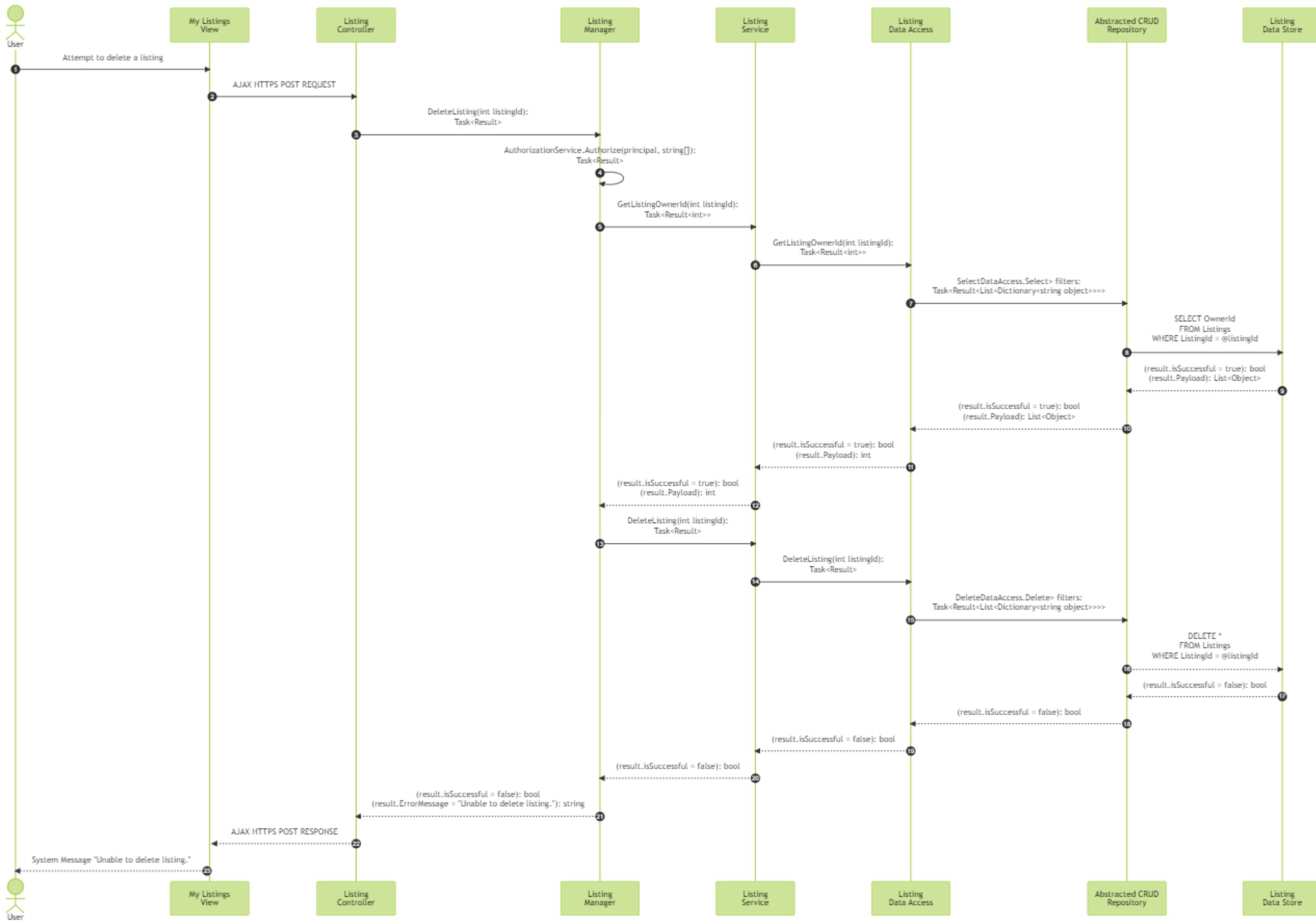
3. Datastore select failure or null payload



4. User is not the owner of the listing

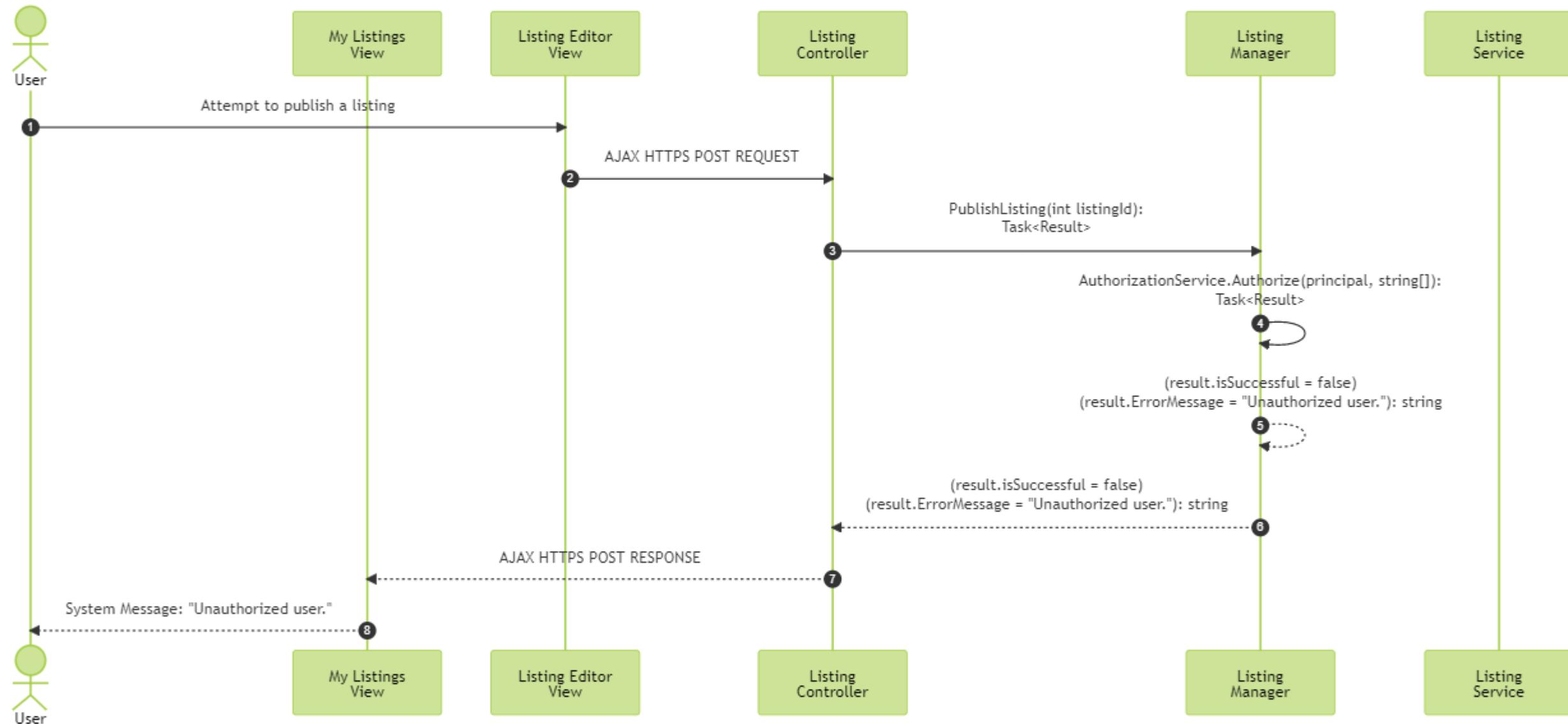


5. Datastore delete failure in Listings datastore

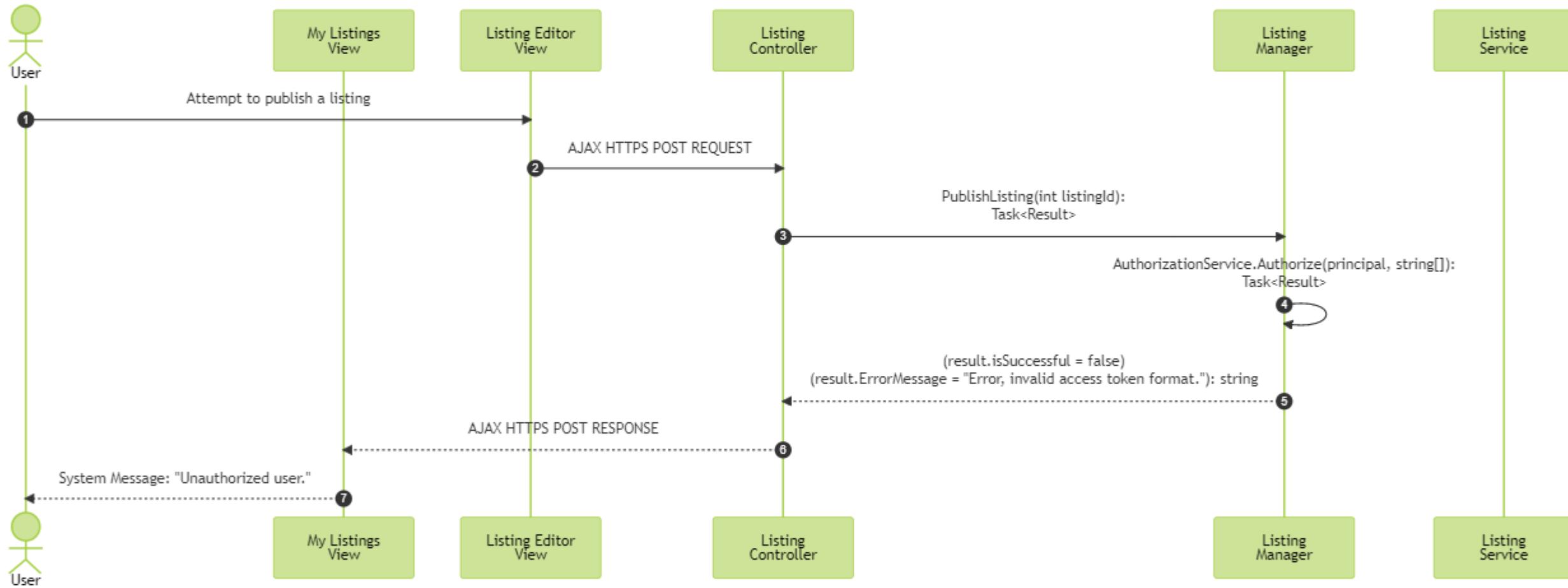


Publish a listing

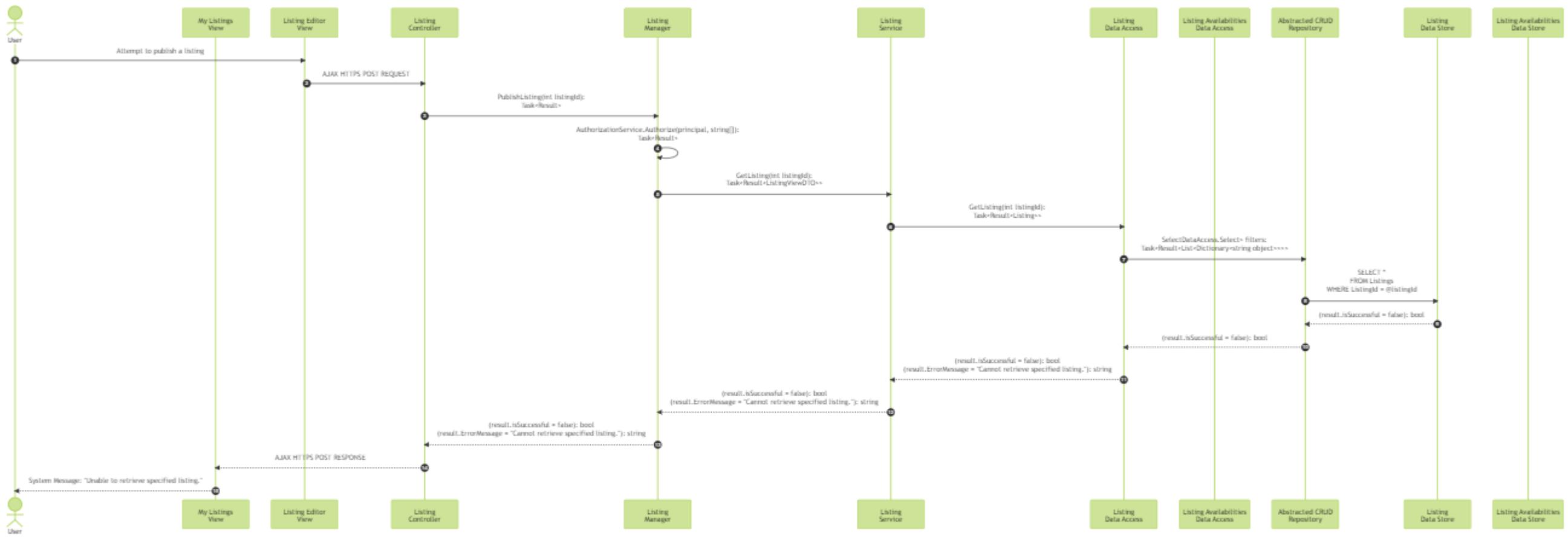
1. User does not have a security token



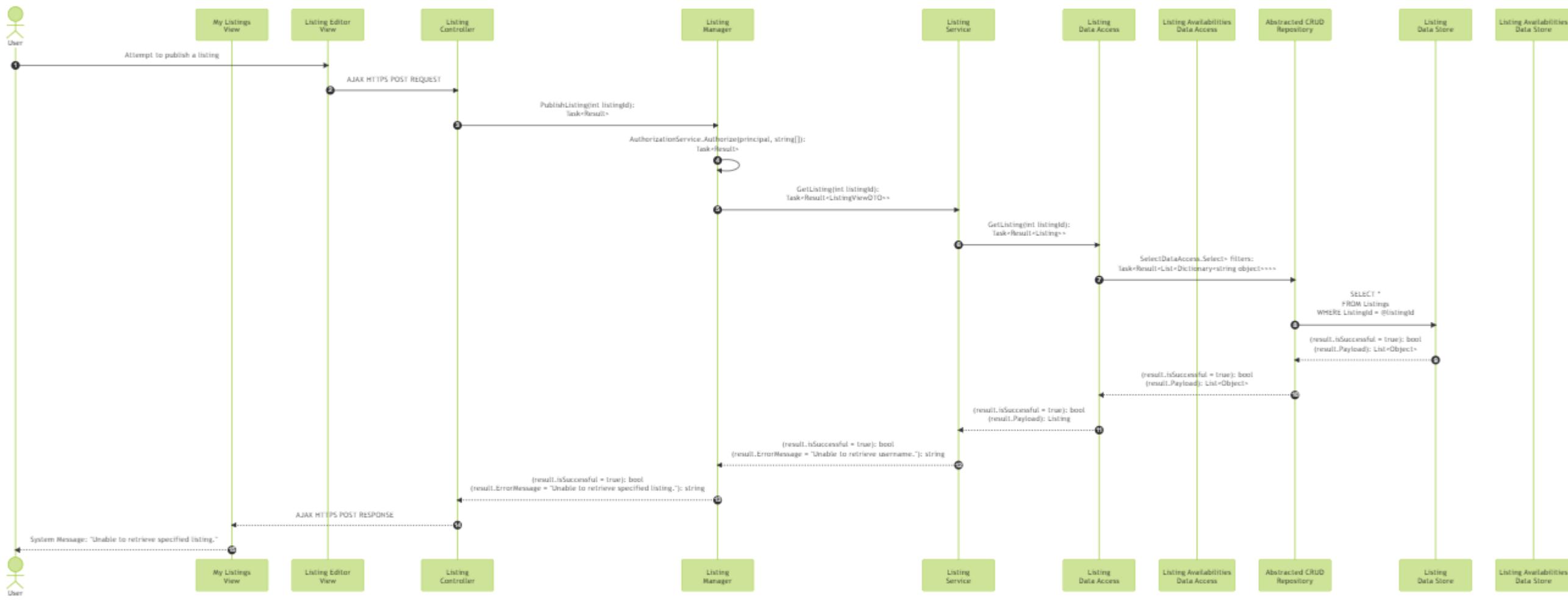
2. Security token contains no ID



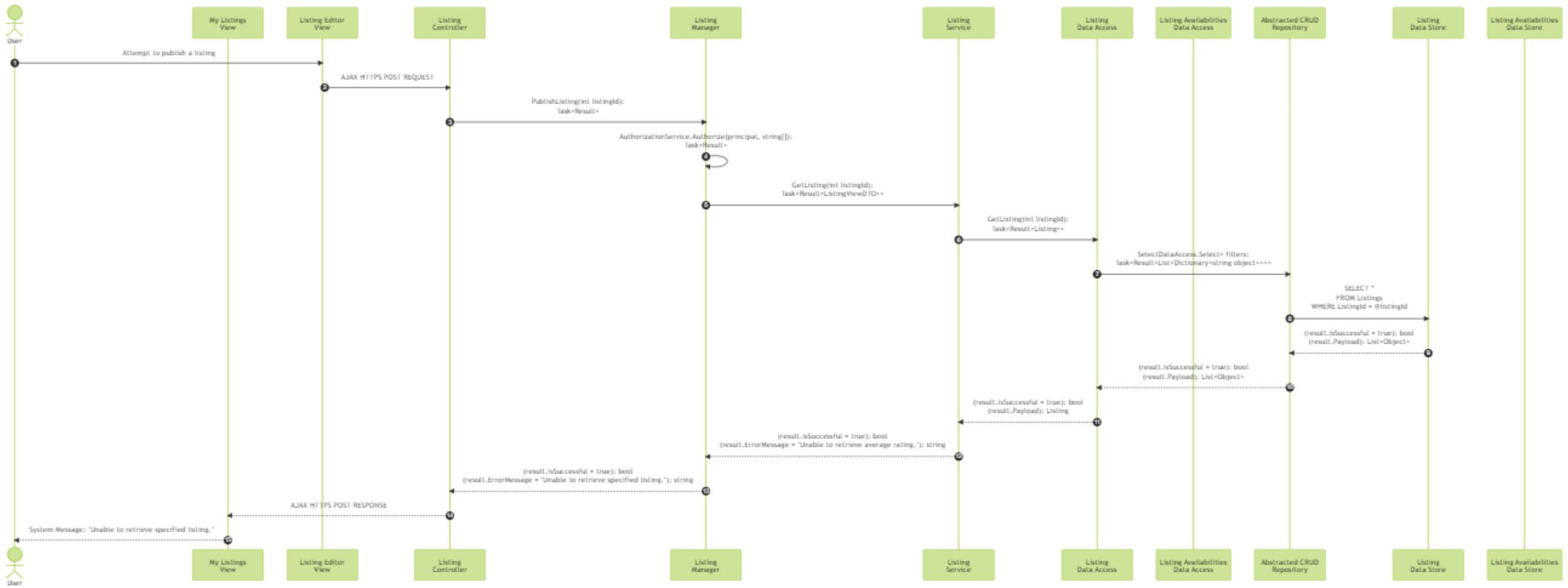
3. Datastore select failure in Listings datastore or null payload



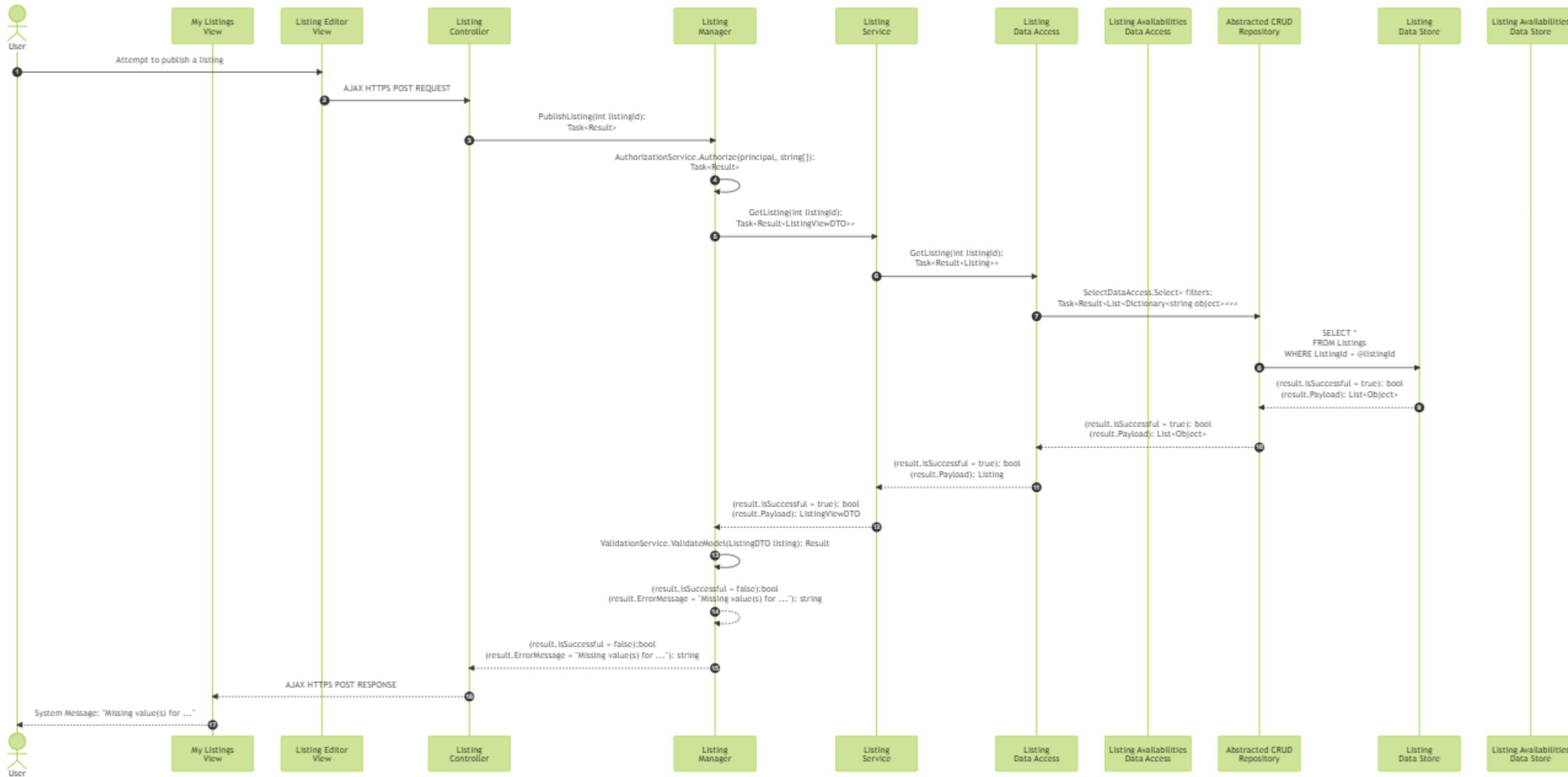
4. Unable to retrieve username



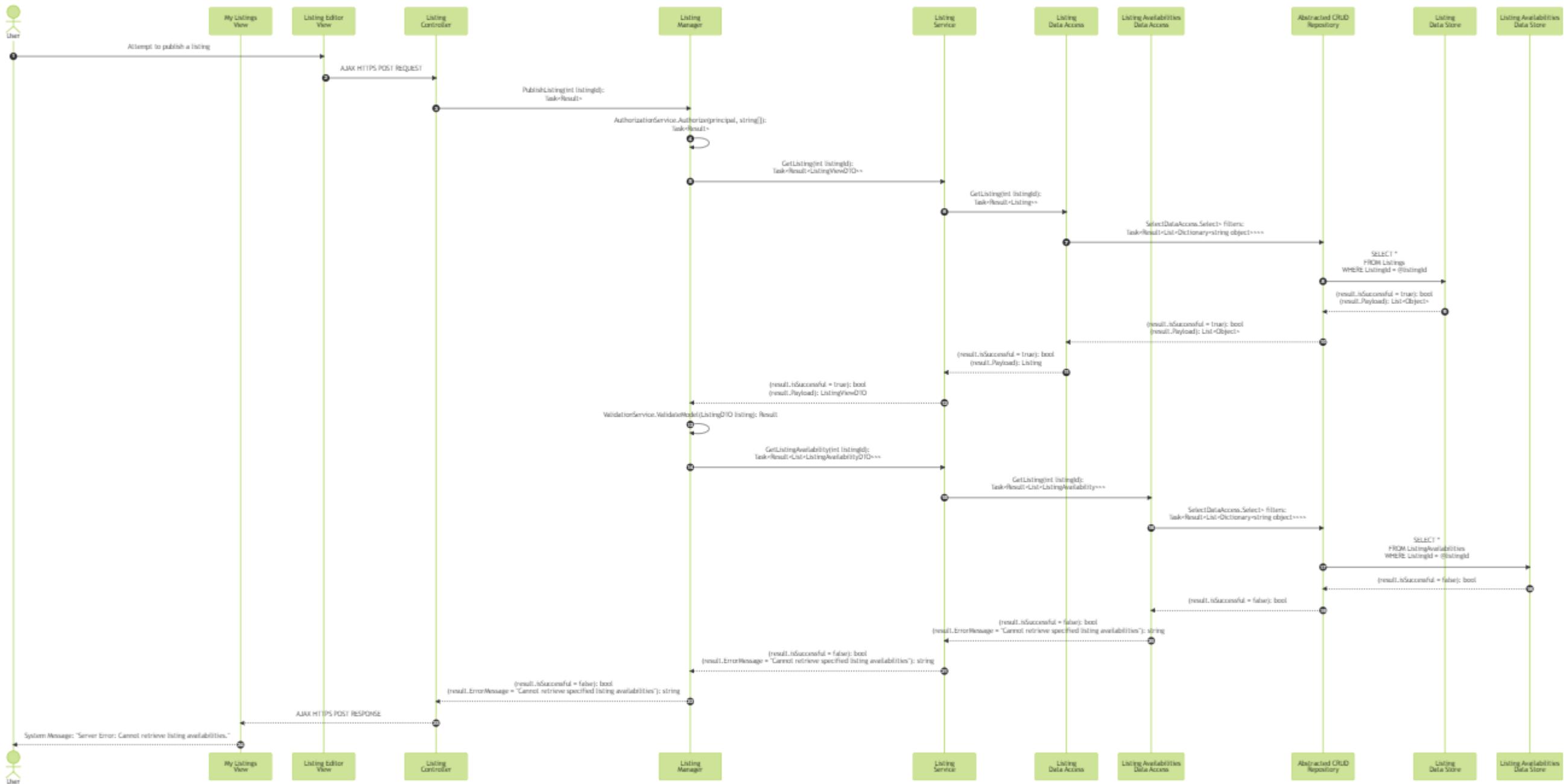
5. Unable to retrieve average rating



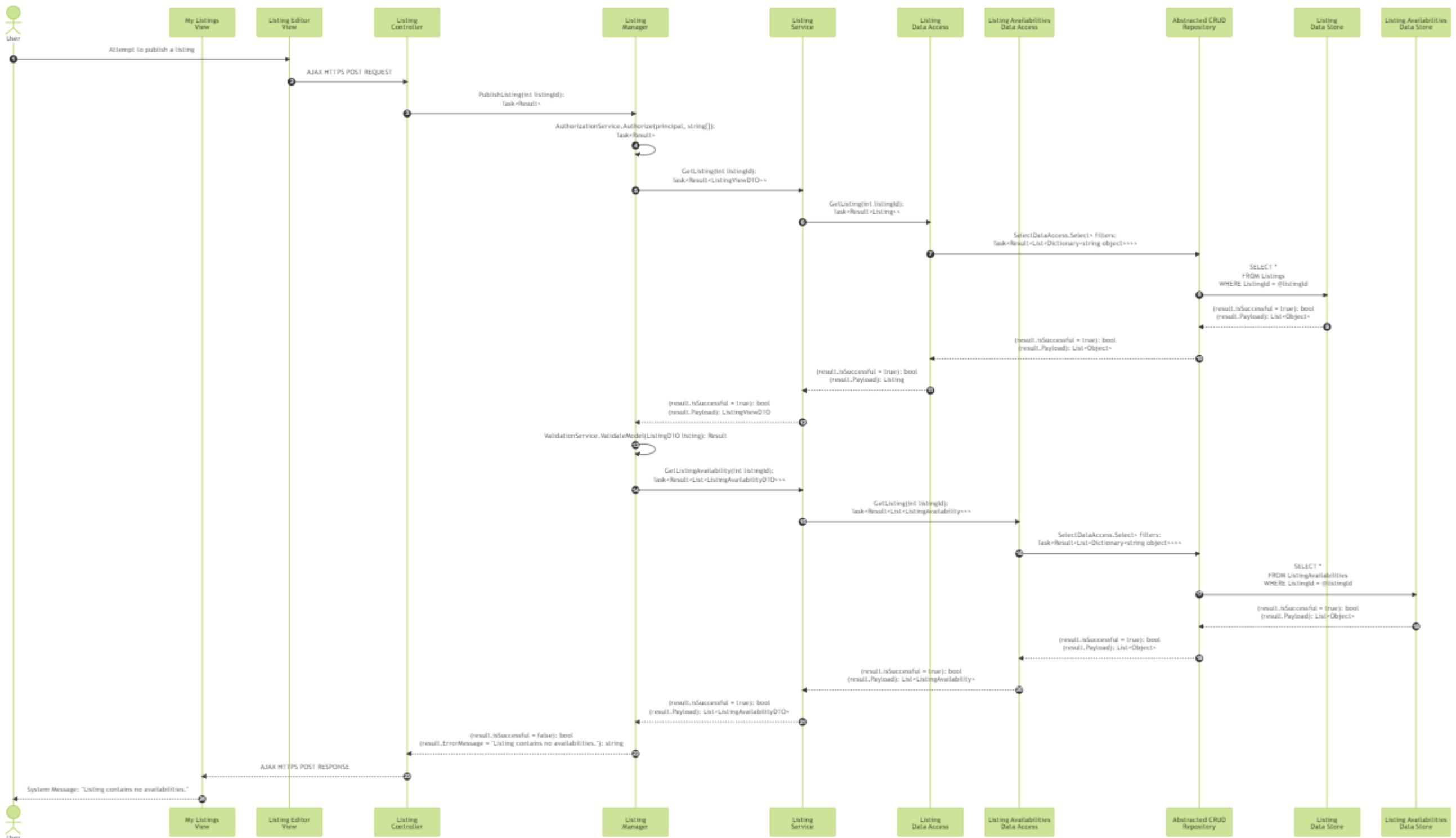
6. Invalid ListingViewDTO Object



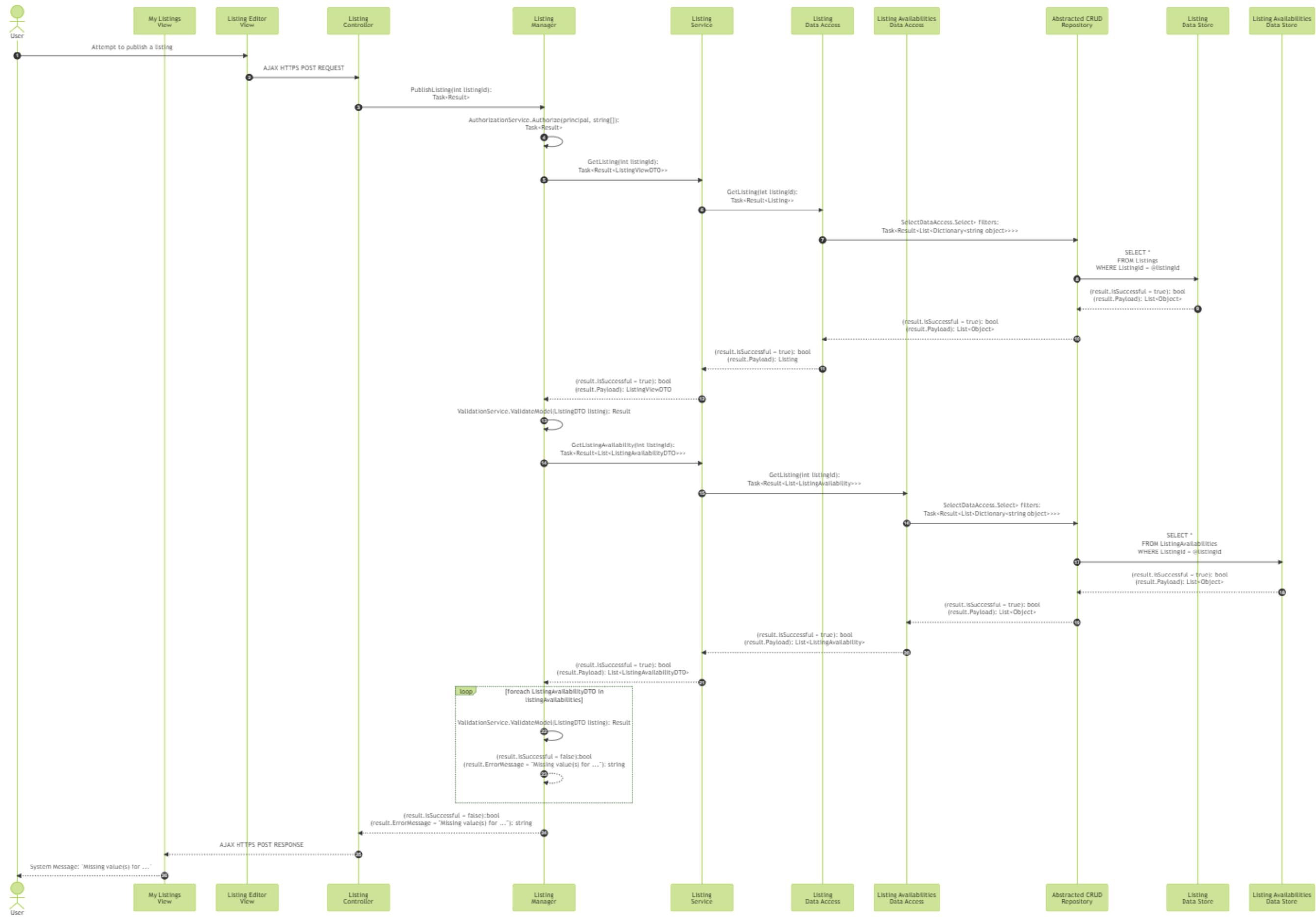
7. Datastore select failure in ListingAvailabilities datastore



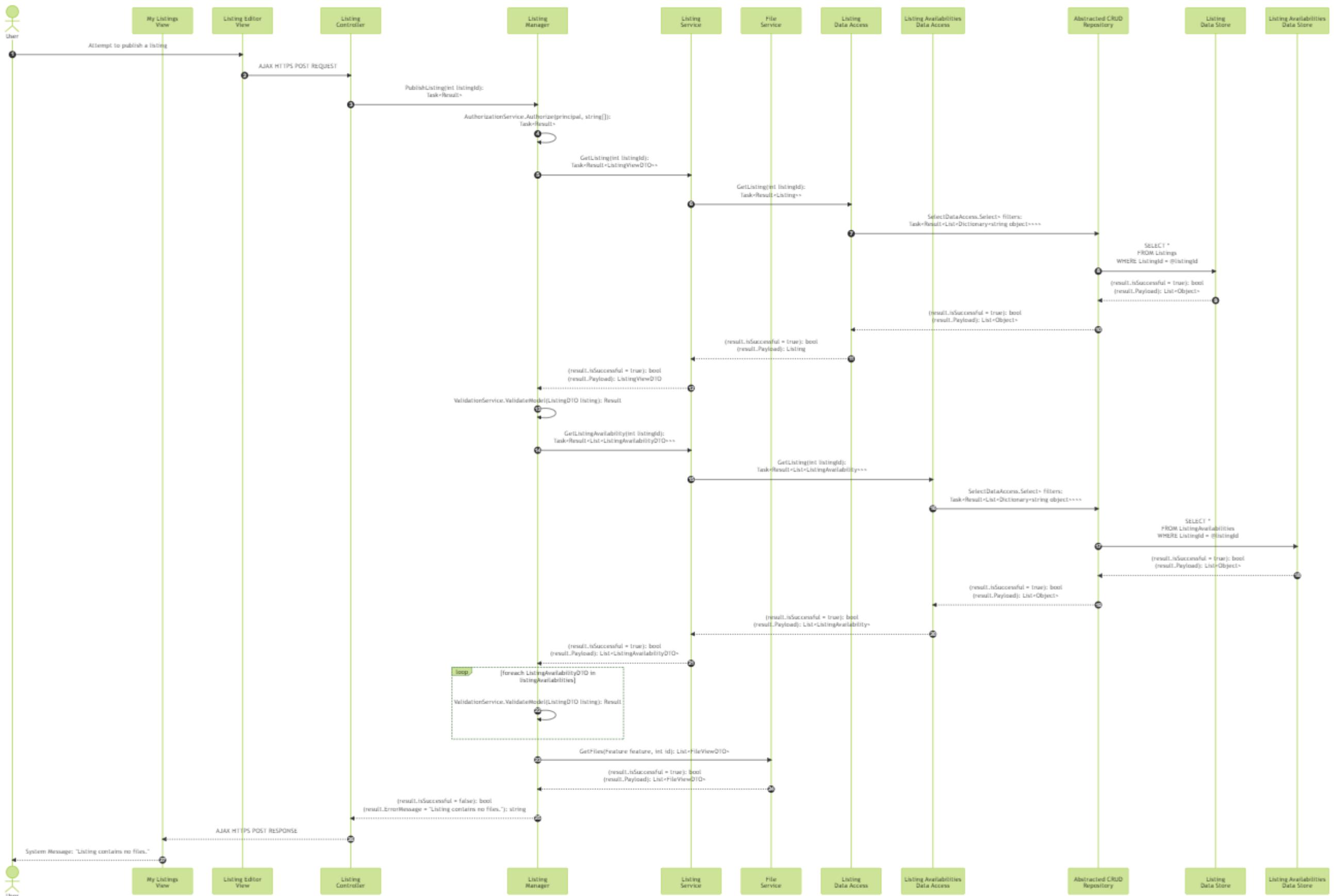
8. Listing contains no availabilities



9. Invalid ListingAvailabilityDTO Object



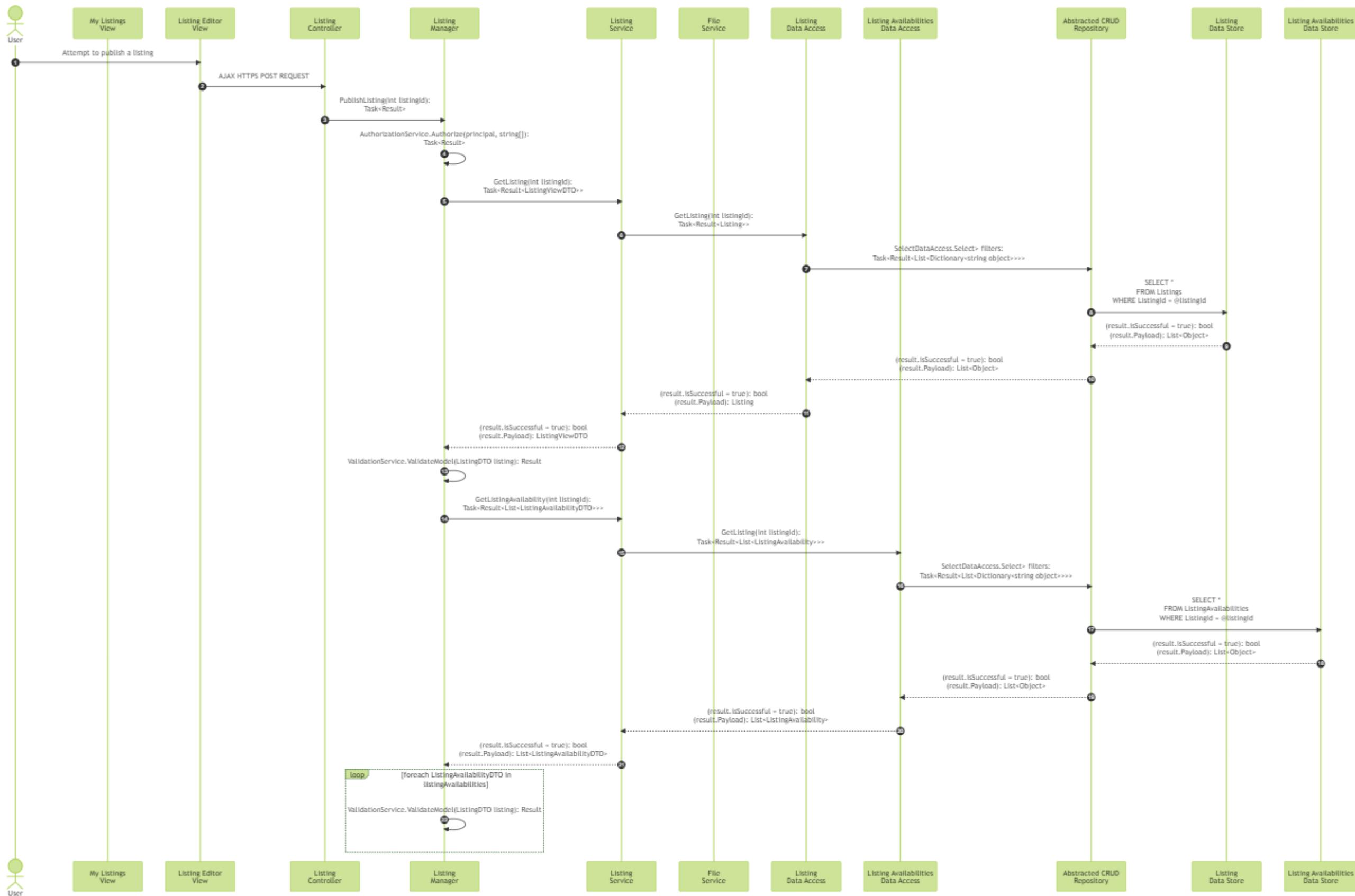
10. Listing contains no files



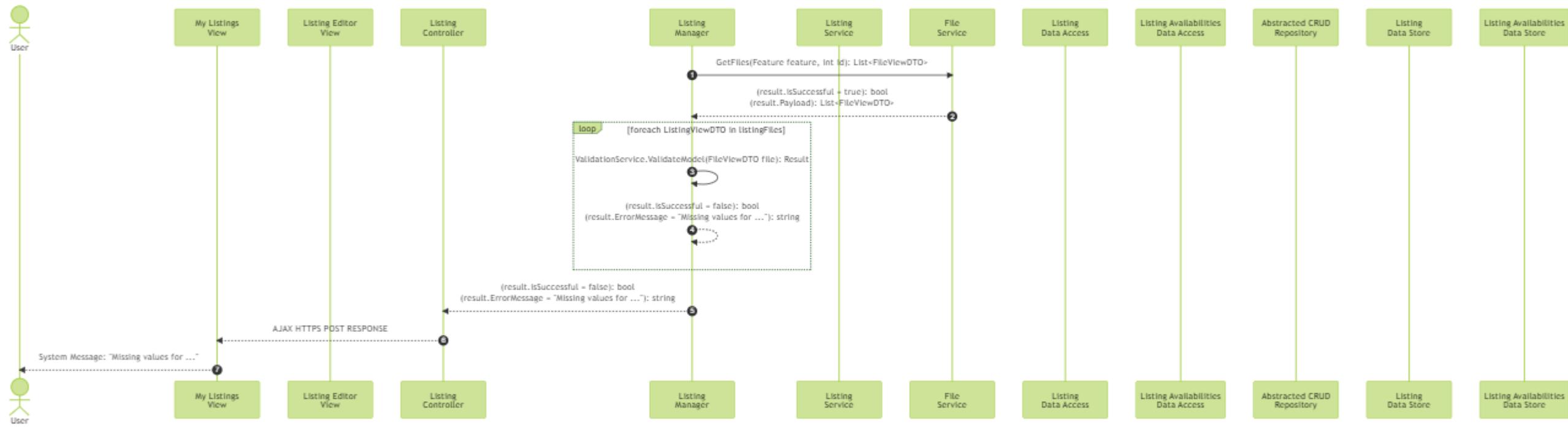
11. Invalid FileDTO Object

Due to formatting restrictions, this requirement is broken into multiple parts. Each part is a continuation of the previous.

Part I:



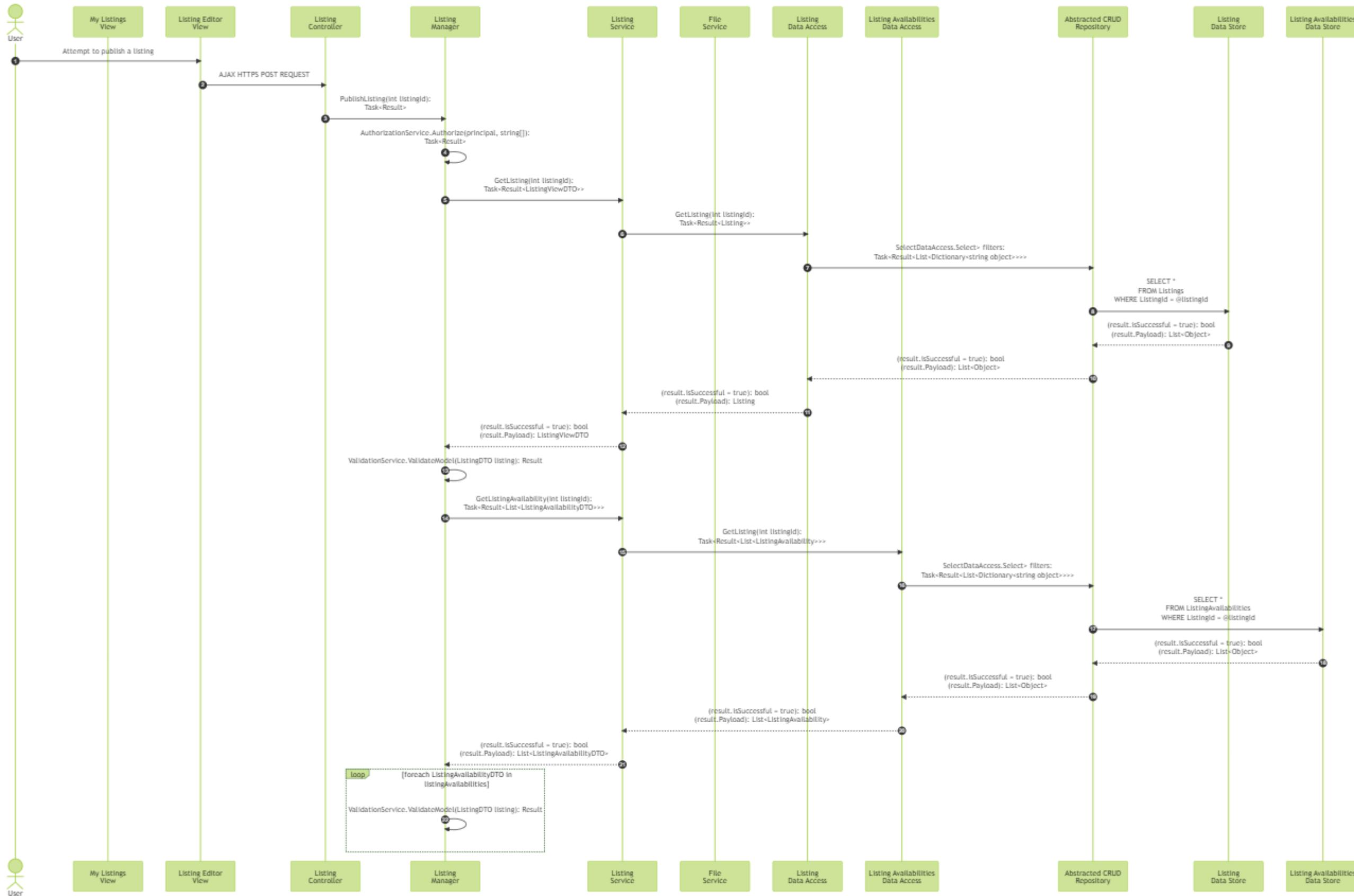
Part II:



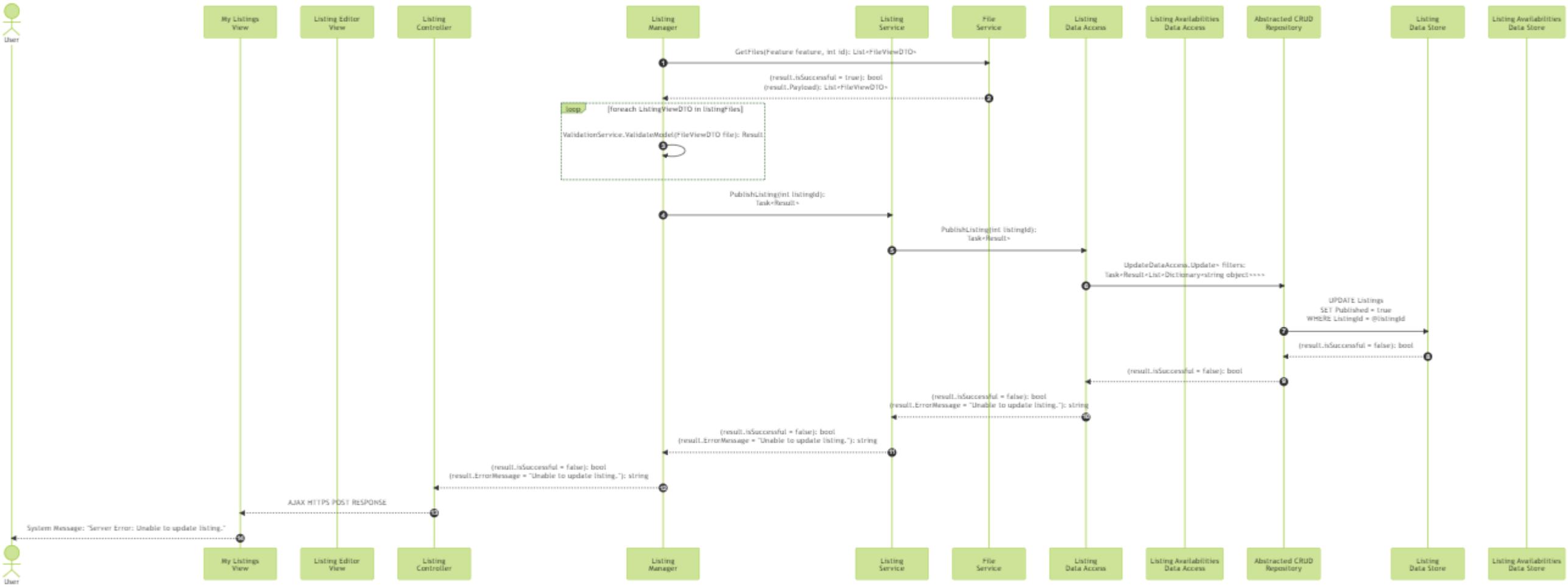
12. Datastore update failure in Listings datastore

Due to formatting restrictions, this requirement is broken into multiple parts. Each part is a continuation of the previous

Part I:

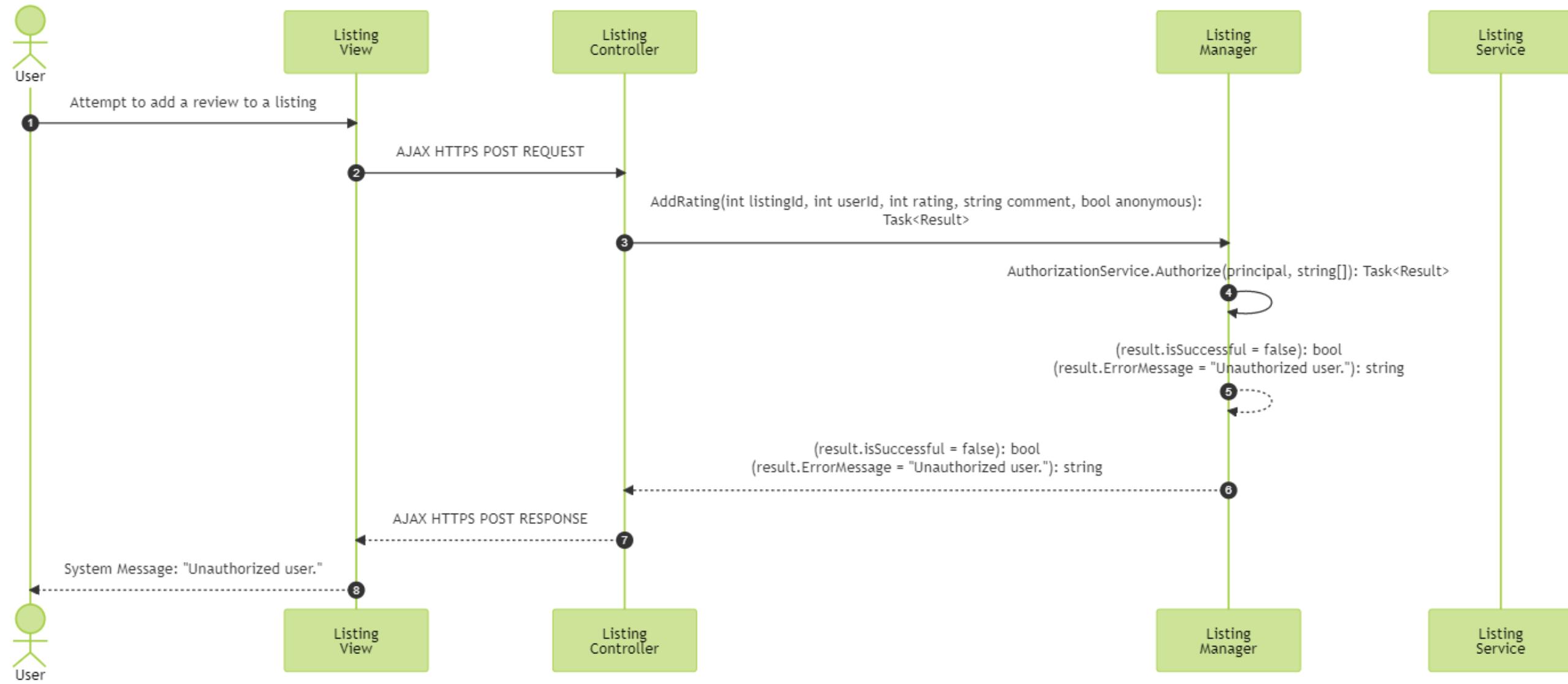


Part II:

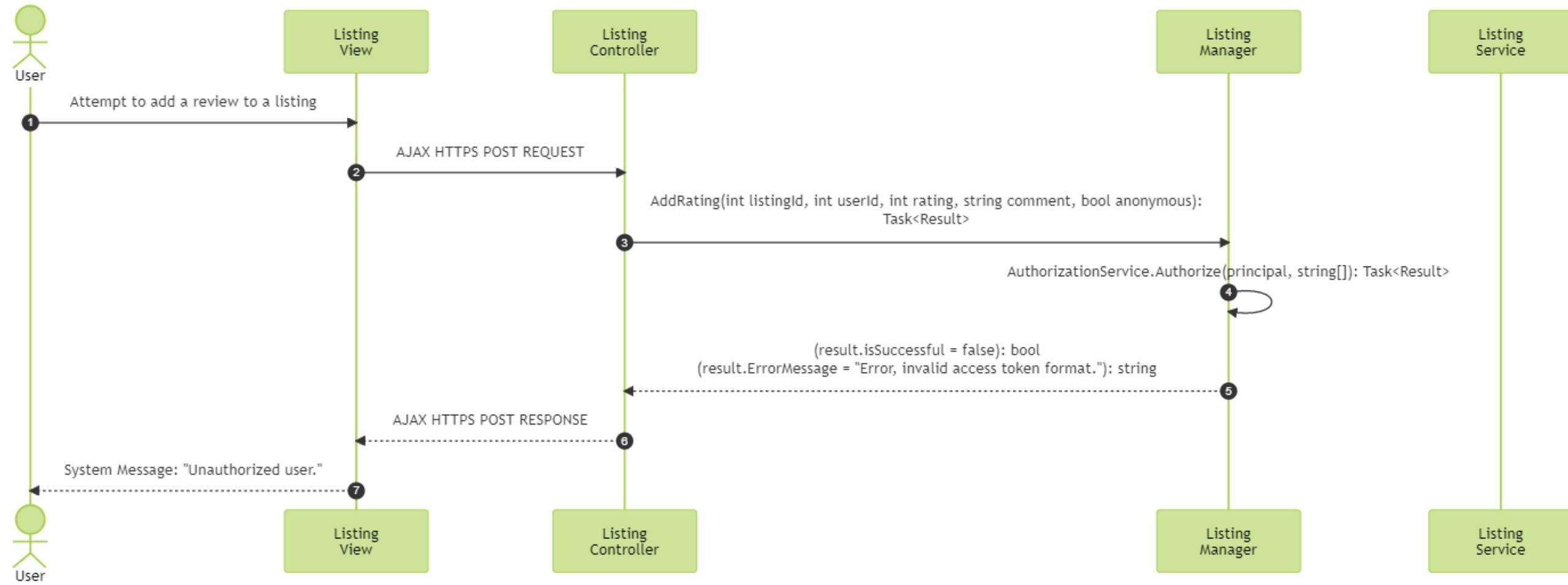


Listing Rating and Commenting

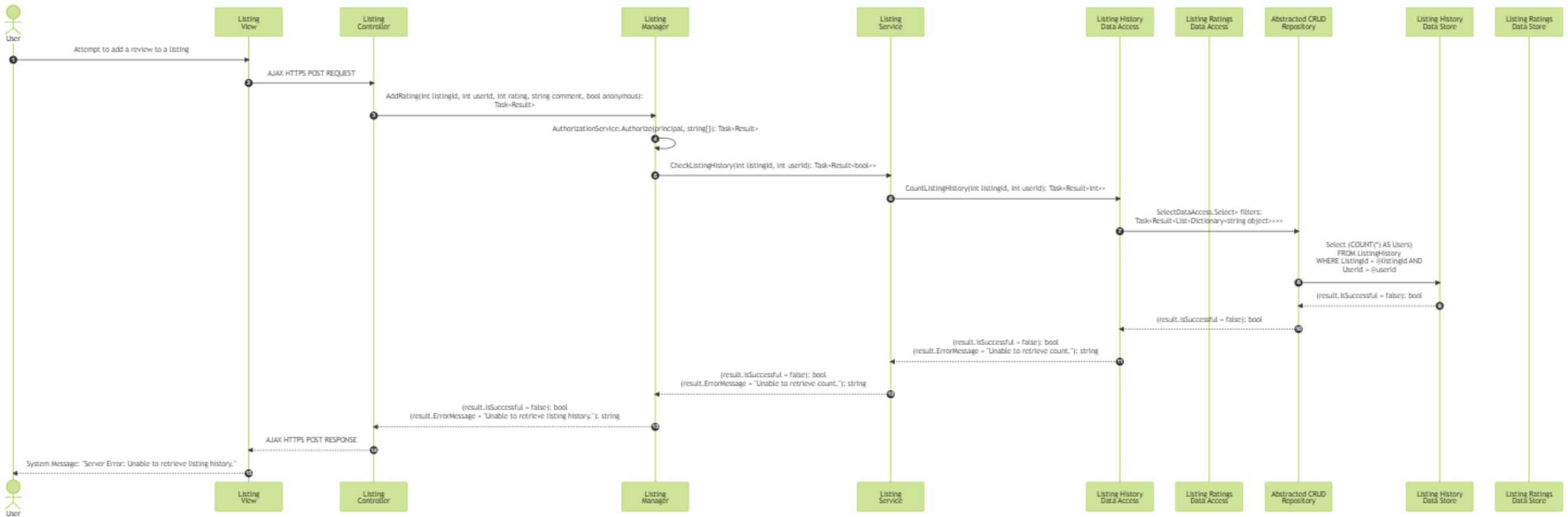
1. User does not have a security token



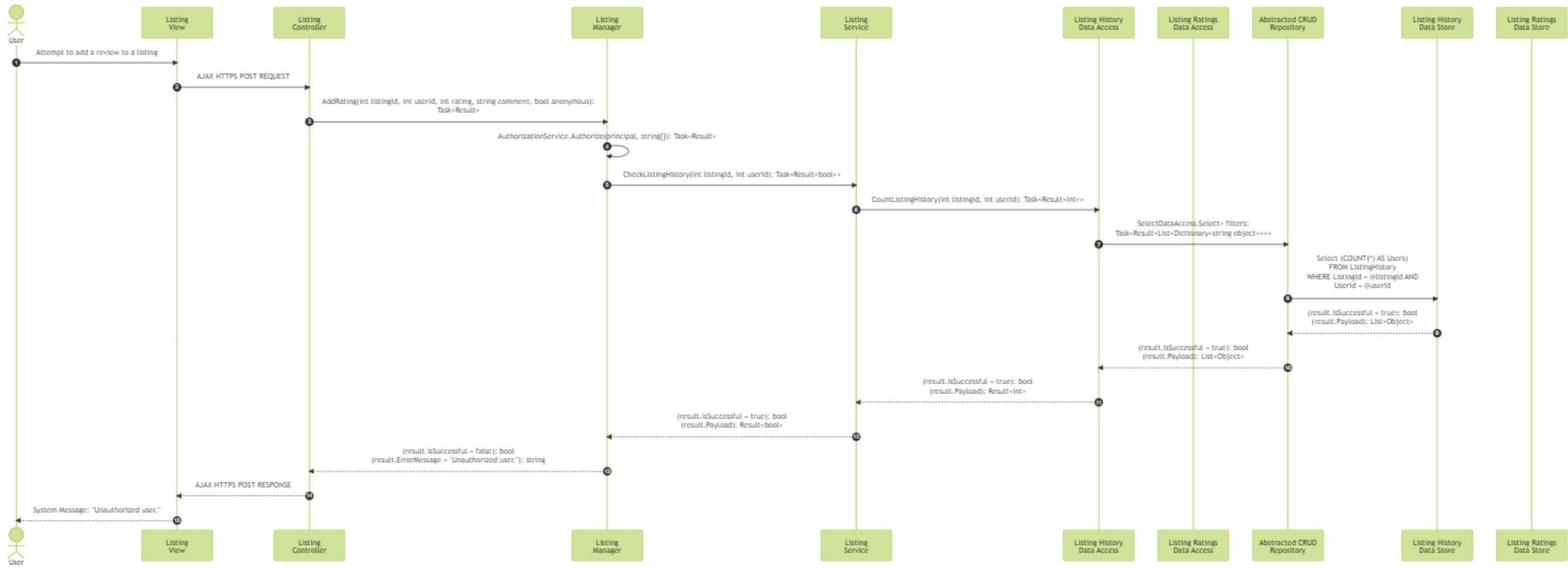
2. Security token contains no ID



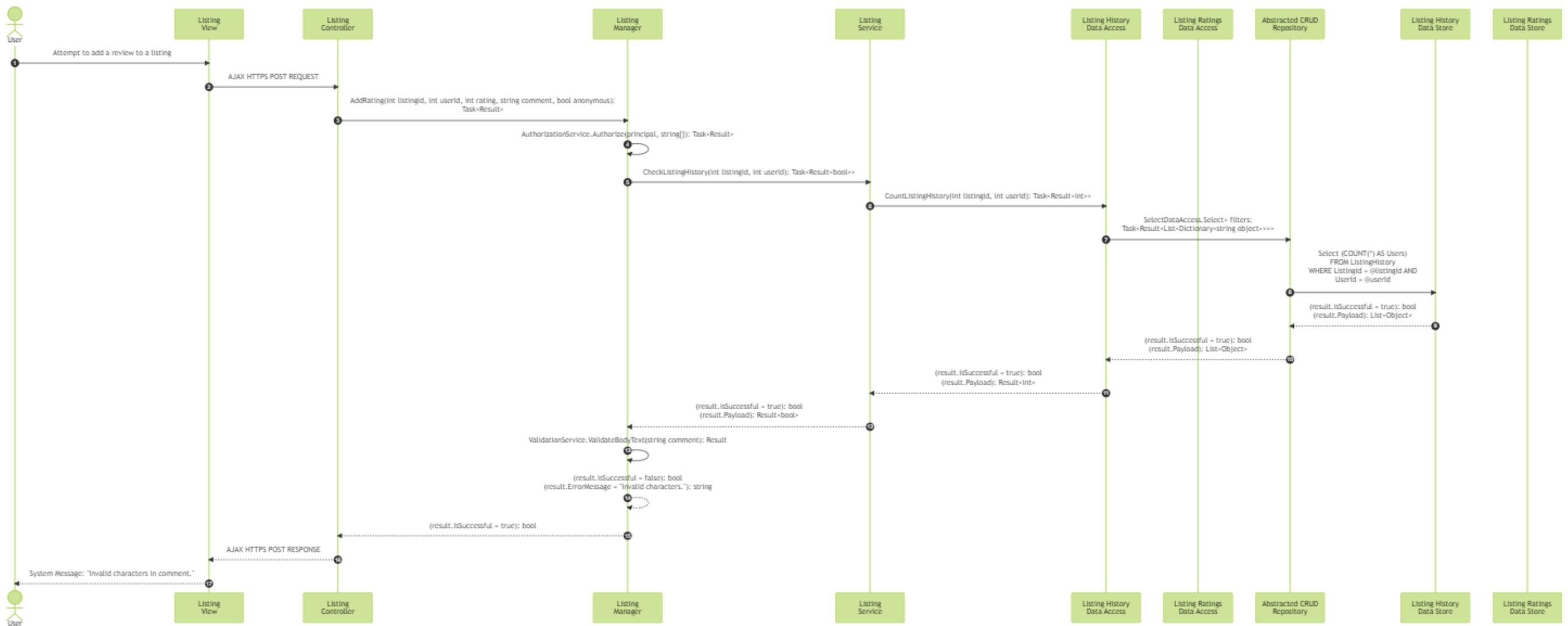
3. Datastore select failure in ListingHistory datastore



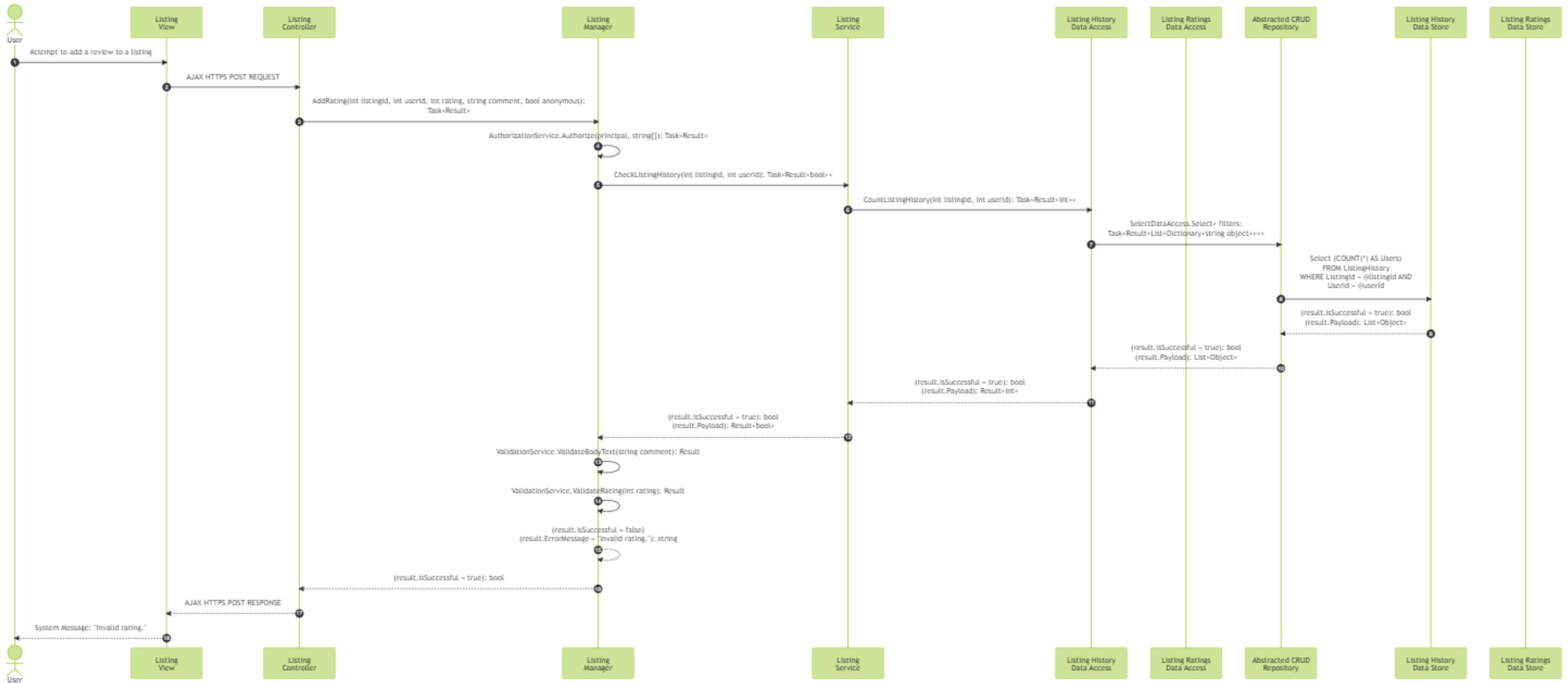
4. User has no history with listing



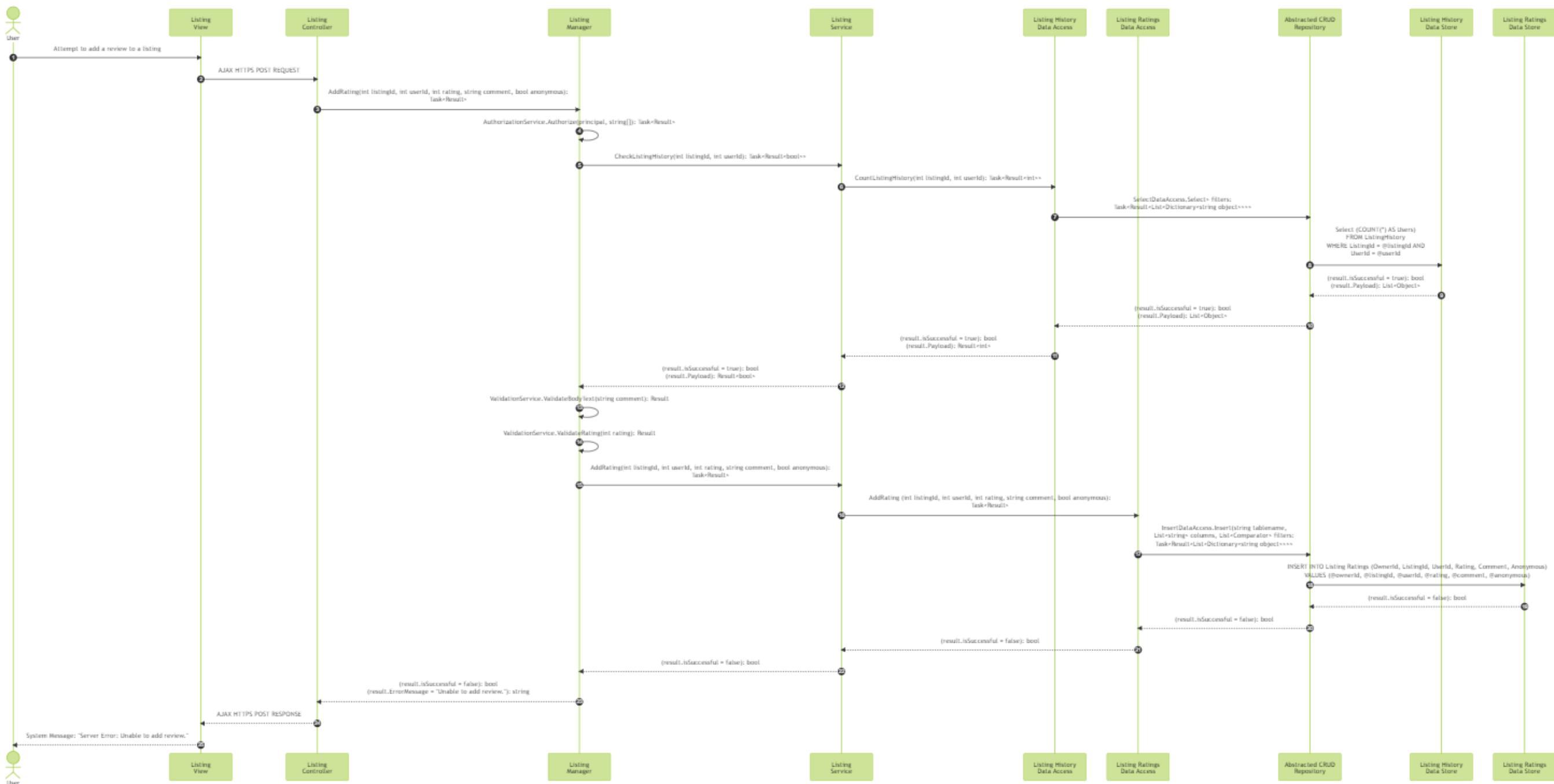
5. Invalid comment



6. Invalid rating

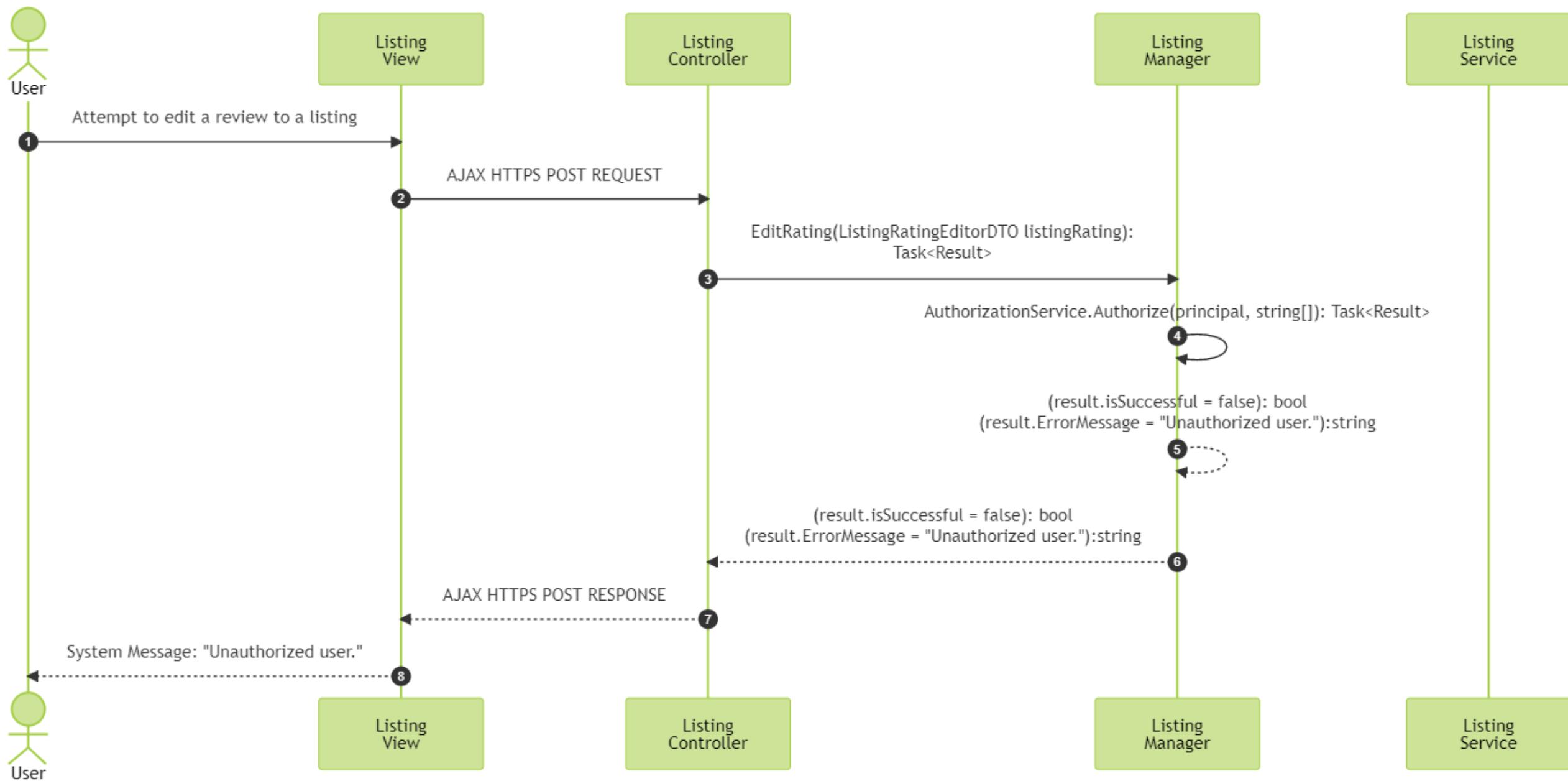


7. Datastore insert failure into ListingRatings datastore

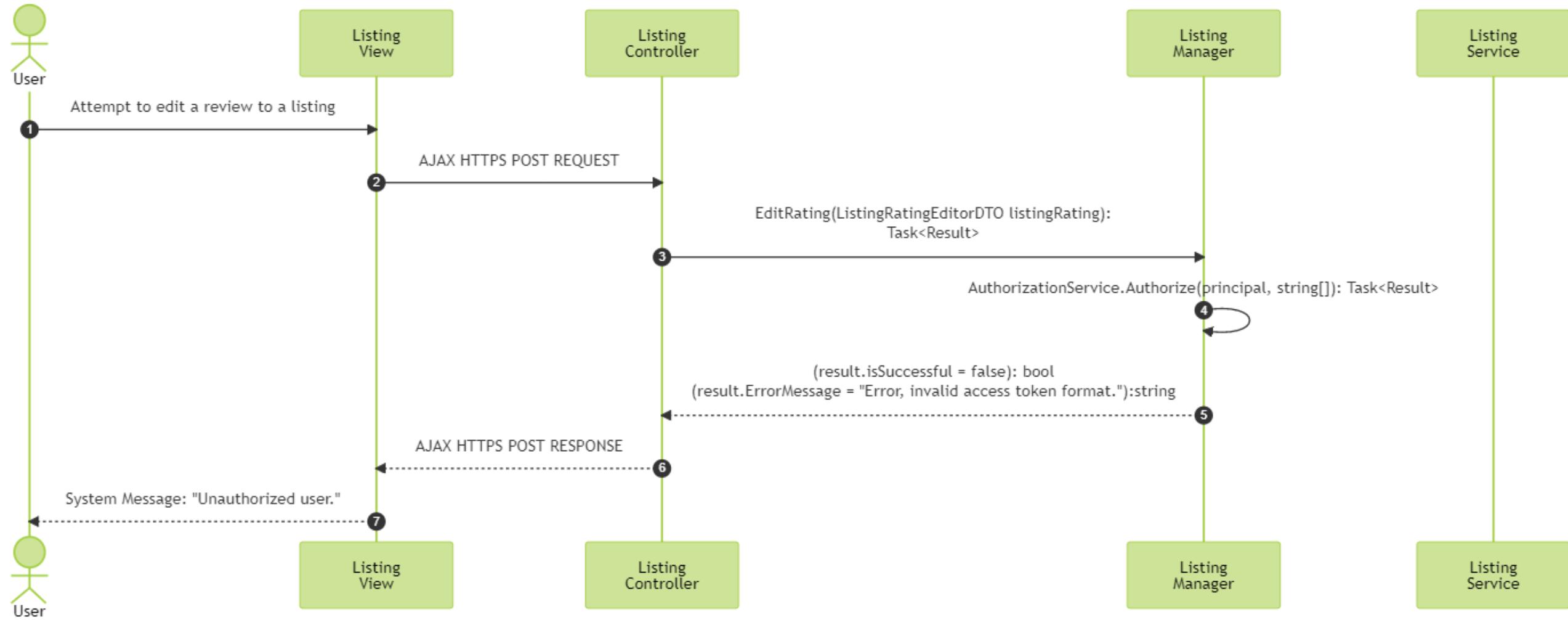


Edit Listing Rating

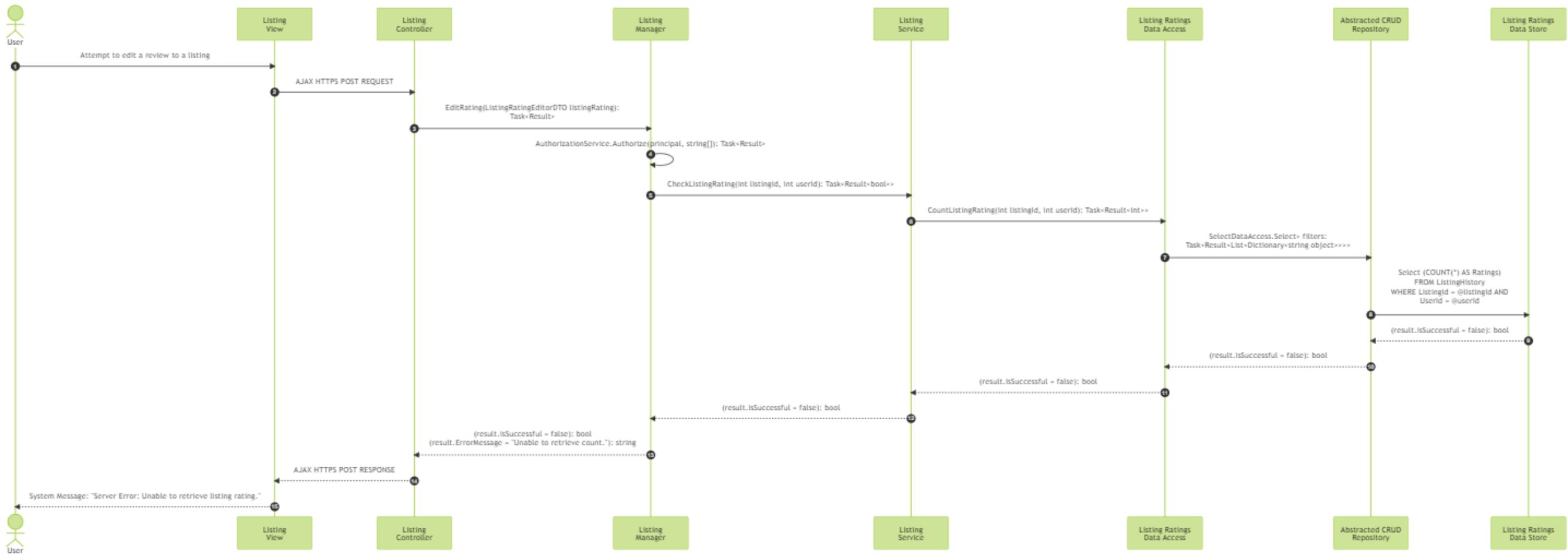
1. User does not have a security token



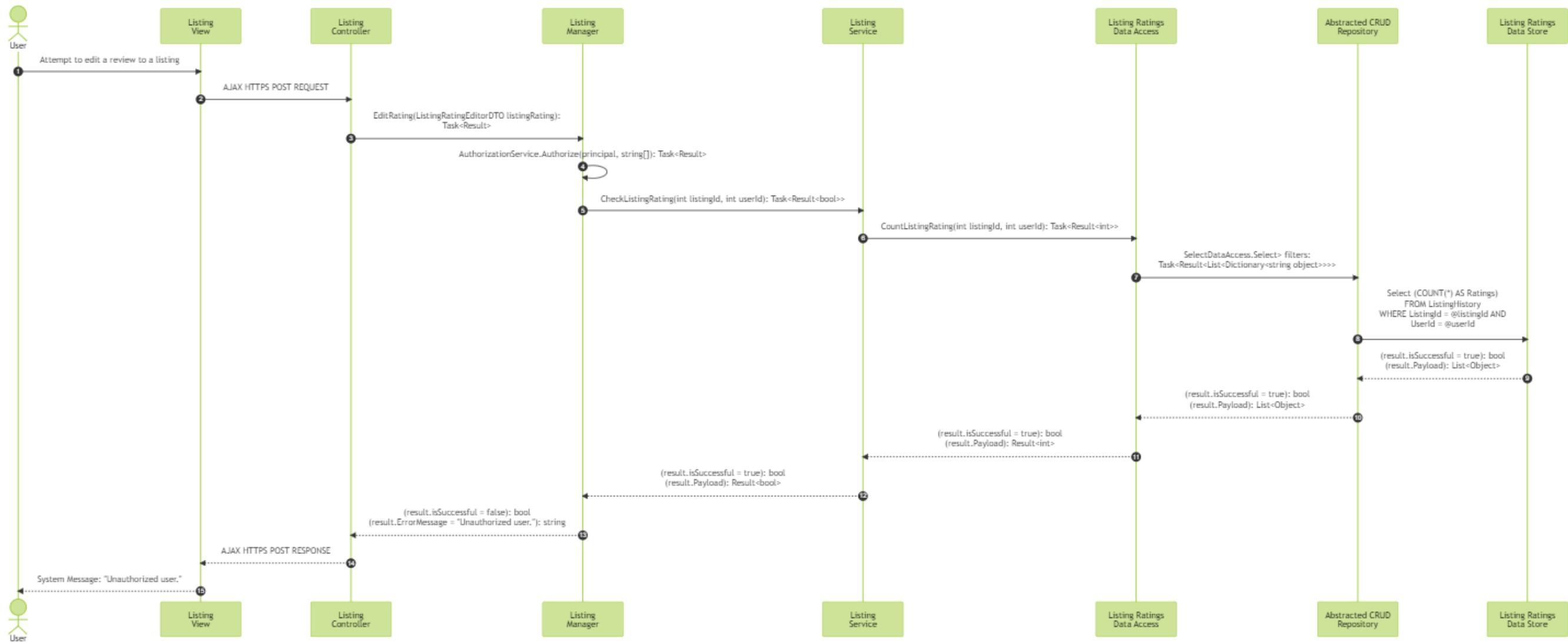
2. Security token contains no ID



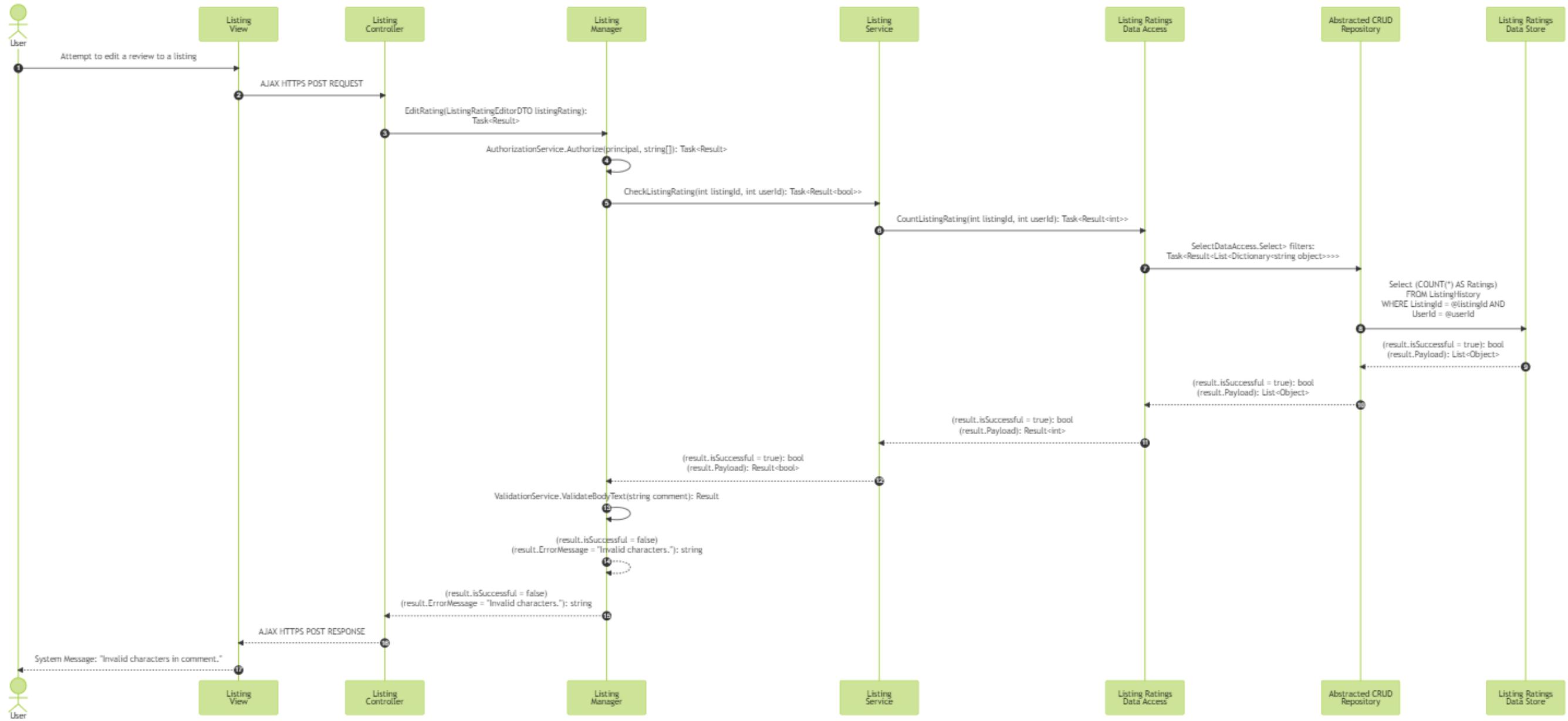
3. Datastore select failure in ListingRating or null payload



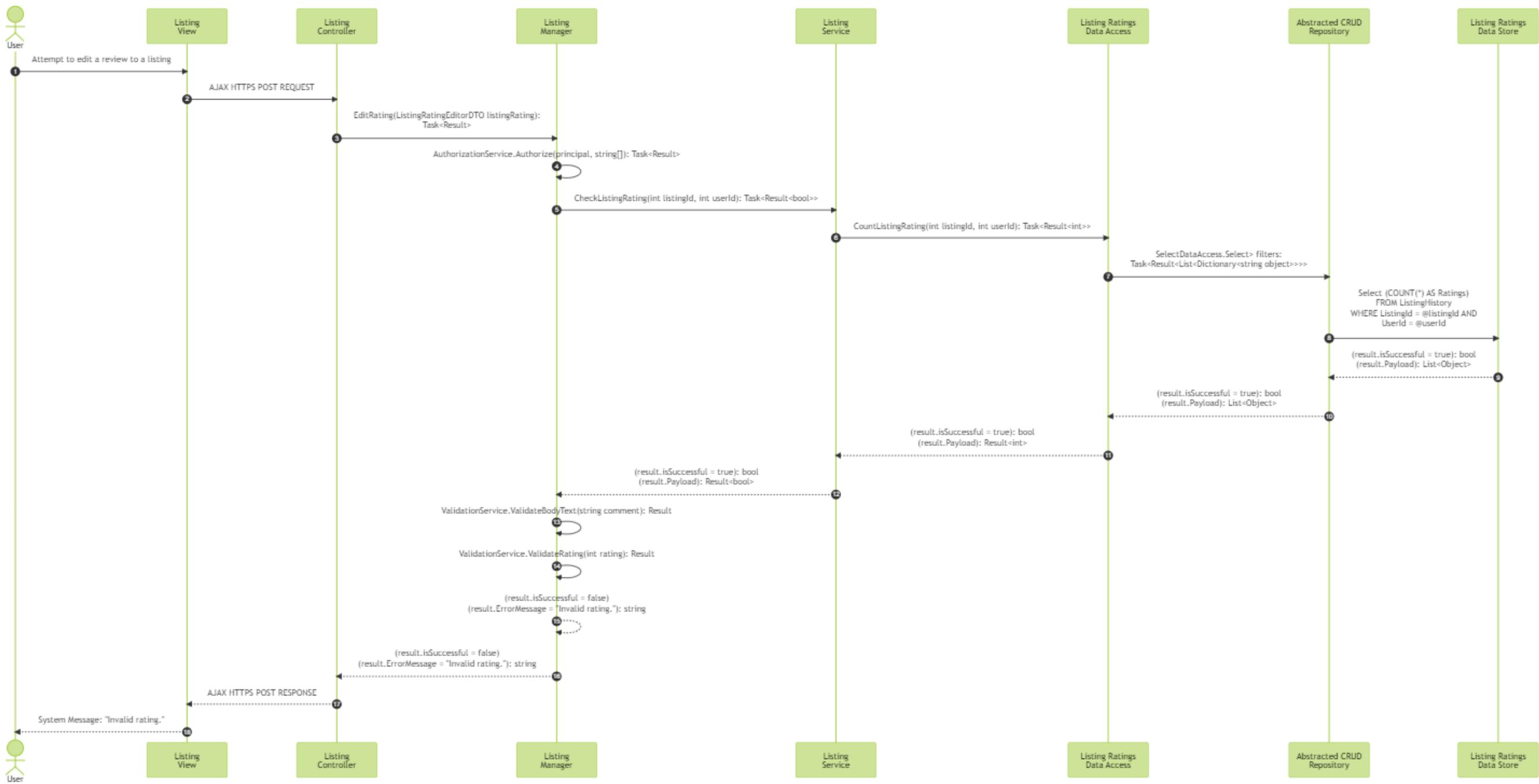
4. User has no preexisting rating



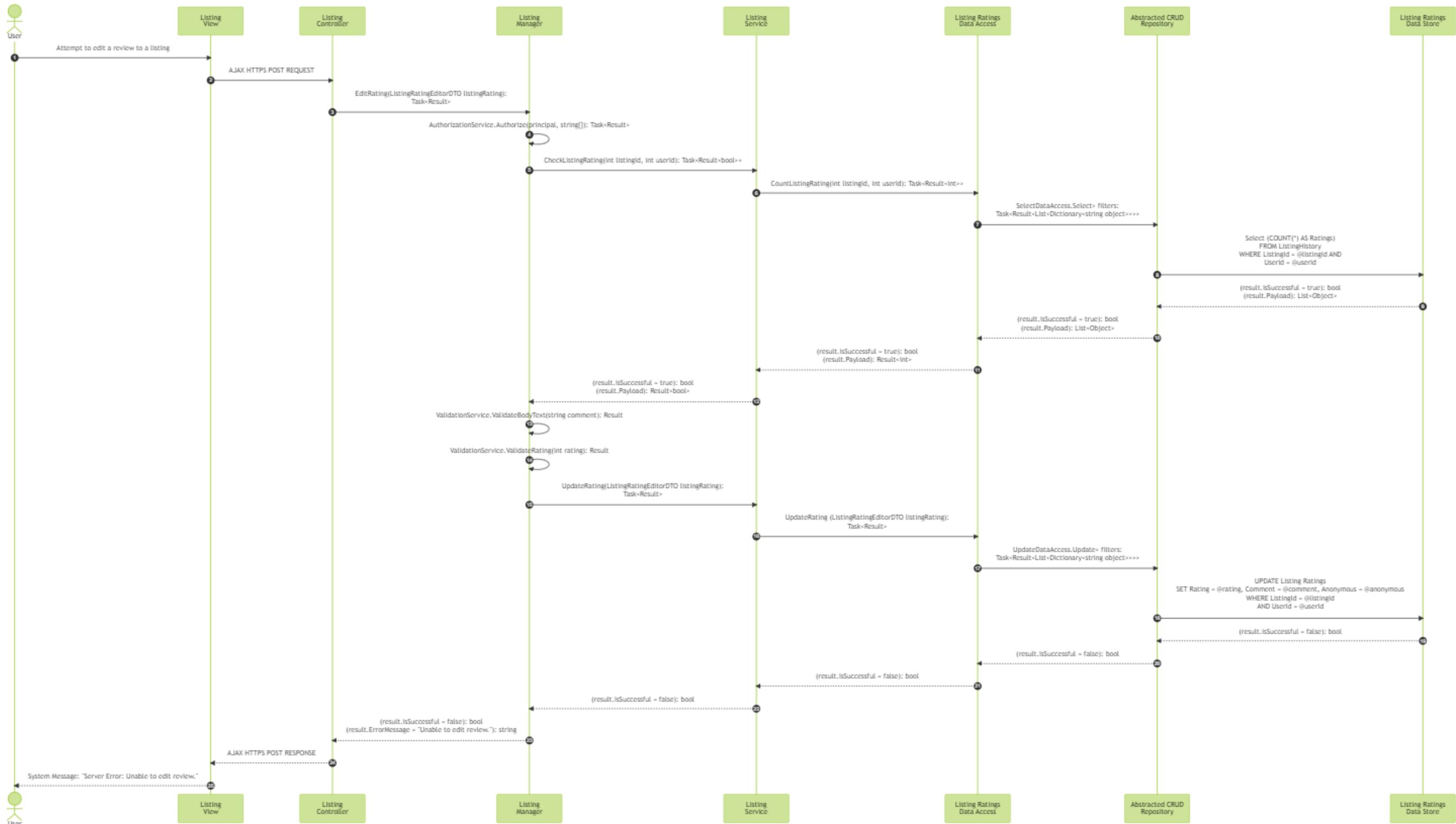
5. Invalid comment



6. Invalid rating

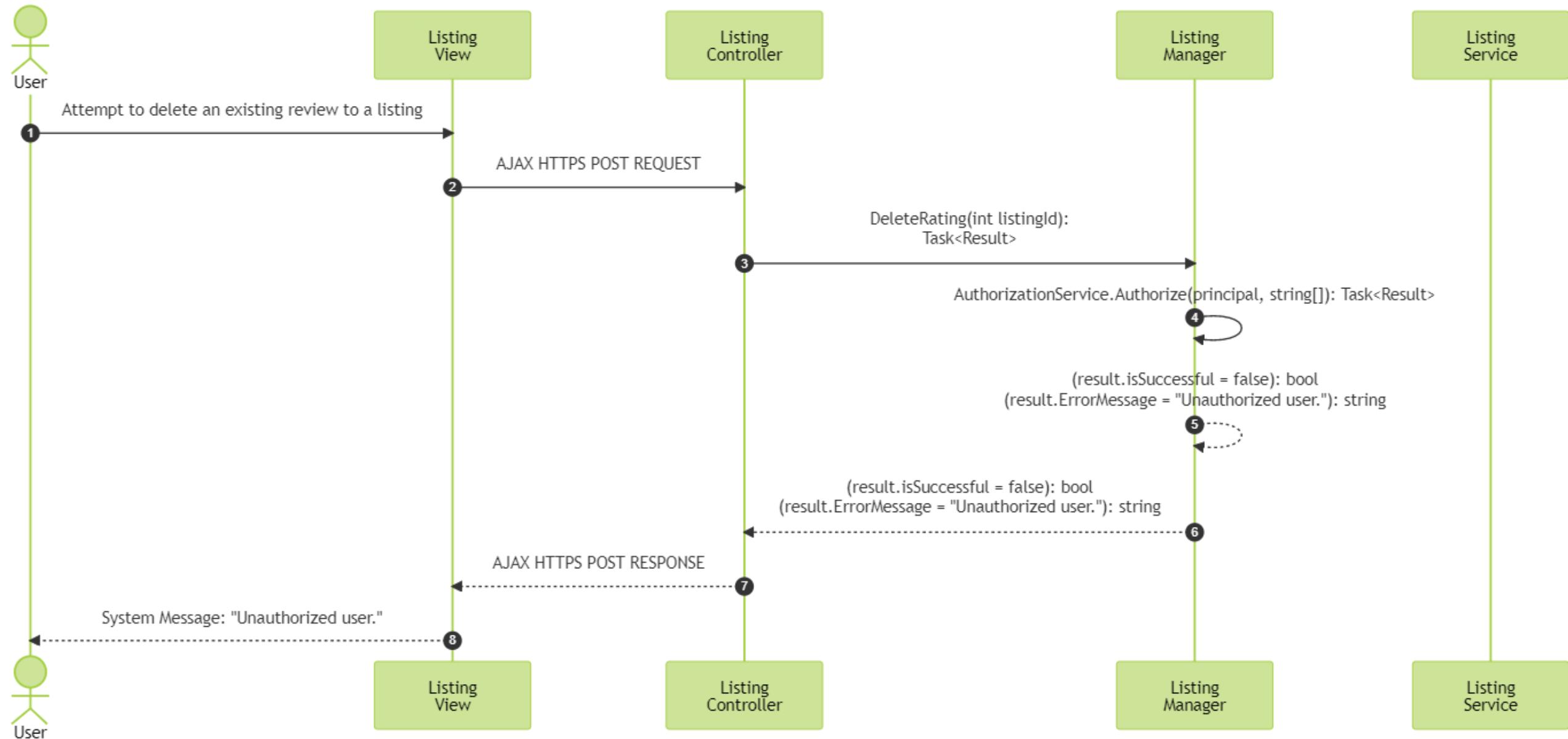


7. Datastore update failure in ListingRatings datastore

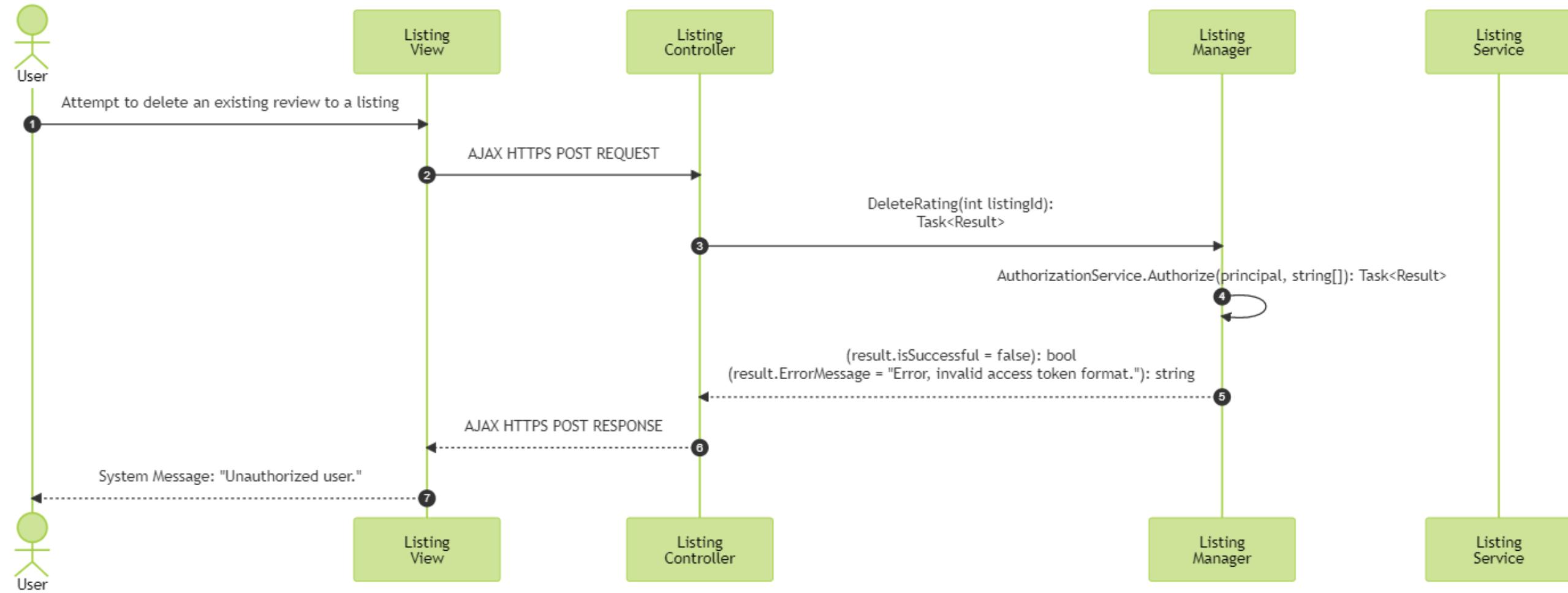


Delete Listing Review

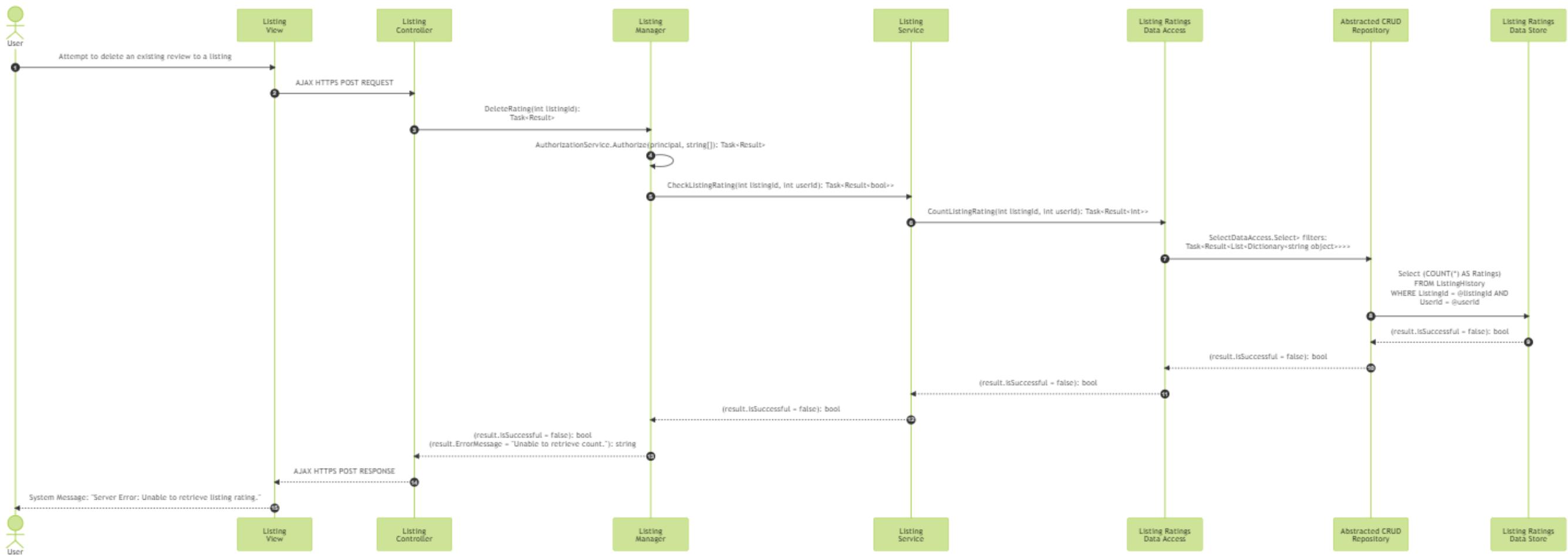
1. User does not have a security token



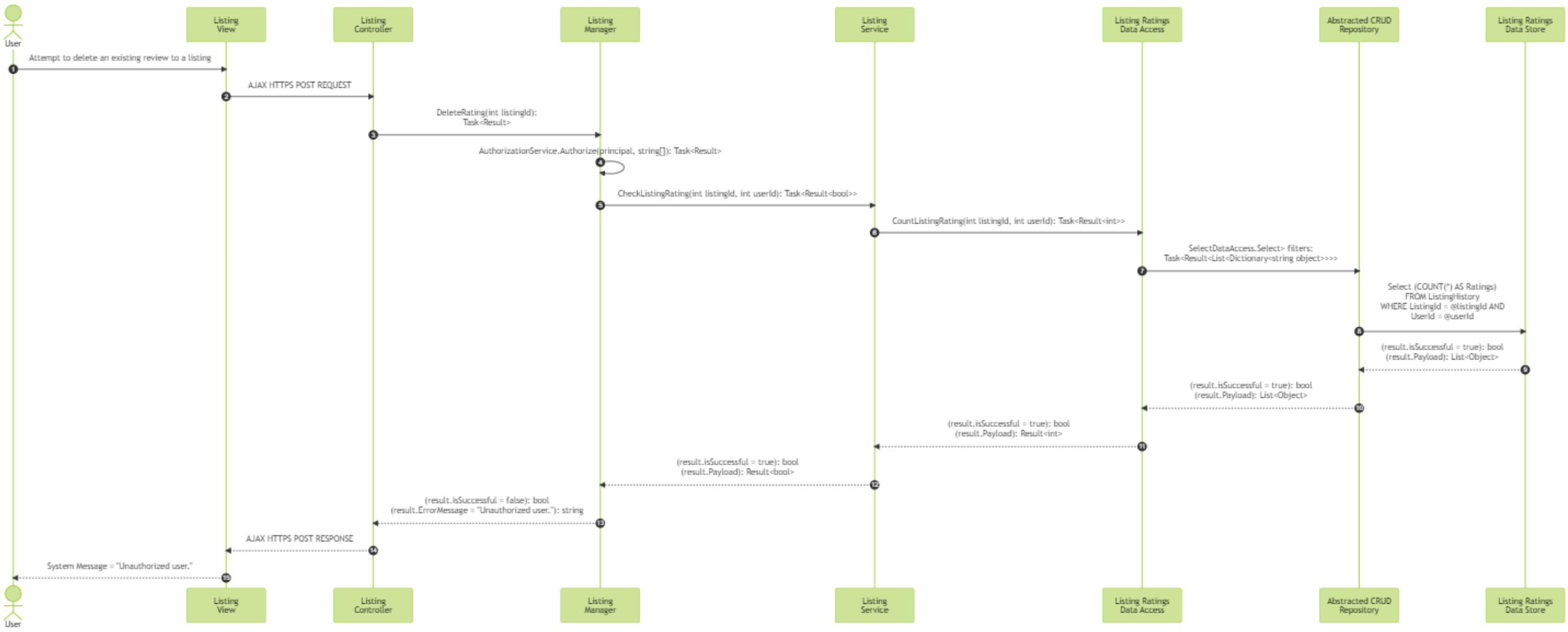
2. Security token contains no ID



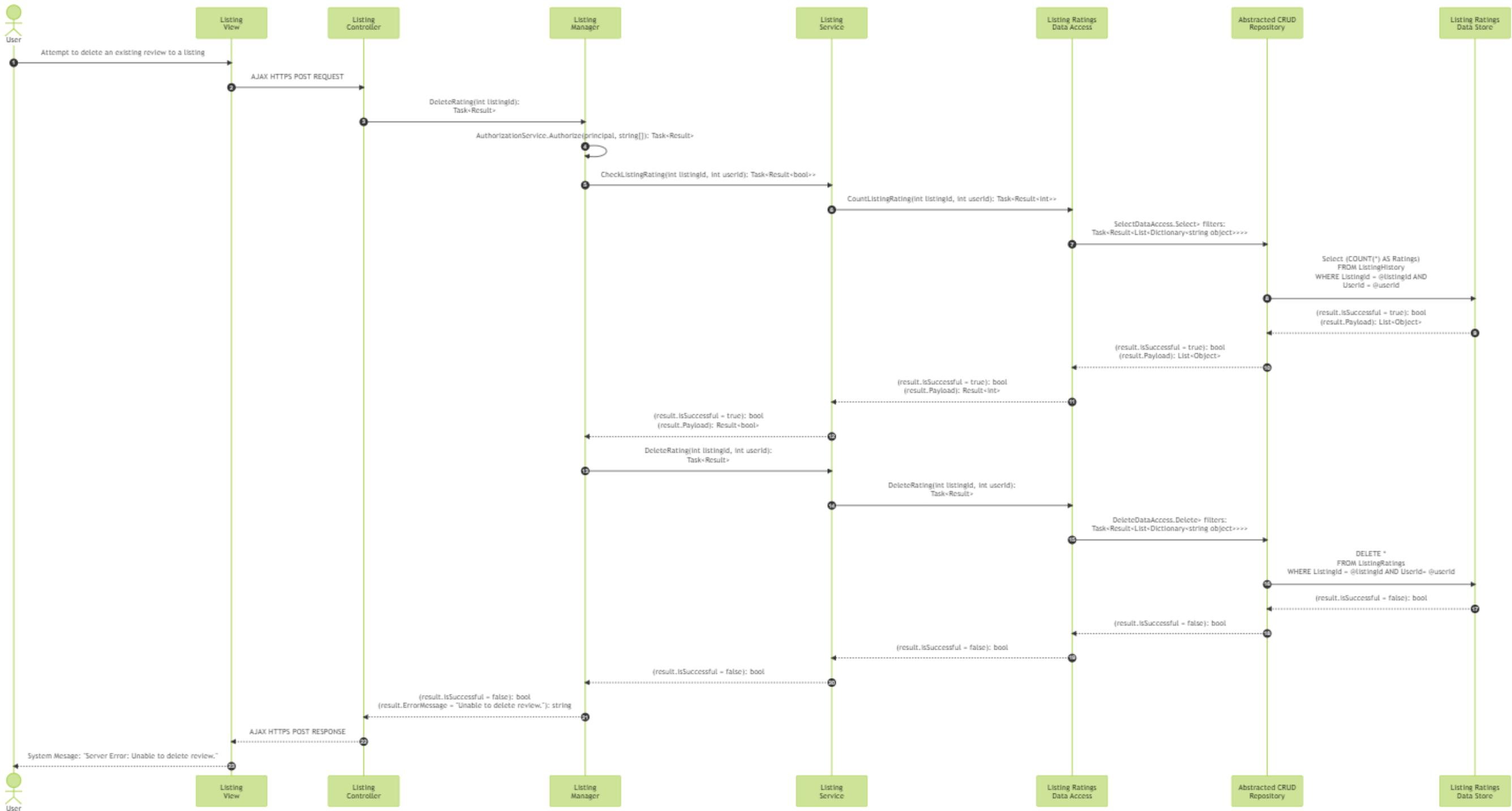
3. Datastore select failure or null payload



4. User has no preexisting rating

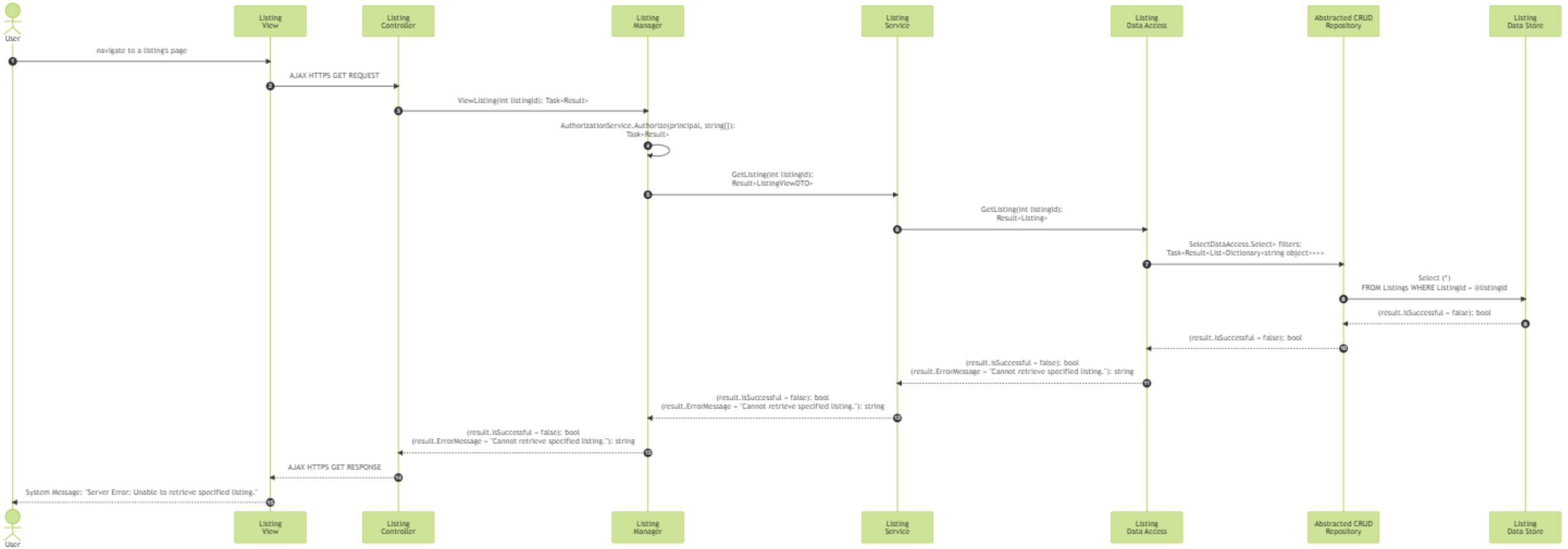


5. Datastore delete failure in ListingRatings datastore

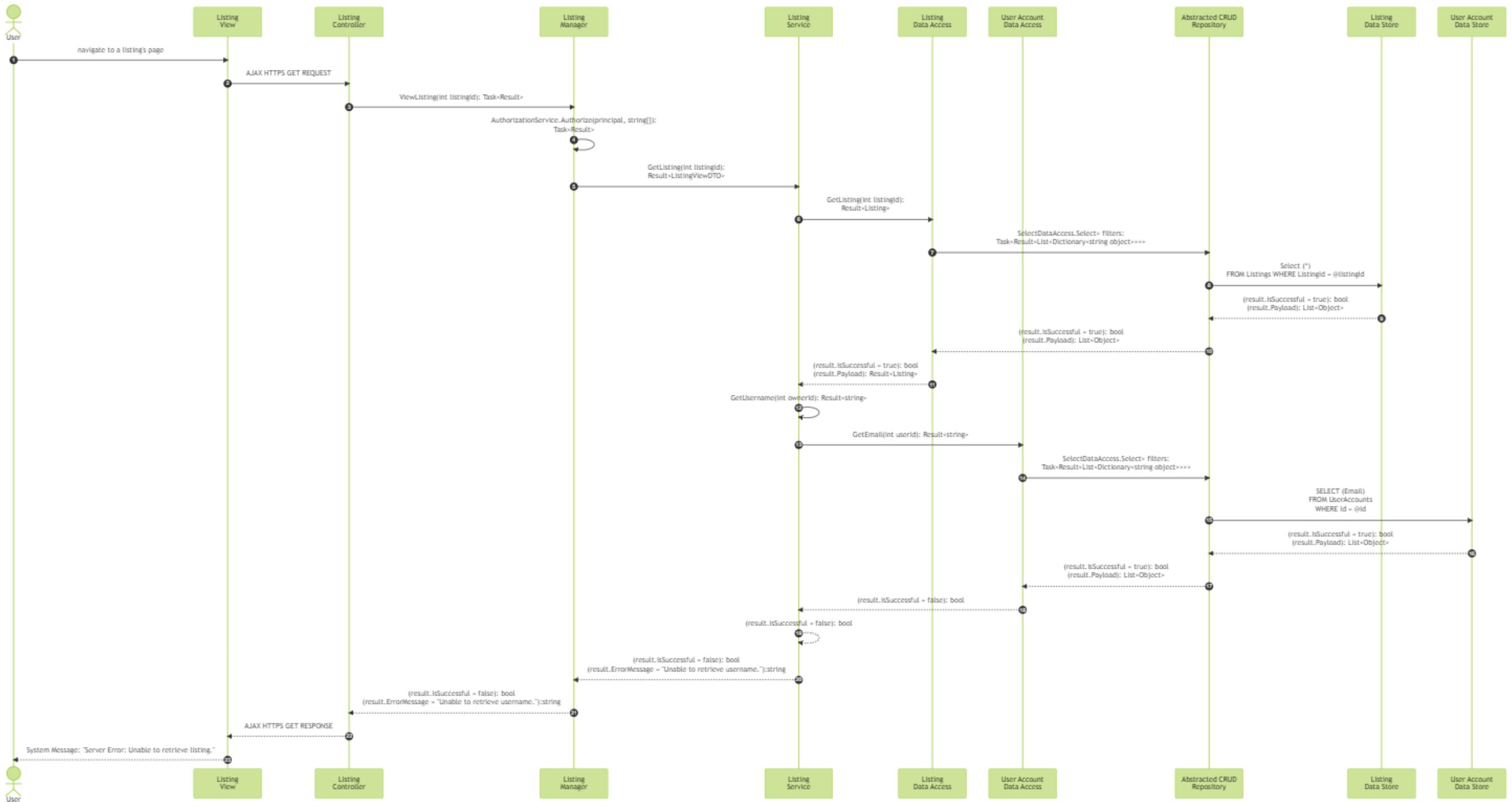


View a listing

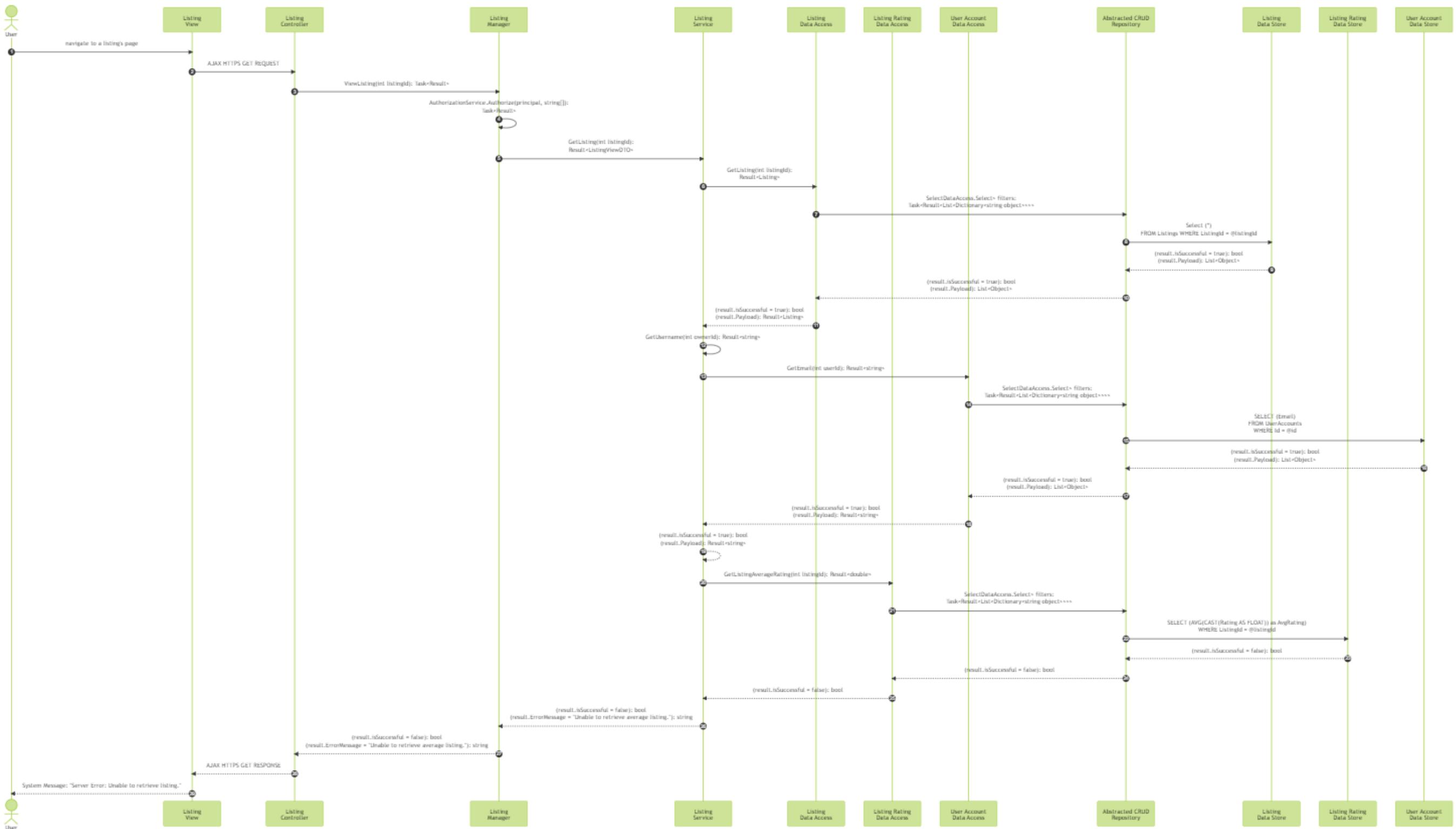
1. Datastore select failure in Listings datastore or null payload



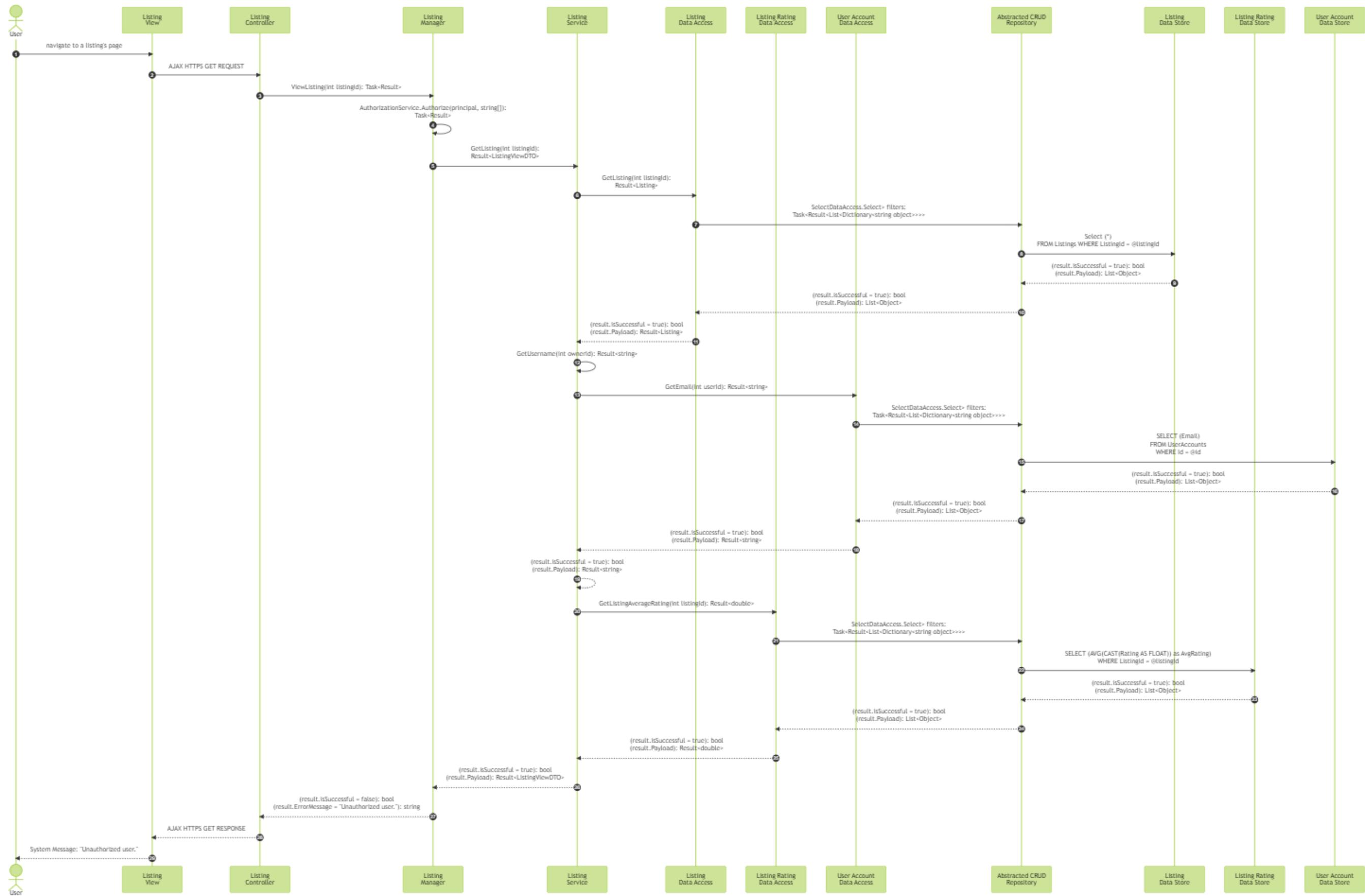
2. Datastore select failure in UserAccounts datastore or null payload



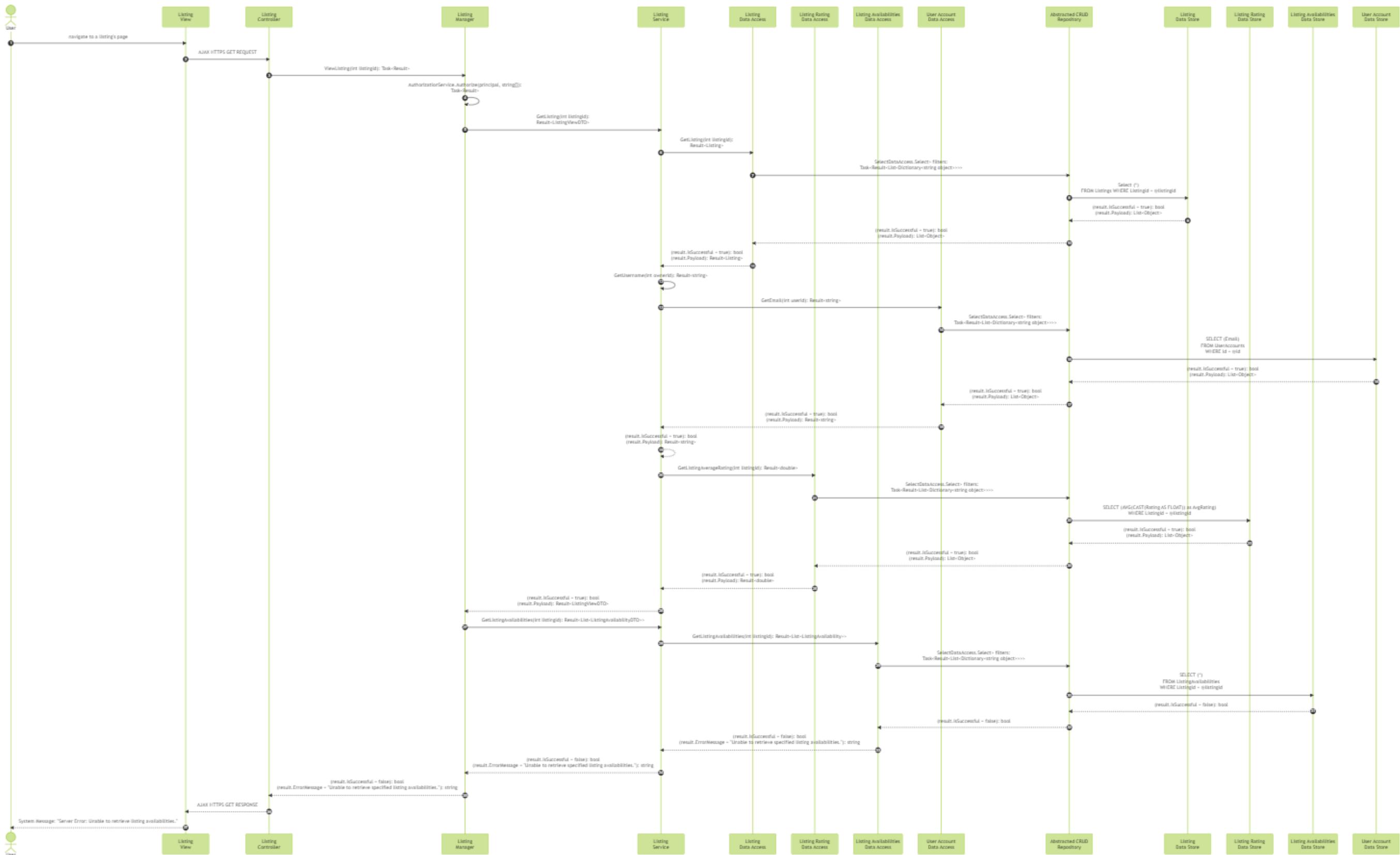
3. Datastore select failure in ListingRatings datastore



4. Listing is unpublished and user is not the owner



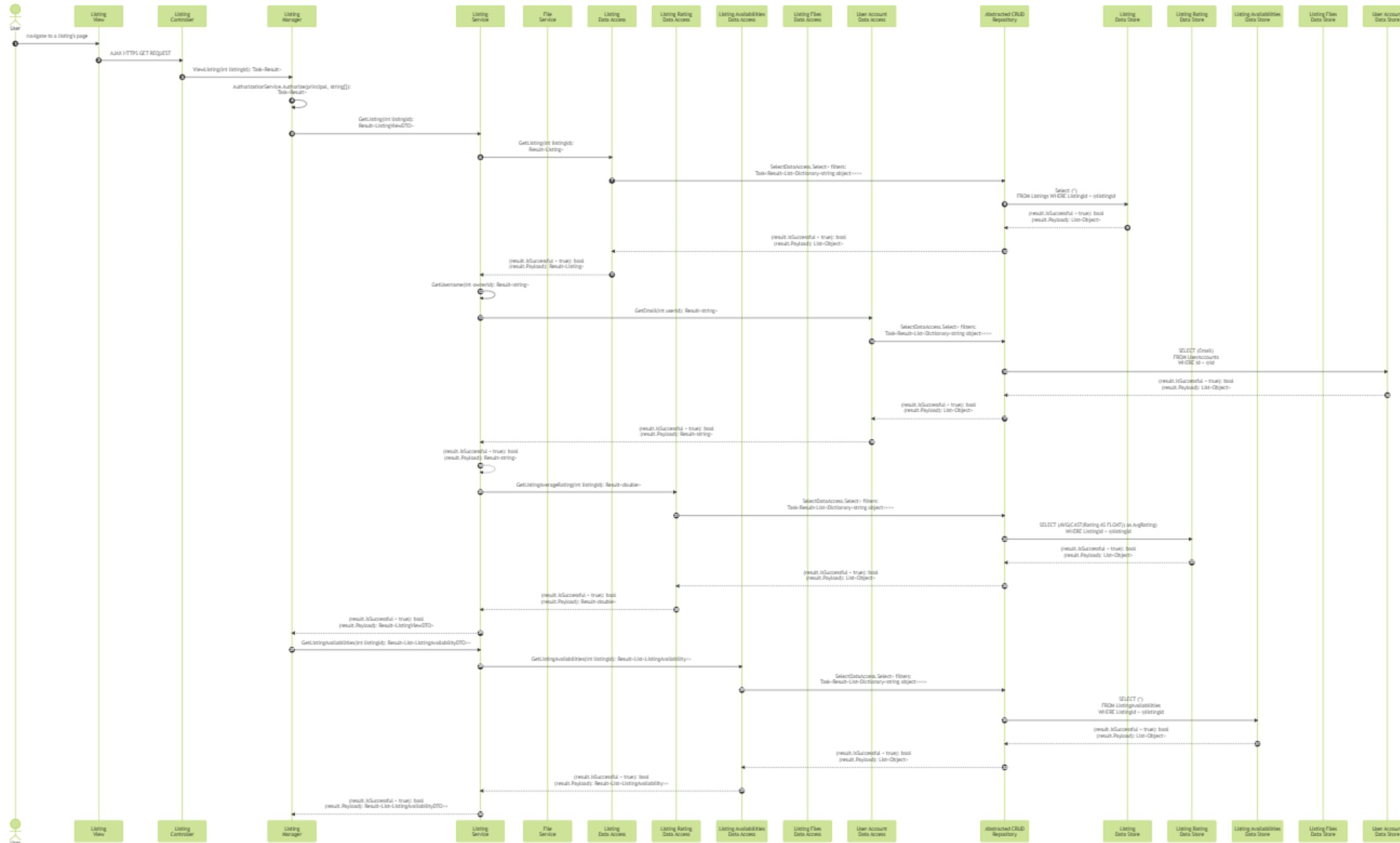
5. Datastore select failure in ListingAvailabilities



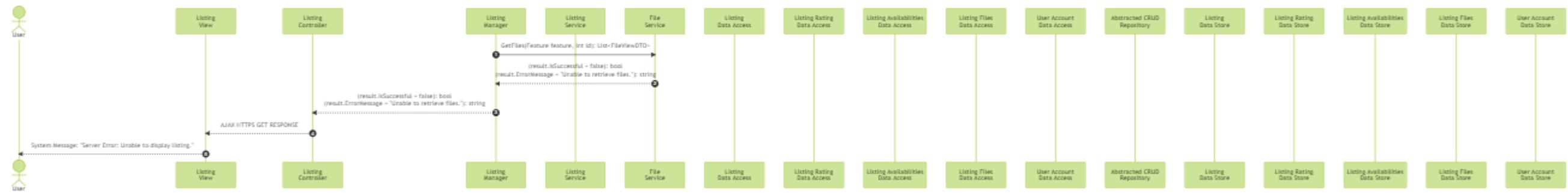
6. Datastore select failure in File datastore

Due to formatting restrictions, this requirement is broken into multiple parts. Each part is a continuation of the previous part.

Part I:



Part II:



References

The requirement is designed based on the system architecture provided in High-Level Design Document¹ and Hubba Business Requirements Document⁴.
The diagrams included in this document utilized diagrams.net² and Mermaid.js³.

¹ High-Level Design Document, URL: <https://github.com/DevelopmentHellaHell/SeniorProject/blob/b43182c4076d471ef03520052675f1f88371dafd/docs/HL%20Design/DevelopmentHell%20HLD%20v1.2.pdf>

² <https://www.diagrams.net/>

³ <https://mermaid-js.github.io/mermaid/#/>

⁴ Hubba Business Requirements Document, URL: https://github.com/DevelopmentHellaHell/SeniorProject/blob/main/docs/BRD/DevelopmentHell_BRD_v.3.2.pdf