

Team Big Data

U-tification

Logging 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: V2

CHANGES

- Format Changes for Success and Failure Diagrams
- Changed Return types
- User/System Events are general

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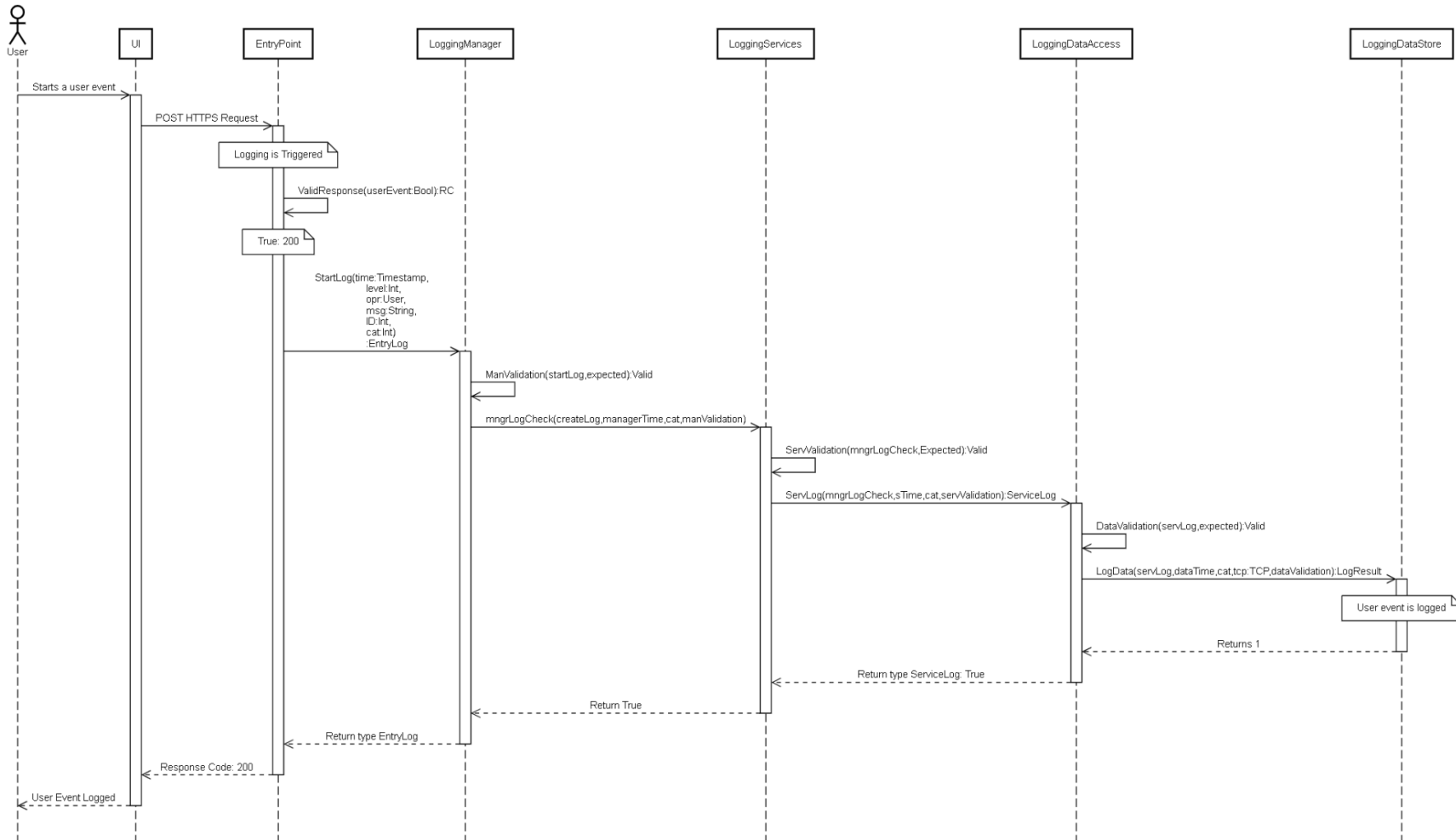
U-tification

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Logging Success: Successfully Logging User Success

The diagram shows successful user events being logged. The user being logged in as an example. LogResult is an enum where “Logged” is a value that refers to the system logging correctly.

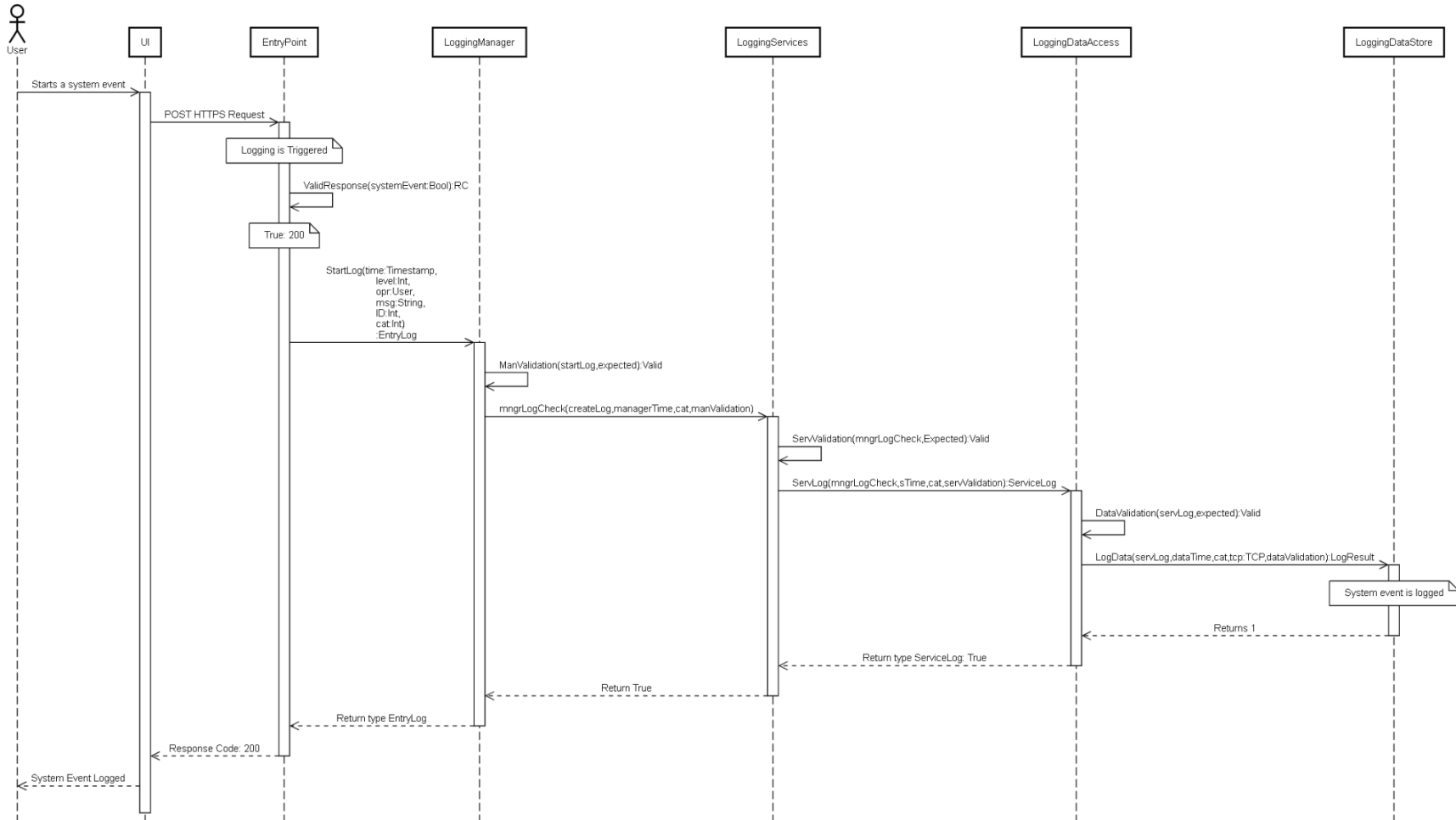
As a User, I want to start a user event, so that the system may log my actions.



Successfully Logging System Success

The diagram below shows a successful system event that is being logged. The map of the system is updating automatically over a certain time interval. LogResult is an enum with “Logged” being a positive outcome.

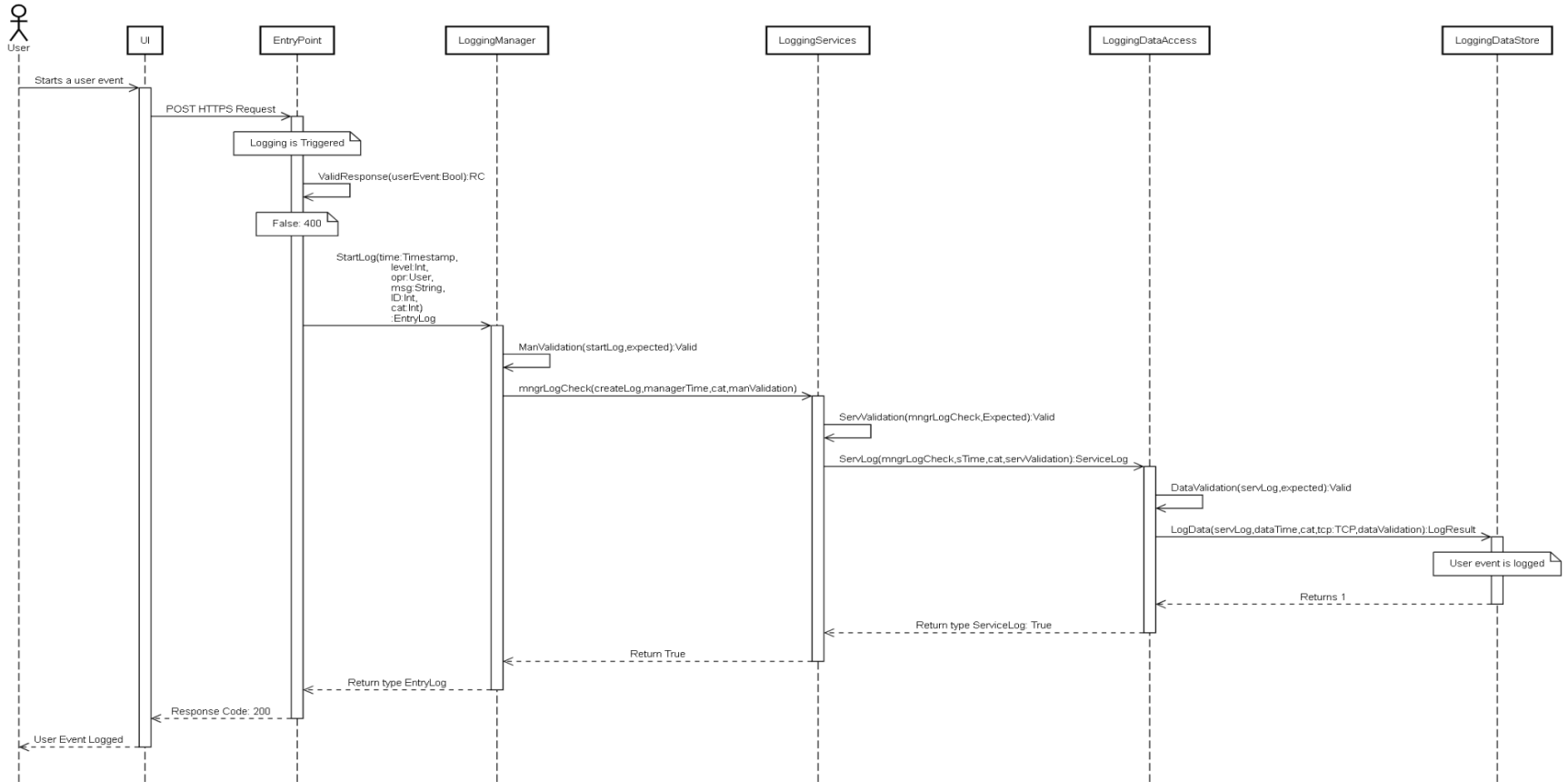
As a System, I want to log successful events, so that the system may log my actions.



Successfully Logging User Failure

The diagram represents a user event failing and being logged. The example shown is of a pin attempting to be created but failing. The LogResult return type refers to an enum that represents a “Logged” being an accepting enum.

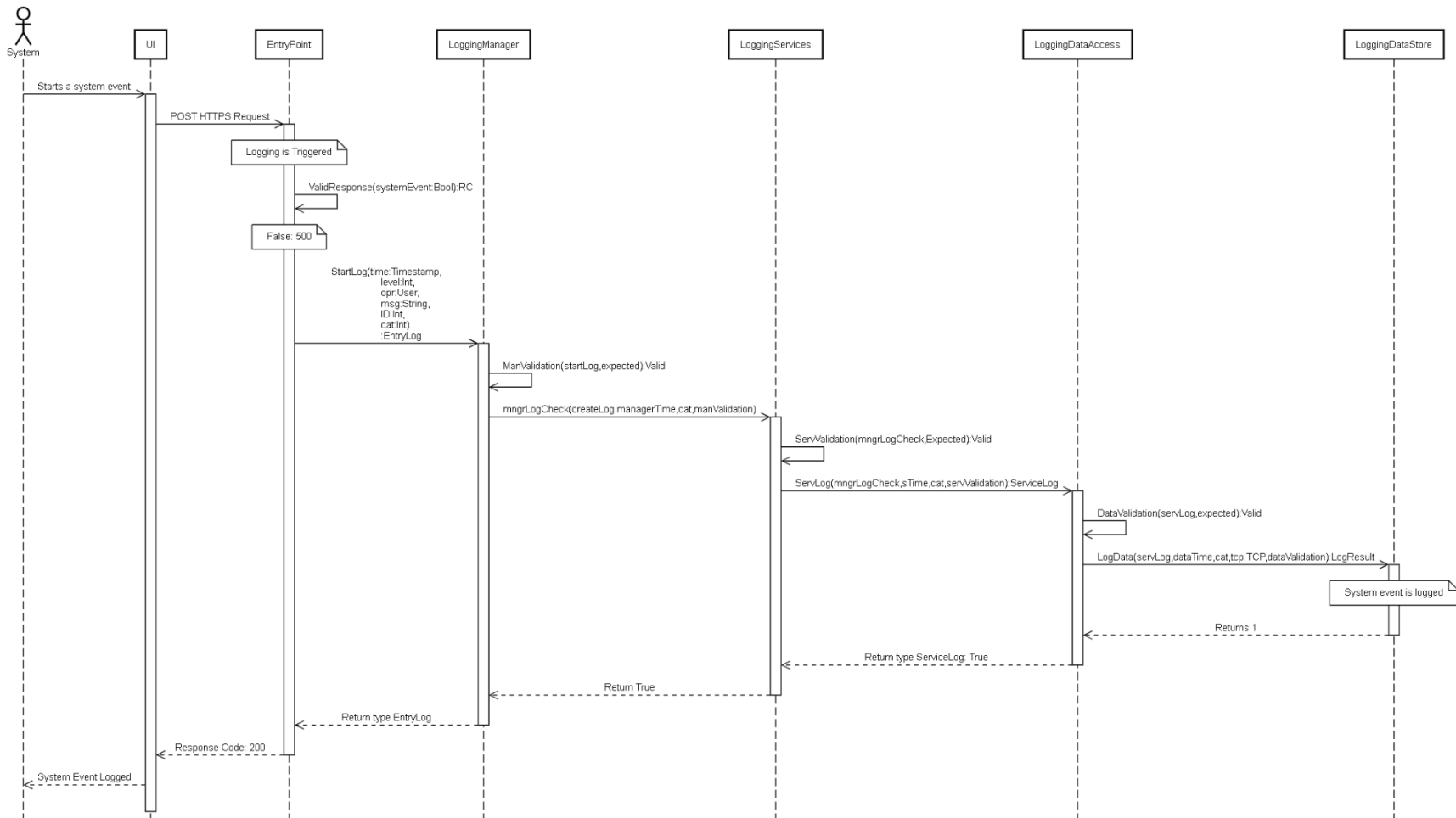
As a User, I want my Unsuccessful user events logged, so that the system may record error.



Successfully Logging System Failure

The system failure in this diagram represents a failure in the UI layer as an example. The failure accounts for an automatic update to the map but it fails to load. This is then logged to the database. LogResult is an enum that accounts for the response code of the method.

As a System, I want to log unsuccessful events, so that the system may log my actions.

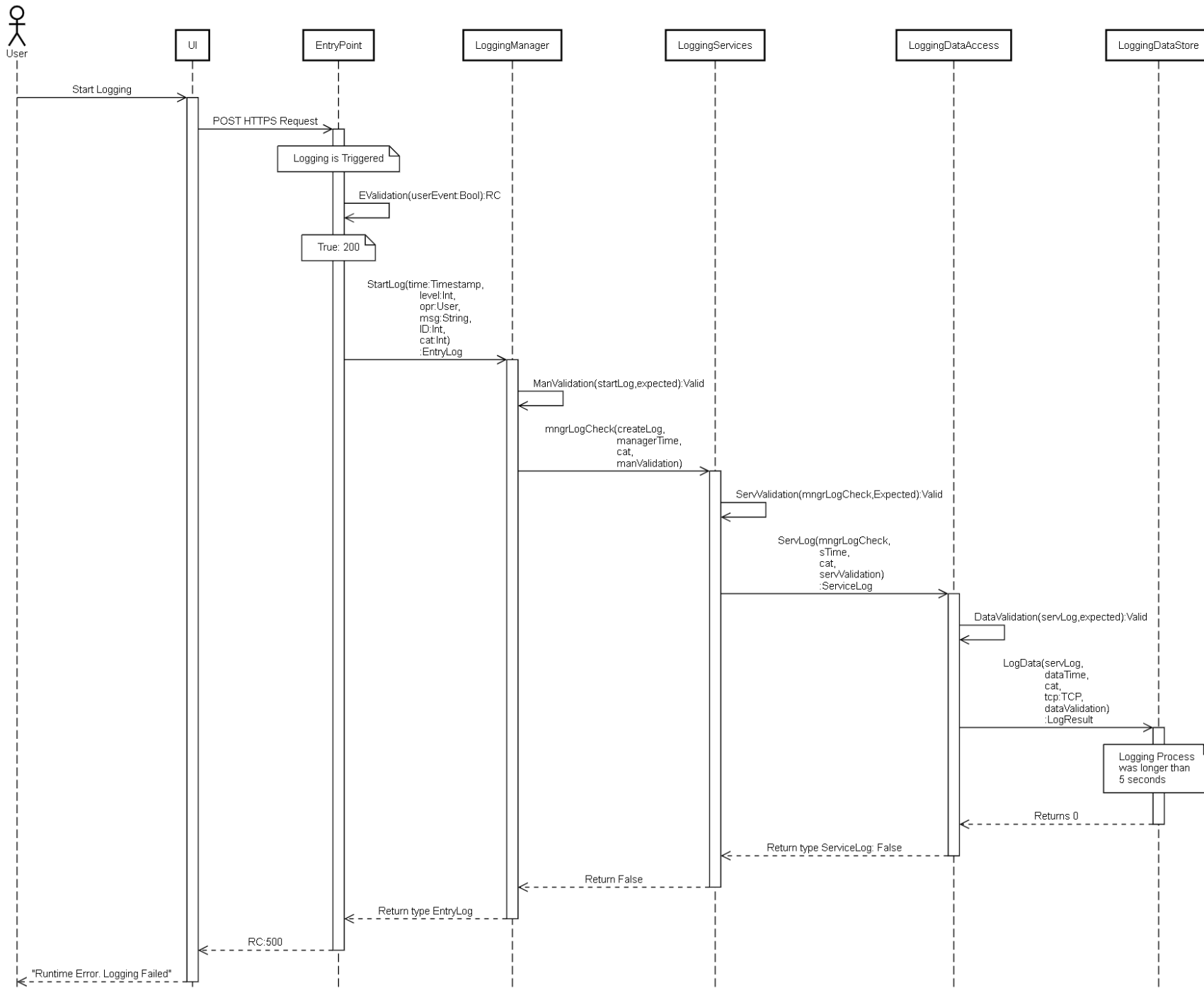


Logging Failure

System Does Has A Log Interaction Take Longer Than 5 Seconds

The Response Code (RC) is returned as a System Error, as User interaction was not the cause of failure.

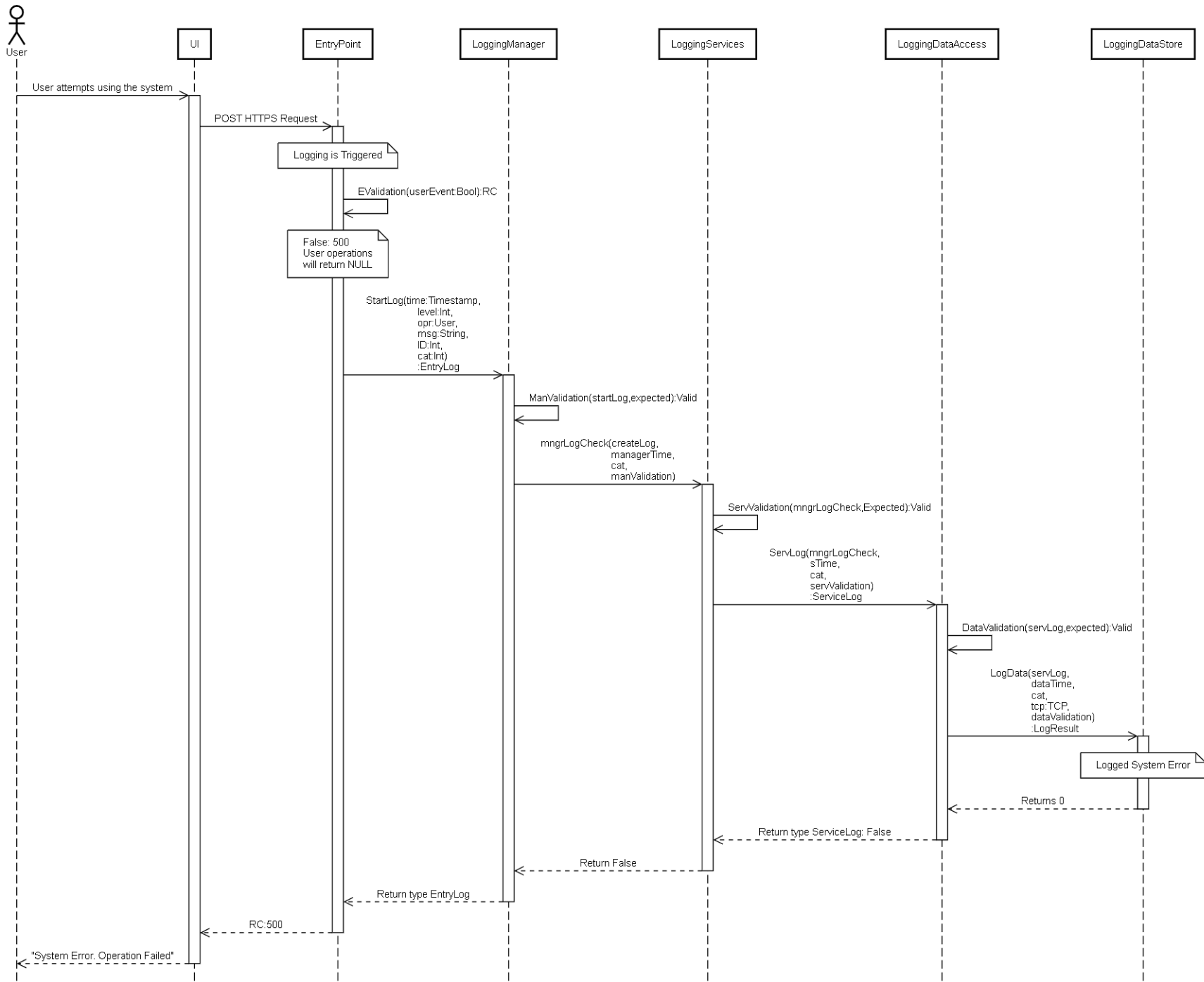
As a System, I want to Log, but the process took longer than 5 seconds



System Logging Does Not Allow User Interaction

Upon Log Creation, the system does not persist and fails to record User Interaction.

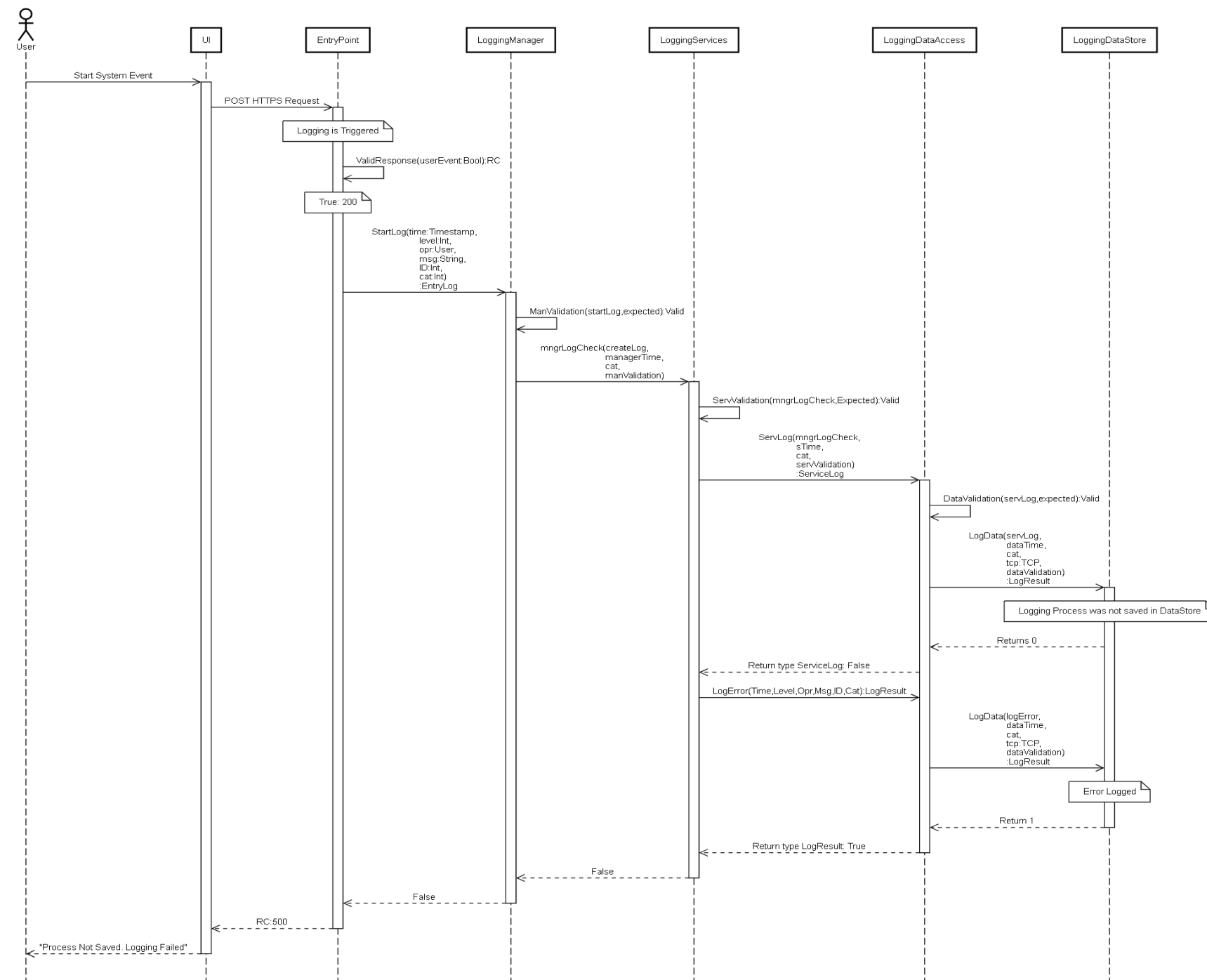
As a User, I want to interact, but I cannot interact with the system.



System Does Not Save Logs In A Persistent Storage

Failed Log Storage is caught during Data Store Validation. A Log of the error is created.

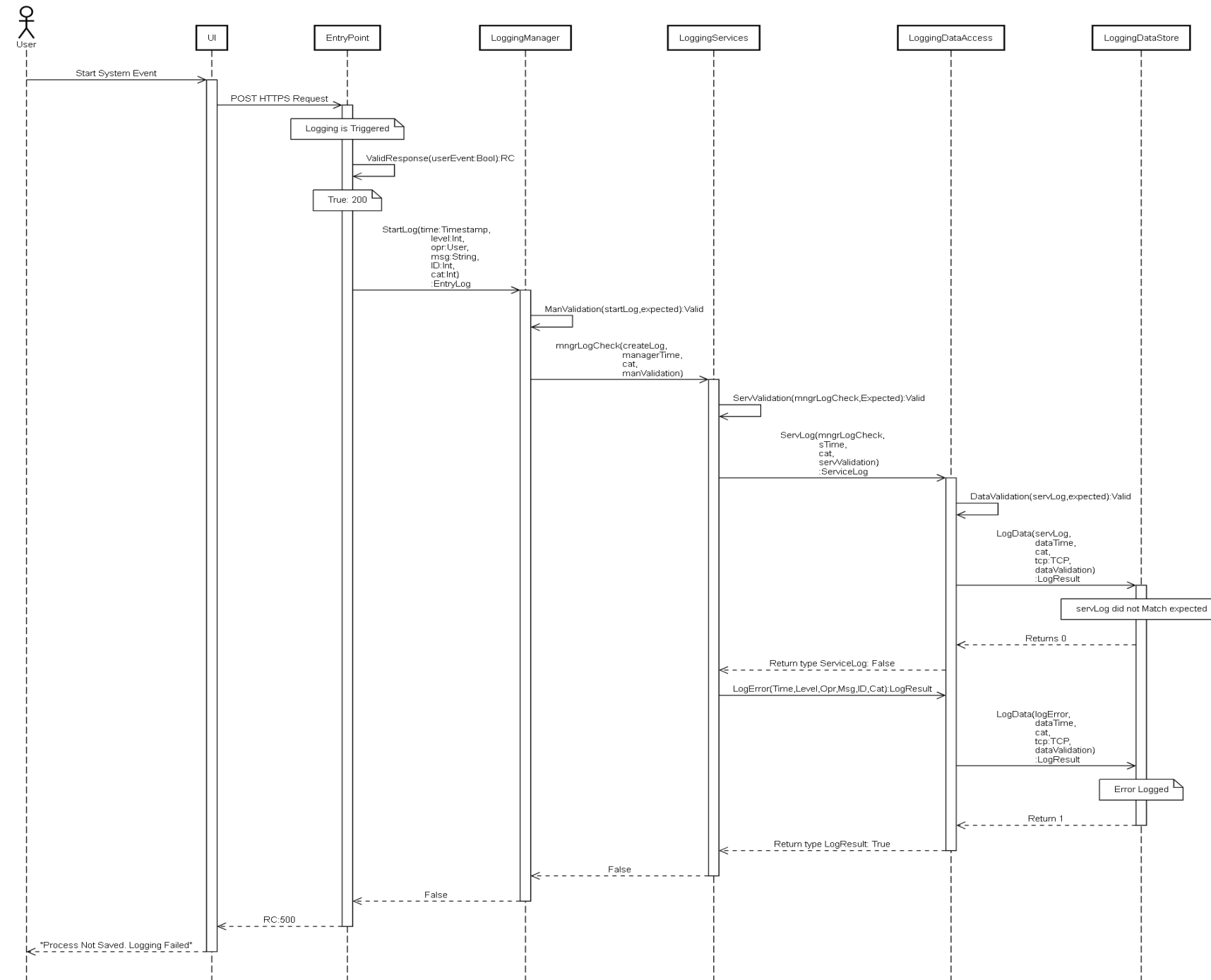
As a System, I want to Log, but the process did not save to the data store.



System Does Not Save All of Logs Data In A Persistent Storage

An Error has occurred when logging any portion and is partially stored. A Log of the error is created.

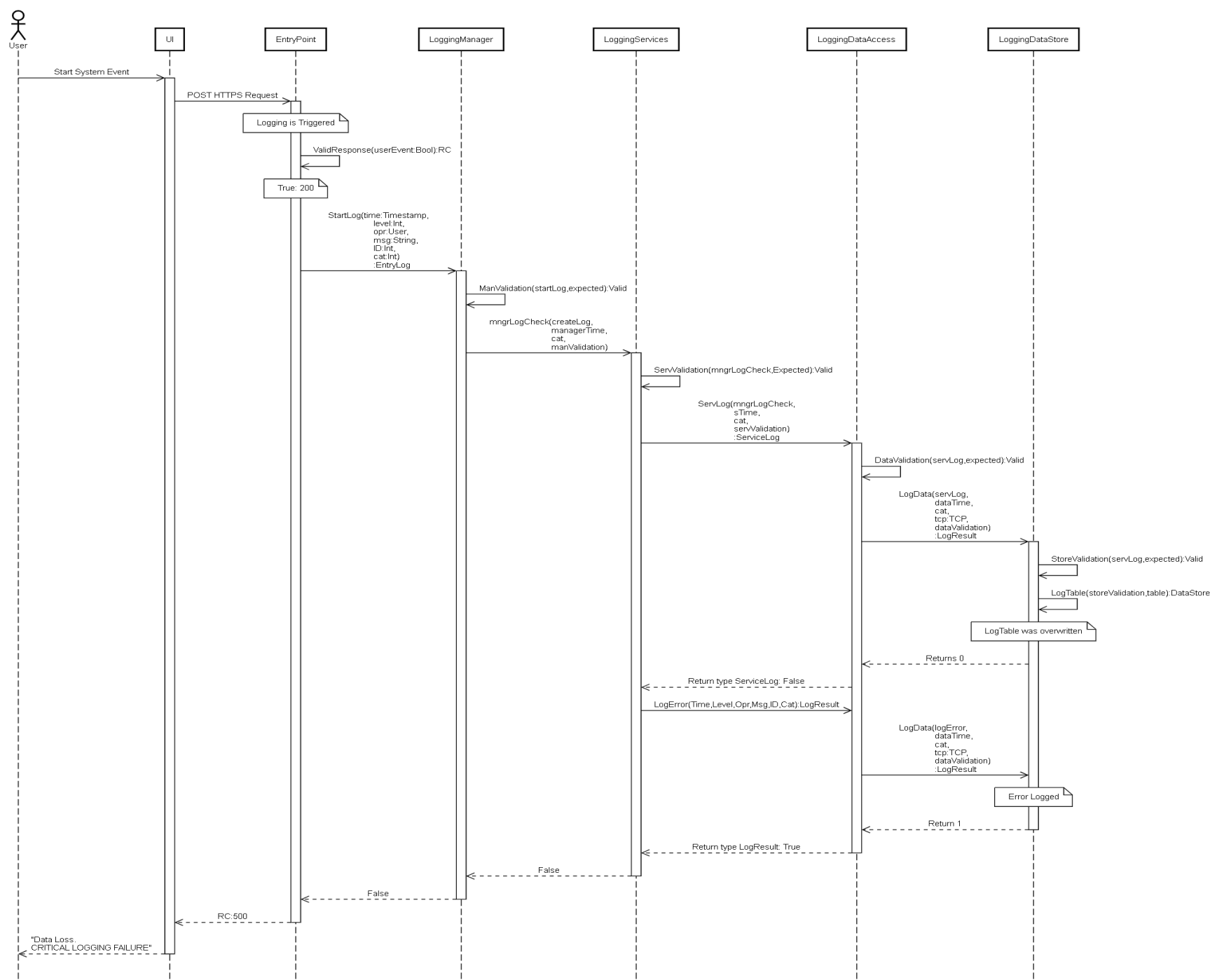
As a System, I want to Log, but the process did not accurately save all data.



System Does Not Allow Immutable Logs

Logs are Modified when being stored on Data Tables. Admin Users are Notified and event is logged.

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



References

<https://sequencediagram.org/>