

SDD Document

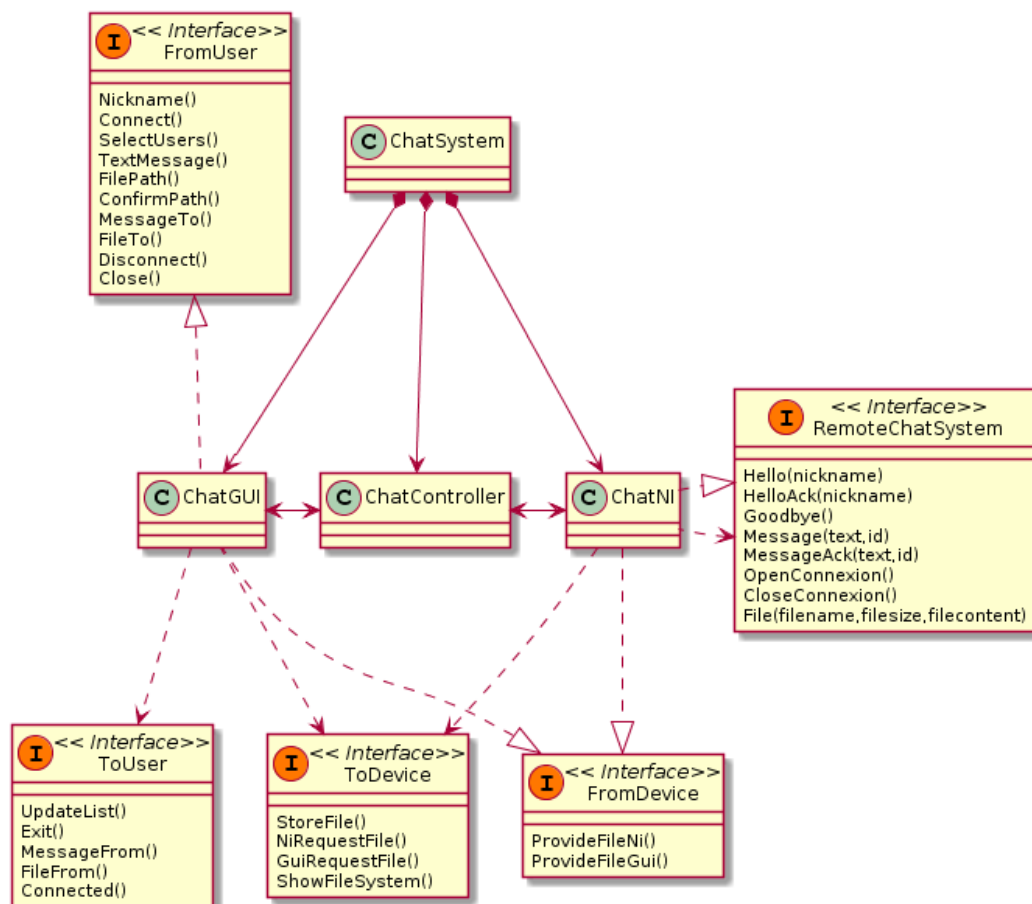
Overview

Here is an informal Software Design Description document which specifies the design of the software to be produced.

This document is needed to describe how the chat system will interact with the other actors. As we have interfaces “FromUser”, “ToUser” and “RemoteChatsystem”, we have to decompose the Chat System into different components which will interact with these interfaces.

High level decomposition : Composite diagram

Here is the class diagram which decomposes the ChatSystem into three components : “ChatUI” (Chat User Interface), “ChatController” and “ChatNI” (Chat Network Interface) :

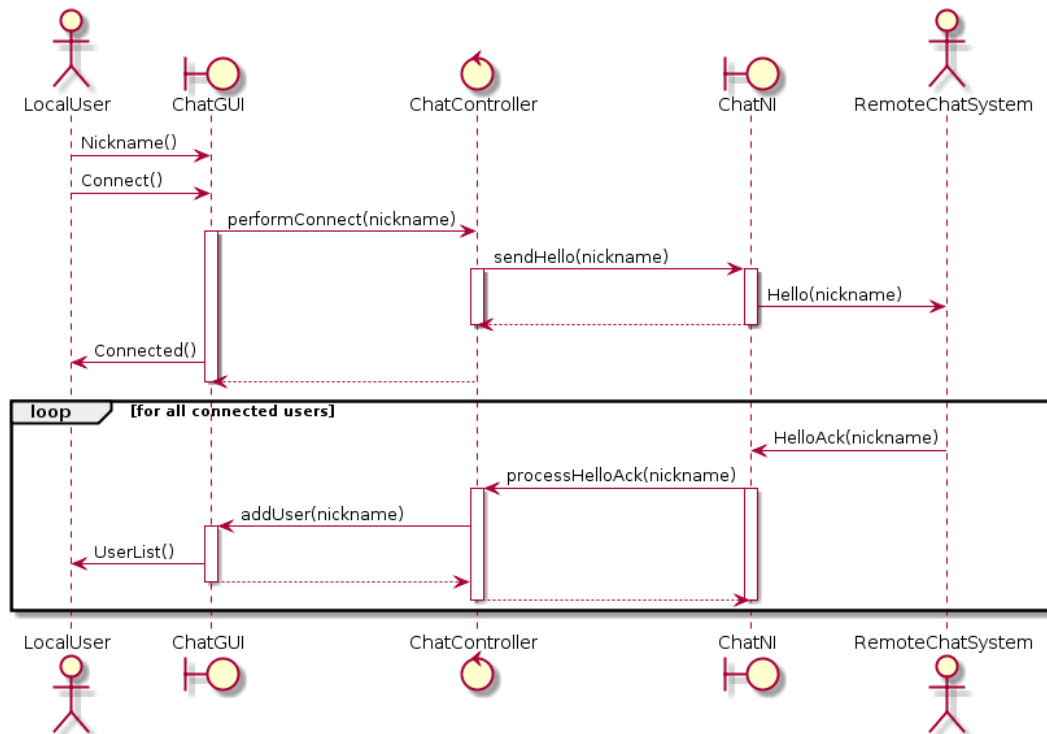


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White Box Sequence diagrams

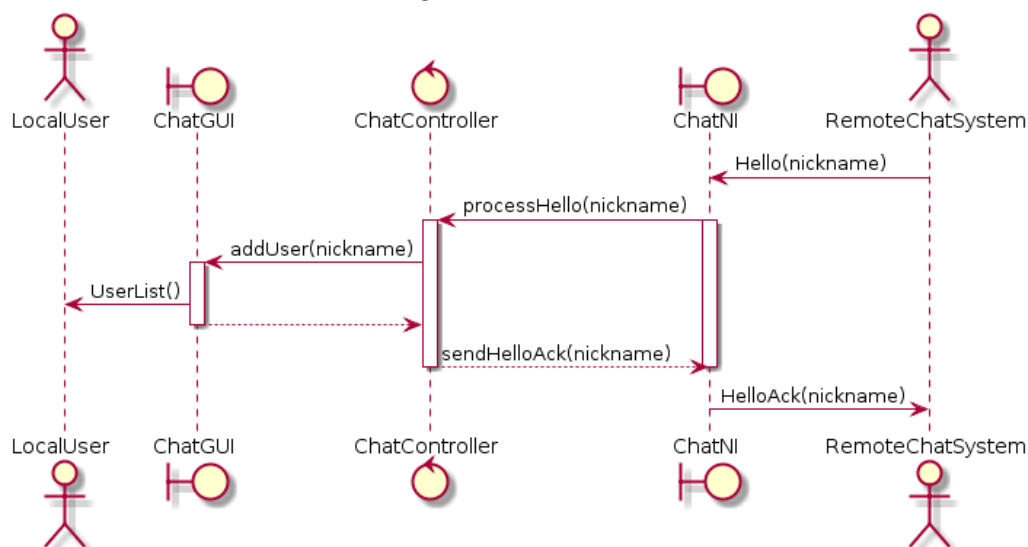
From each previous sequence diagram, we can draw a detailed UML sequence diagram.

When the local user is connecting :



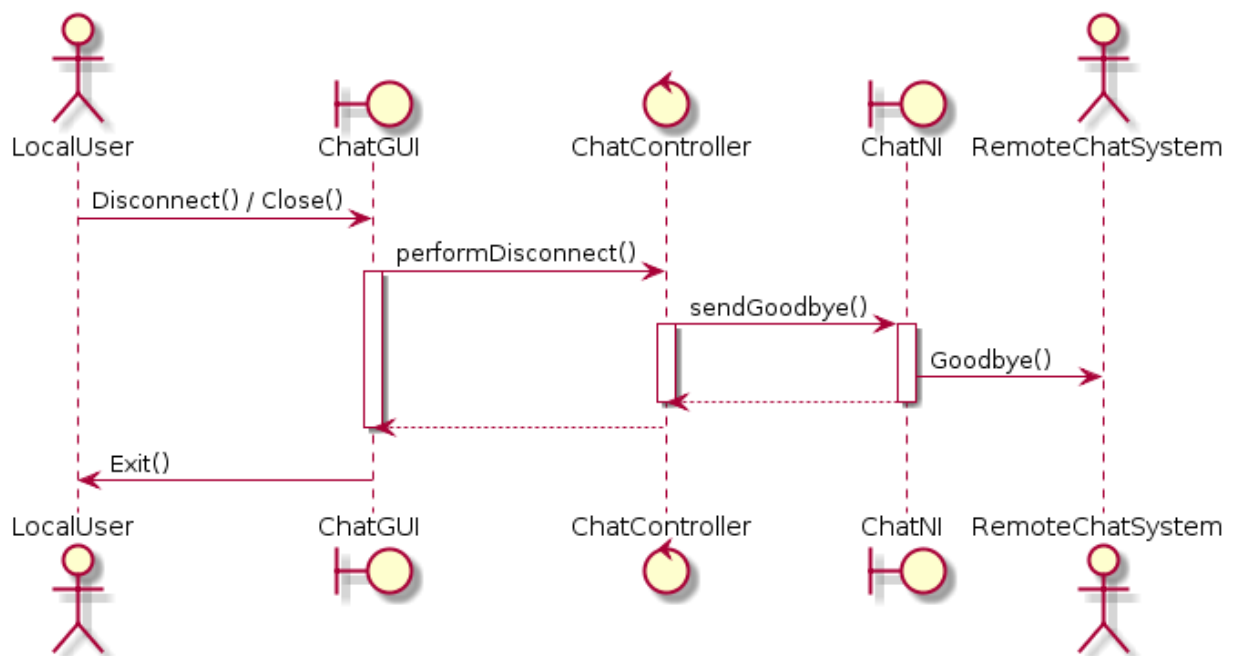
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When another user is connecting :



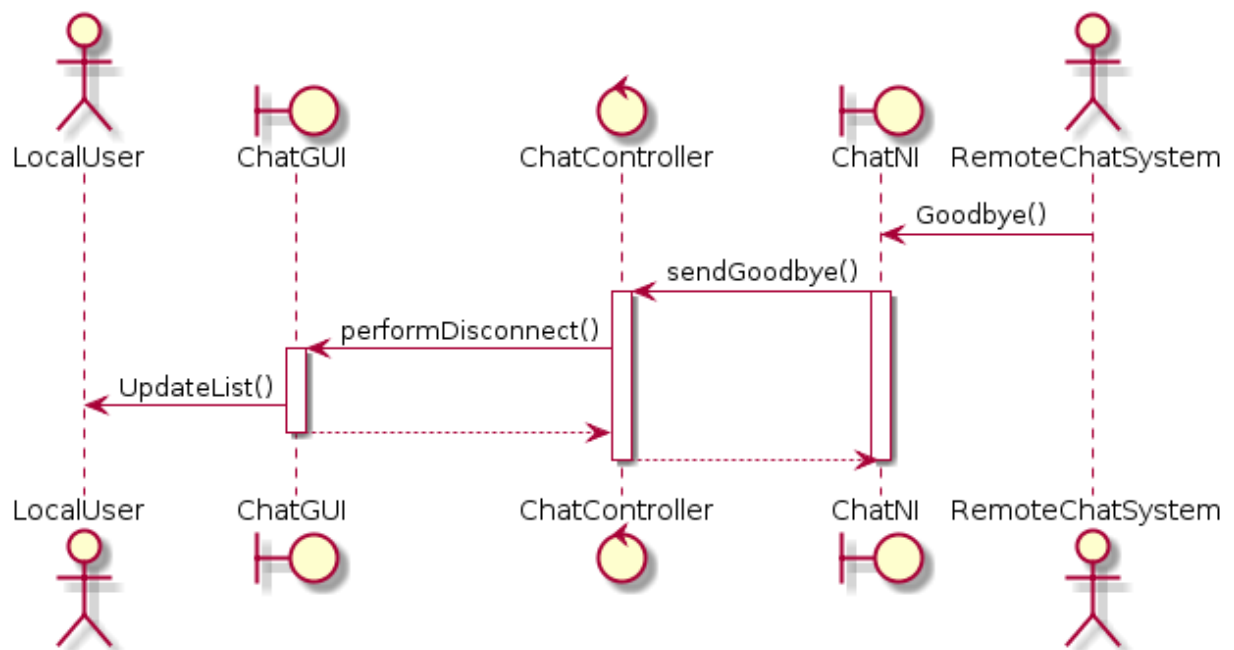
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When the local user is disconnecting :



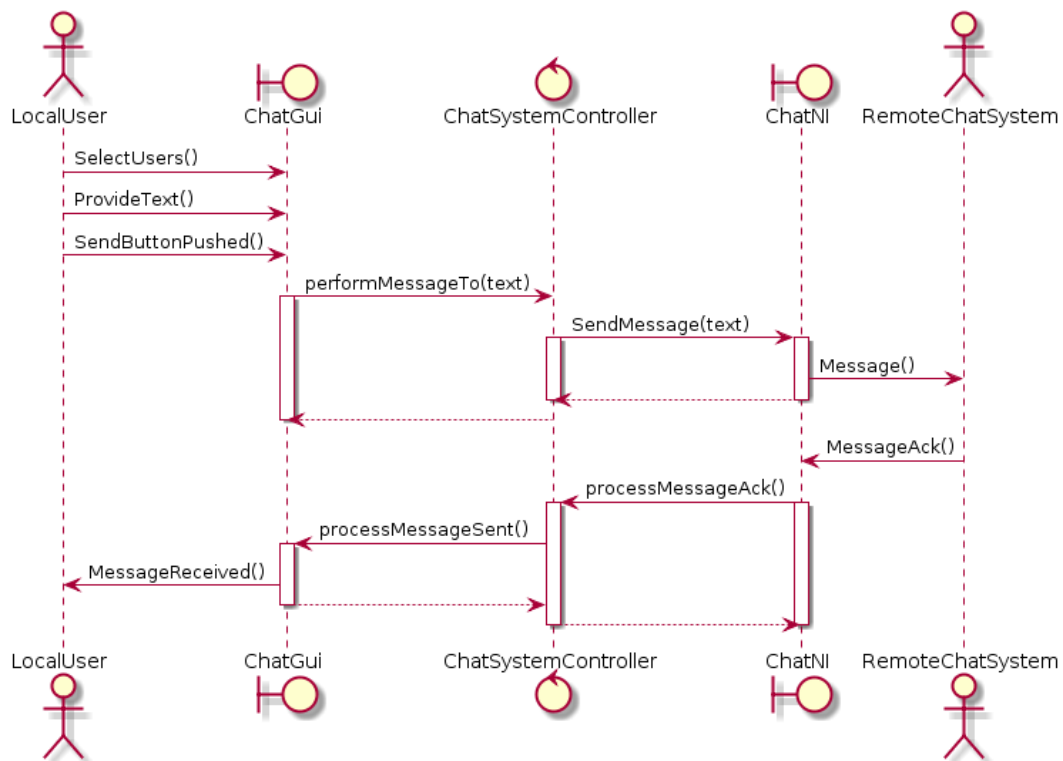
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When another user is disconnecting :



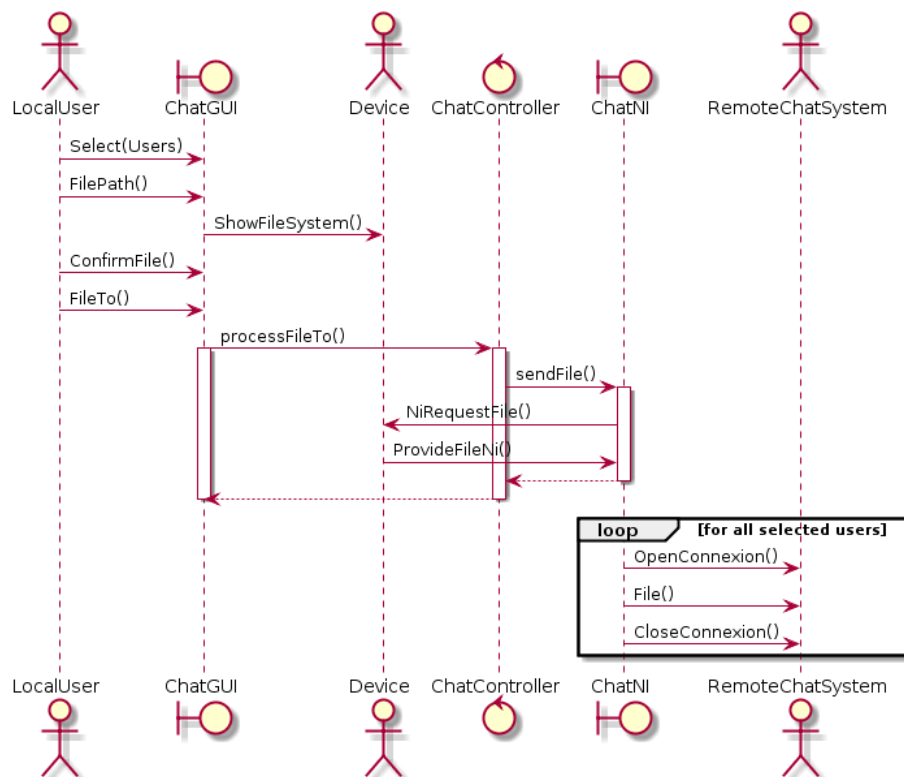
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When the user is sending a message :



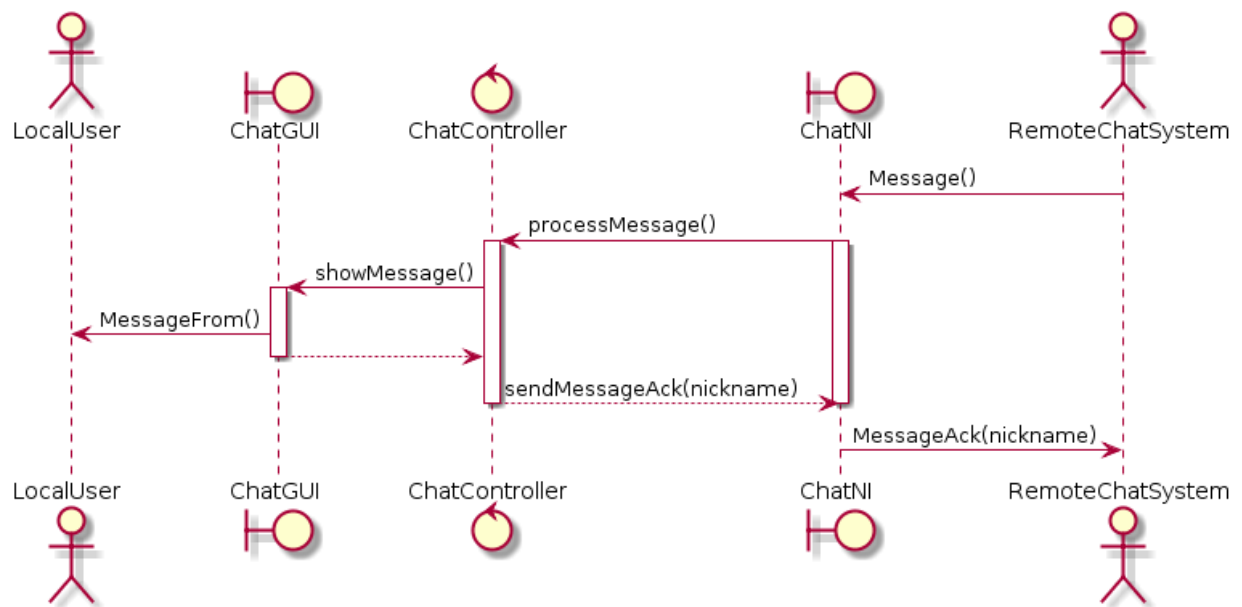
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When the local user is sending a file :



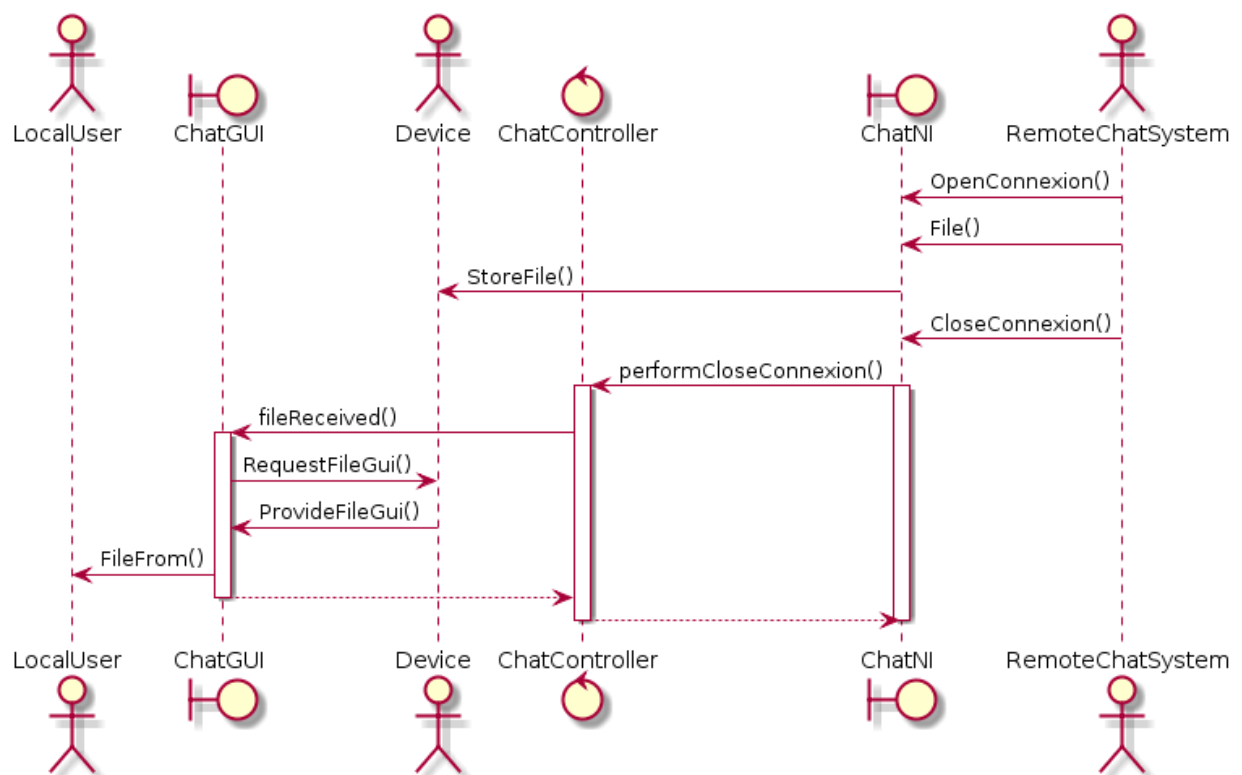
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When the local user is receiving a message from the remote chat system



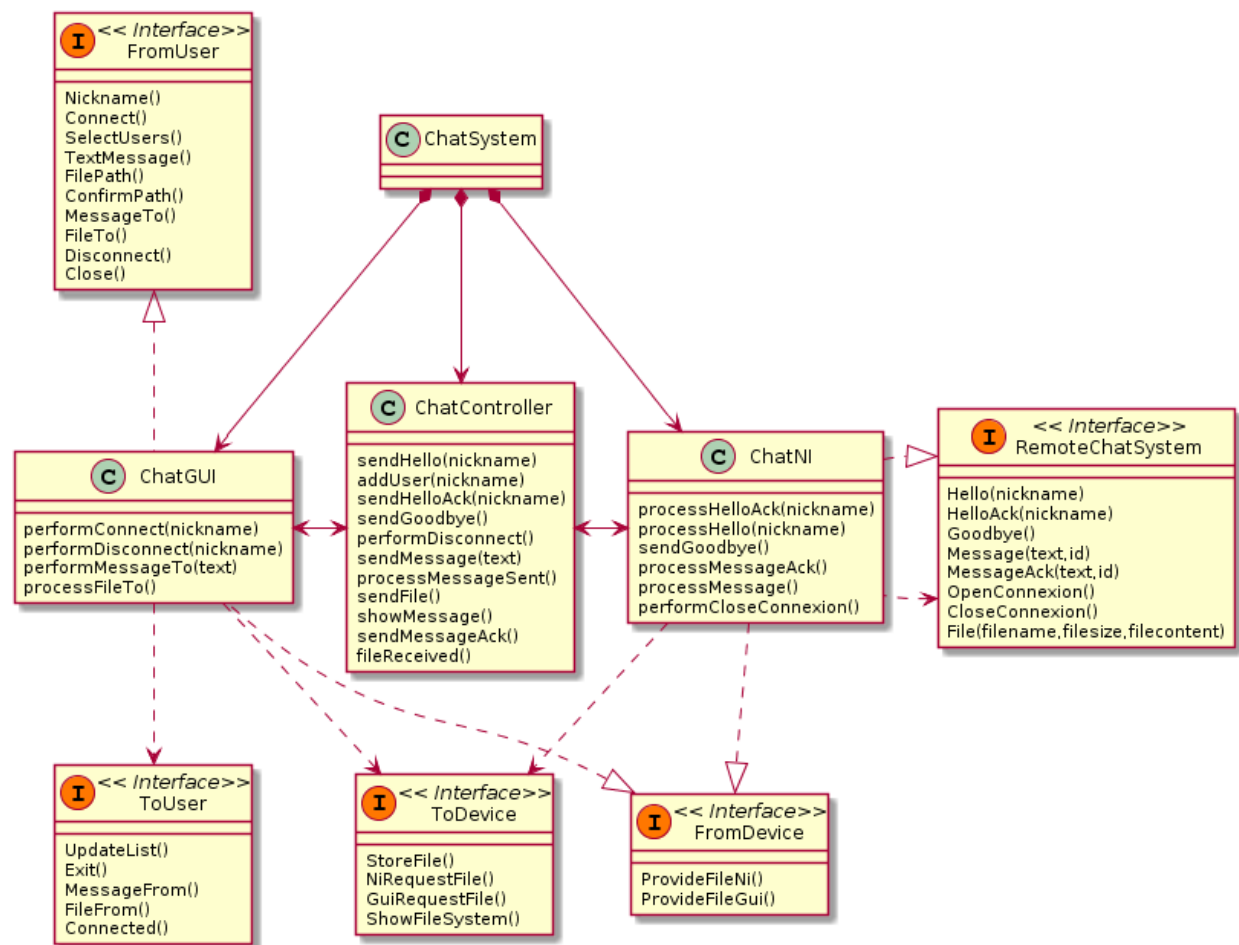
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When the local user is receiving a file



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Now we have this new class diagram with the methods for ChatNI, ChatGUI et ChatController:

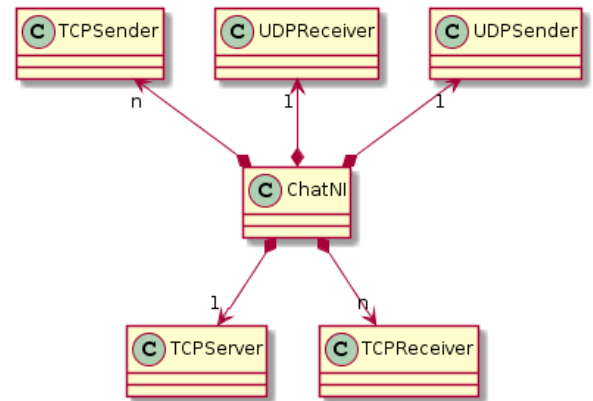


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Component diagrams

We can now decompose ChatGUI et ChatNI. Each signal between an actor and the system can be represented by a class (an object).

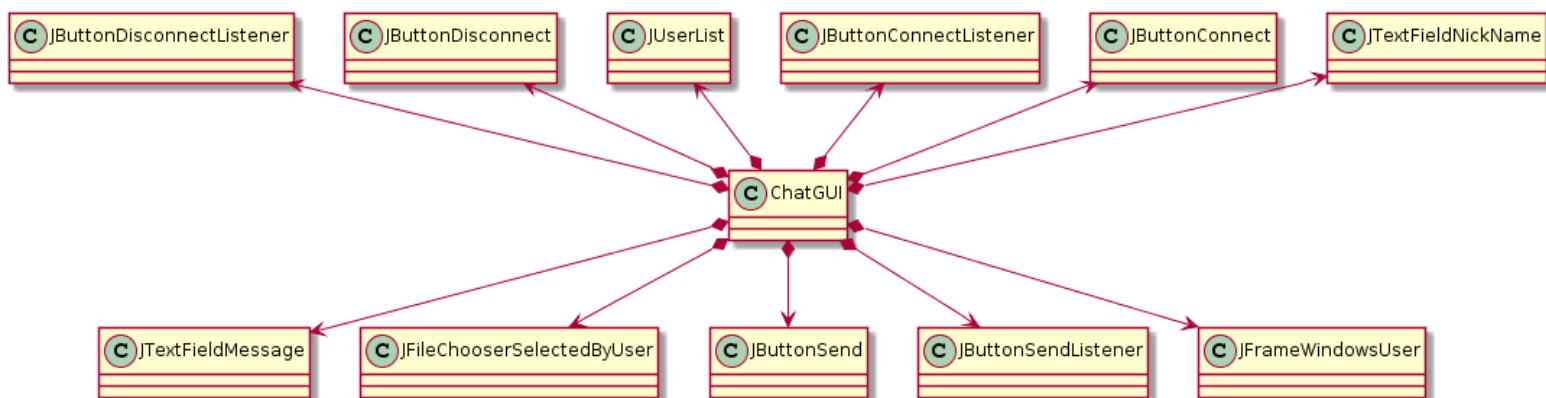
Here is the ChatNI component diagram :



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And here is the ChatGUI component diagram :

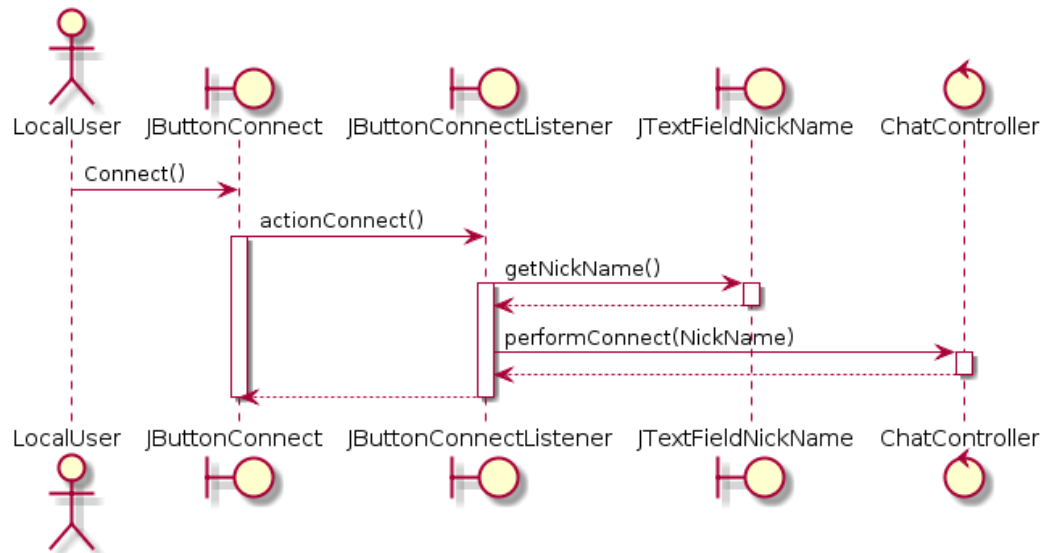
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White Box Detailed Sequence diagrams : Component diagrams

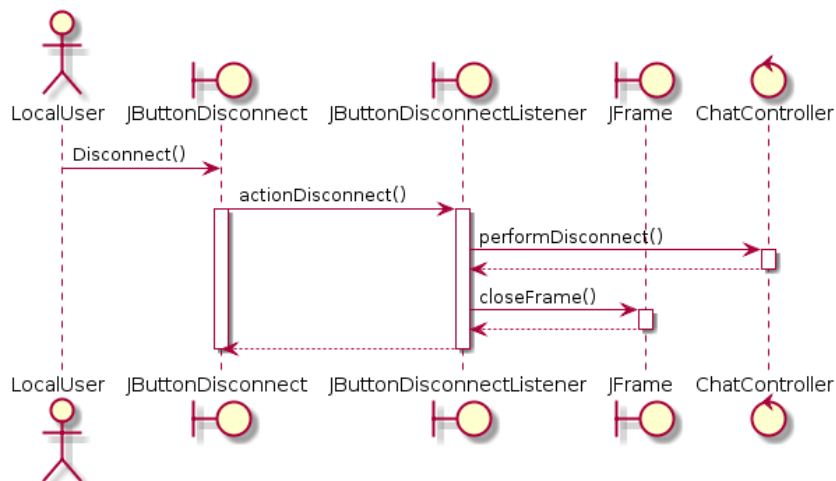
Local User side (ChatGUI side):

Connect



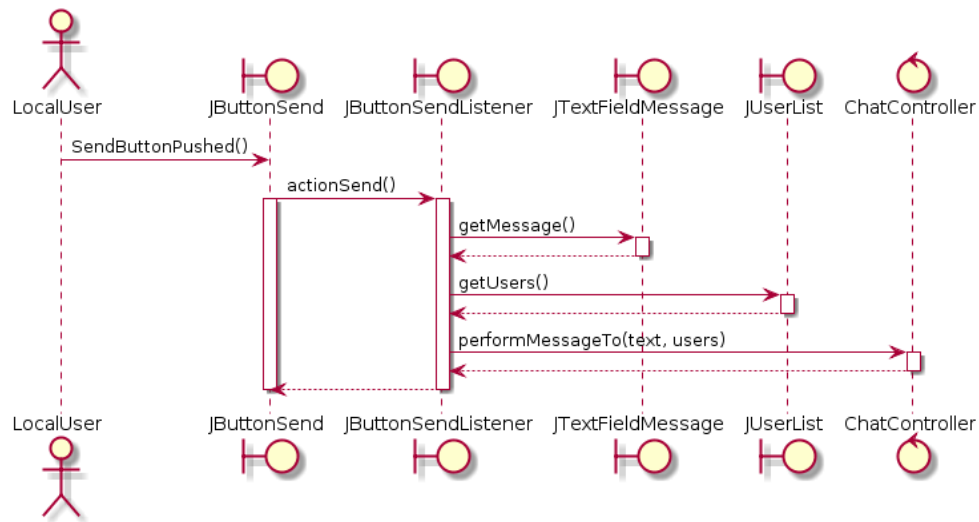
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Disconnect



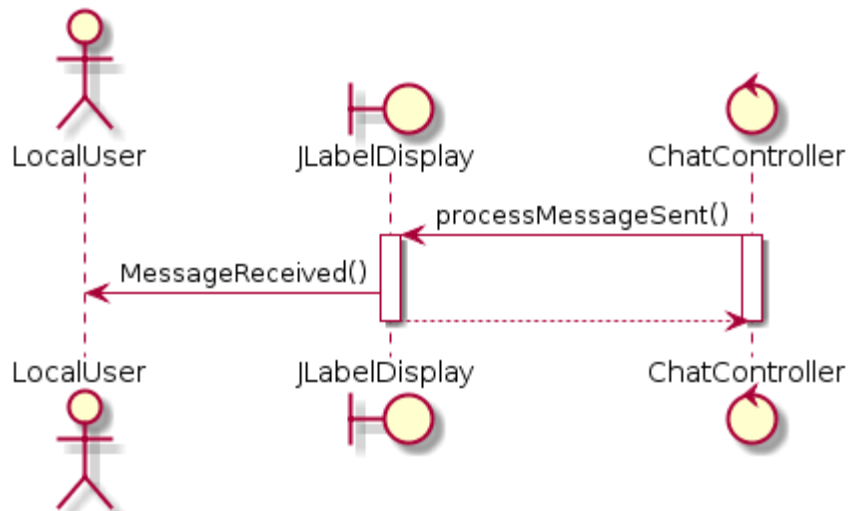
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Send Message



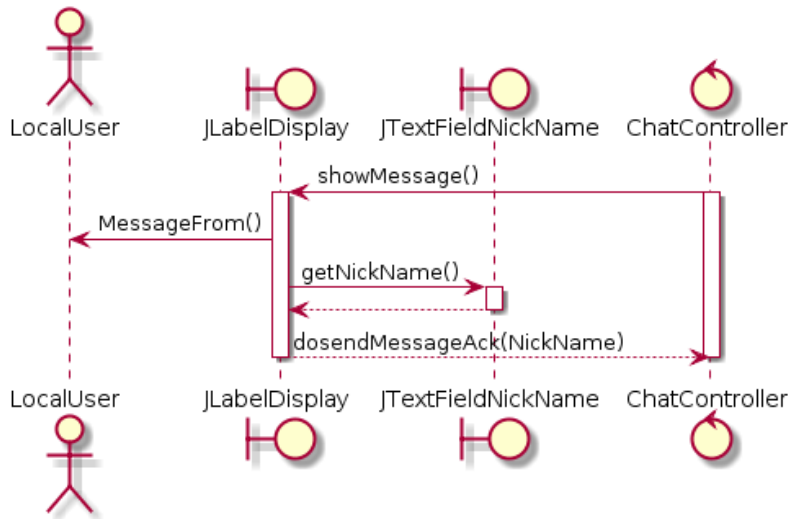
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Receive an ack



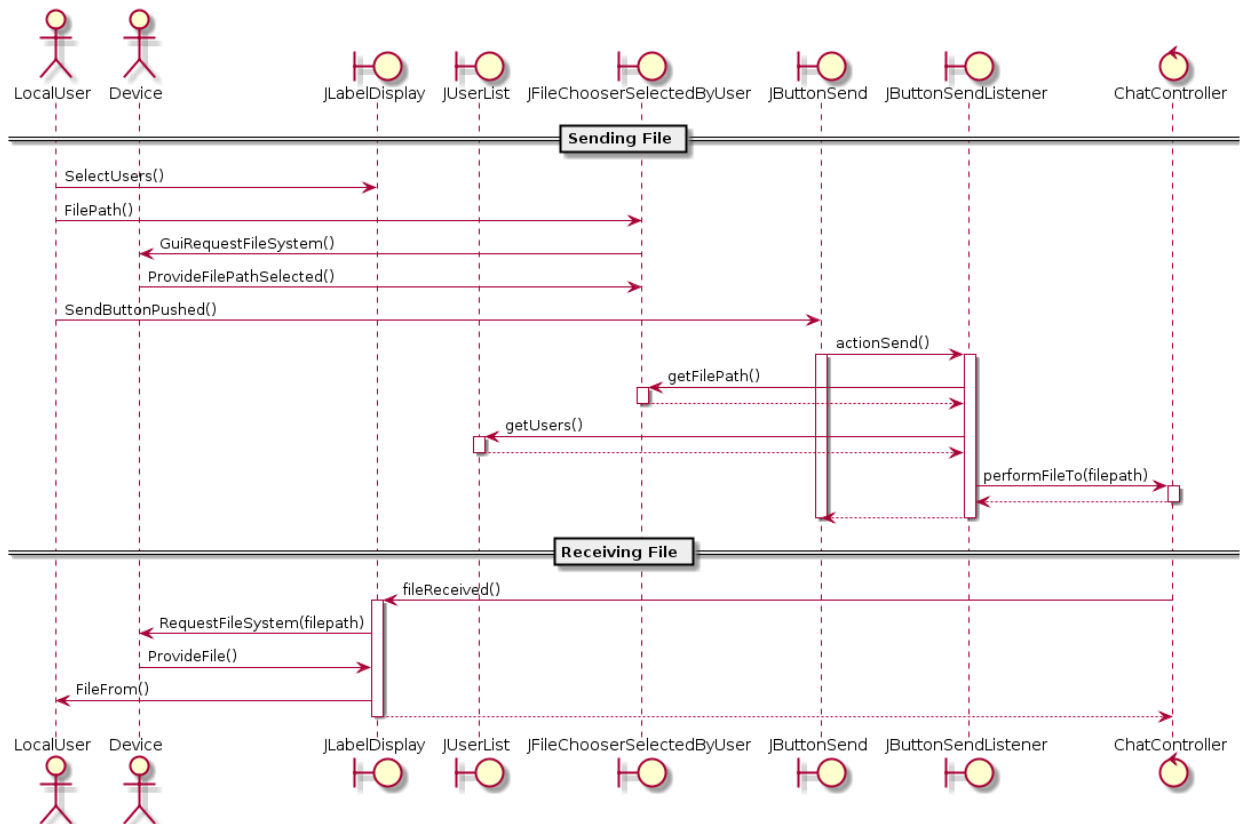
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Receive a message



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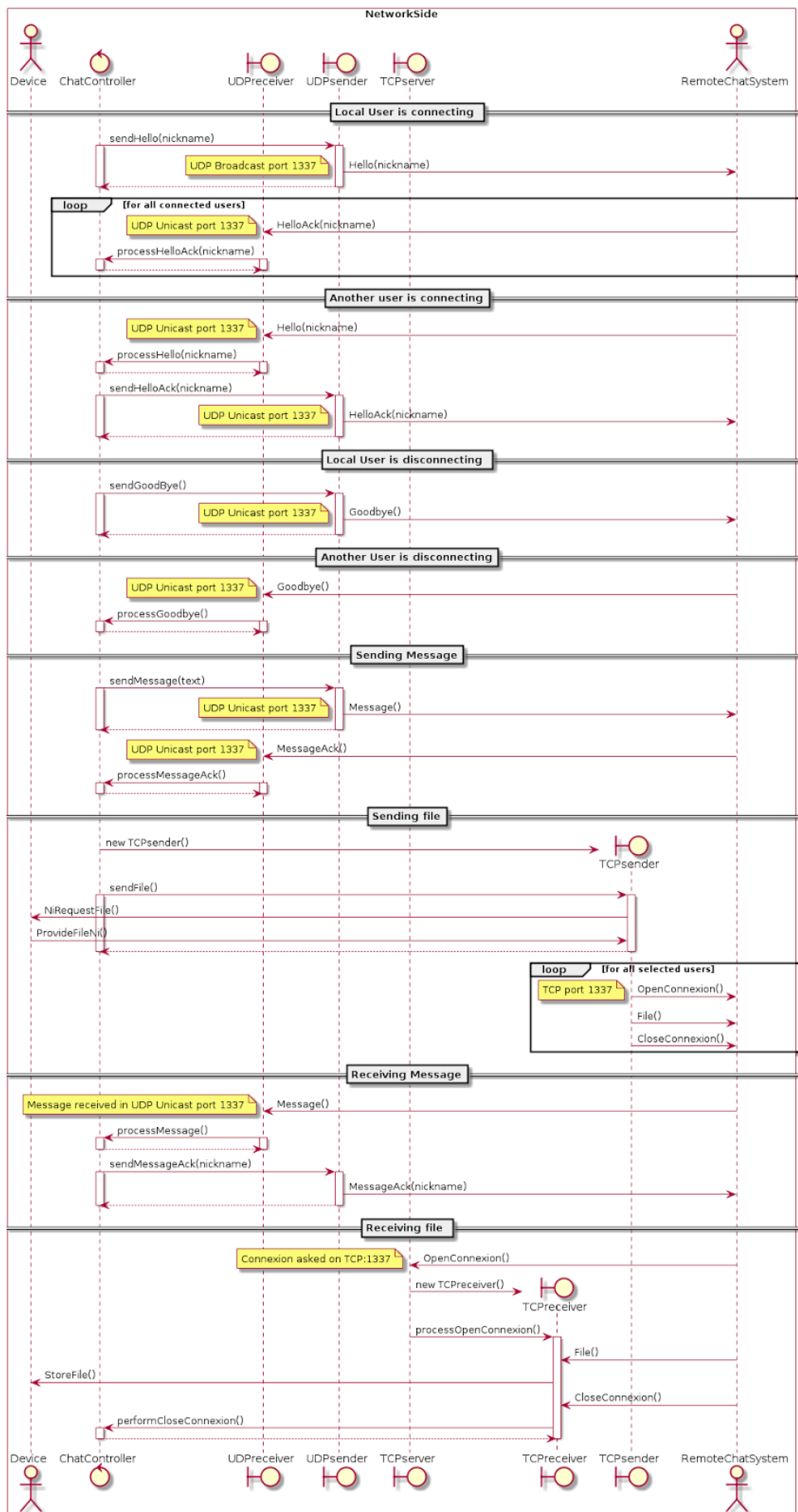
Send & Receive a file



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Network side (ChatNI side):

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Statechart diagram

