Flow Charts of SmartHomeServer

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Introduction

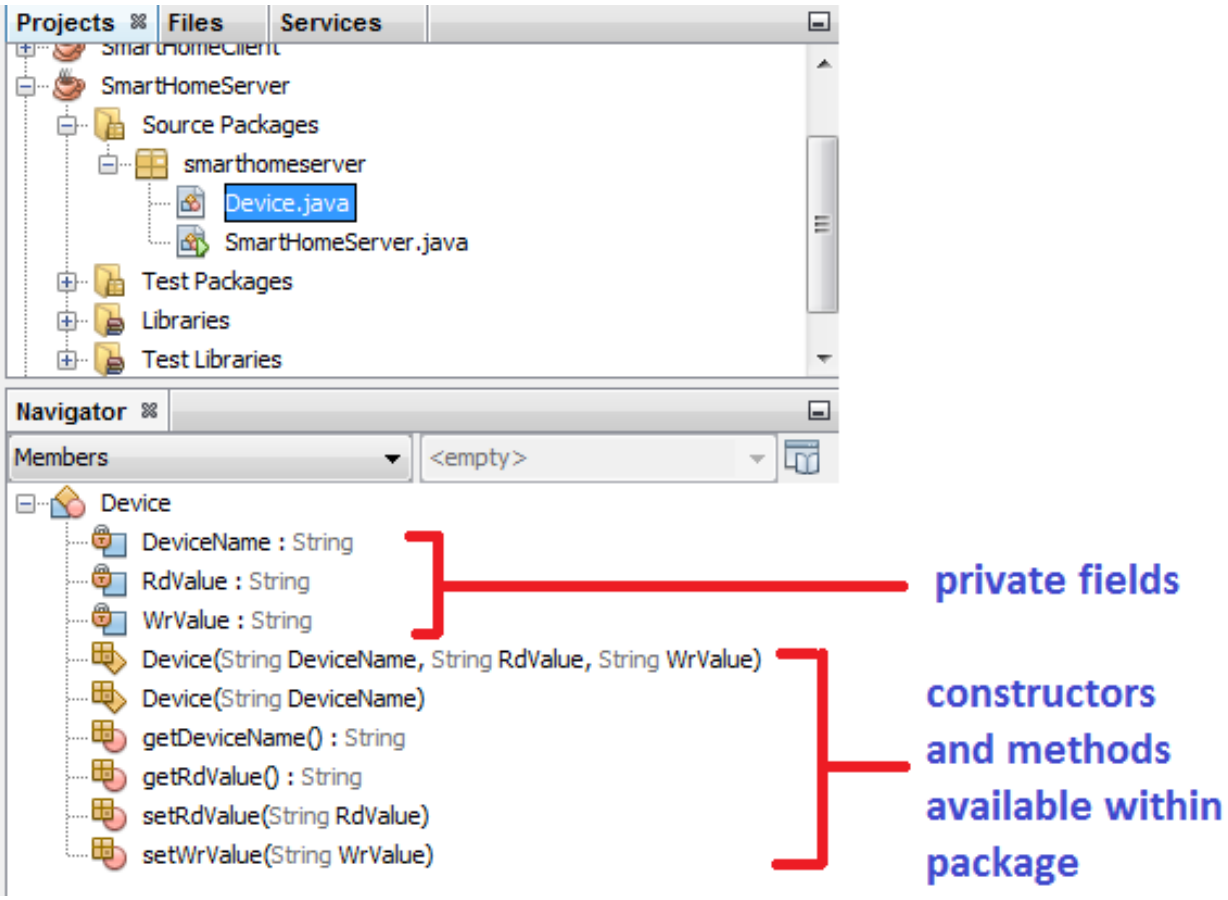
In the class structure section below, there is a screenshot of the Netbeans project and member window showing all the fields and methods in the Device class and SmartHomeServer class. The Device class has been used to create an array of Device objects in the SmartHomeServer class to act as a database.

The main method of SmartHomeClient calls several private methods to keep the code modular, clean and readable. So, the flow chart section has flow-charts of main and all the other private methods.

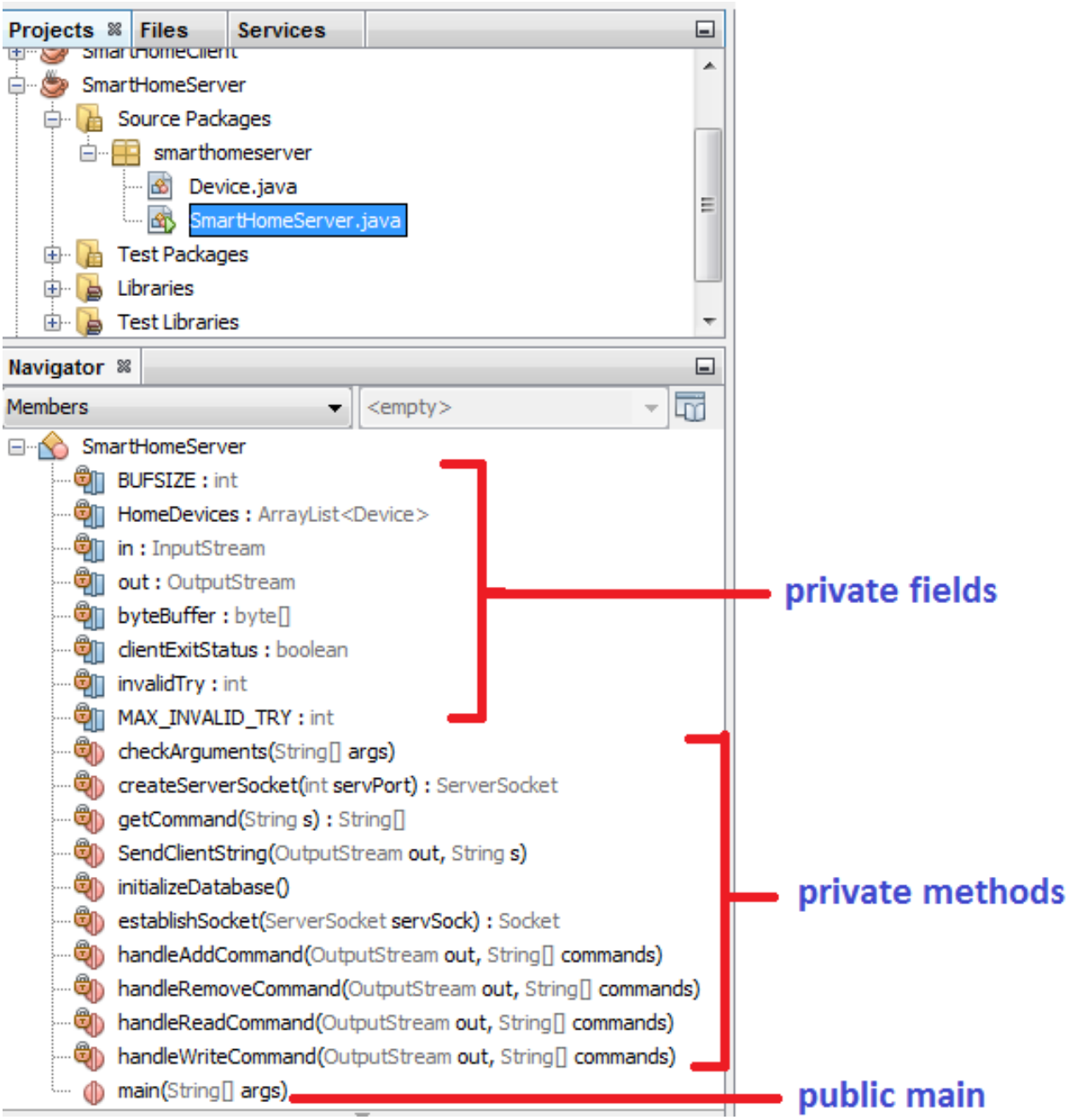
Class Structures

package SmartHomeServer -> class Device

This class has been used to create a new data structure called 'Device'. This class has 3 private fields: DeviceName, RdWalue, WrValue. It also has the necessart get and set methods and 2 constructors.



package SmartHomeServer -> class SmartHomeServer

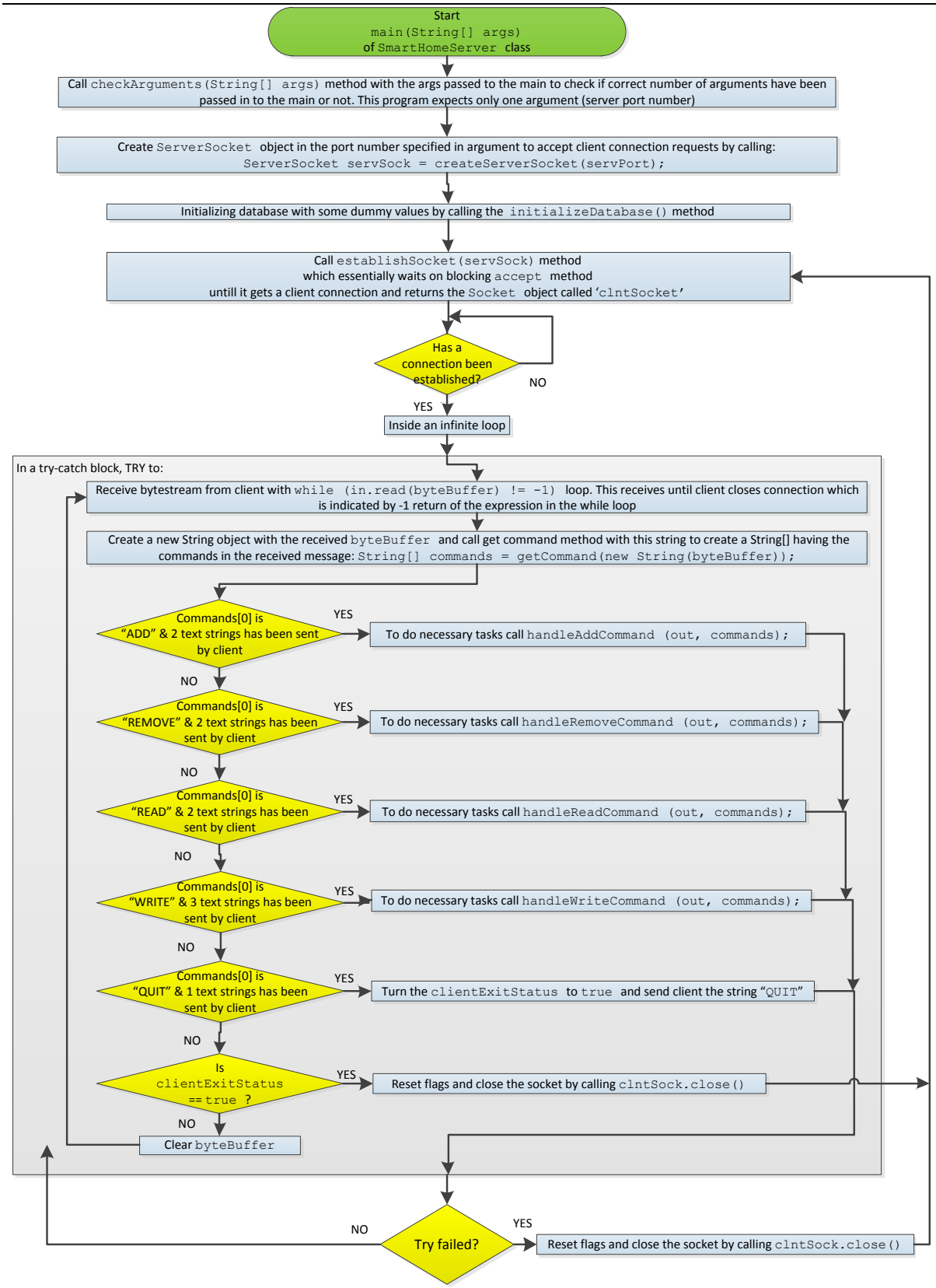


Flow Chart of SmartHomeServer

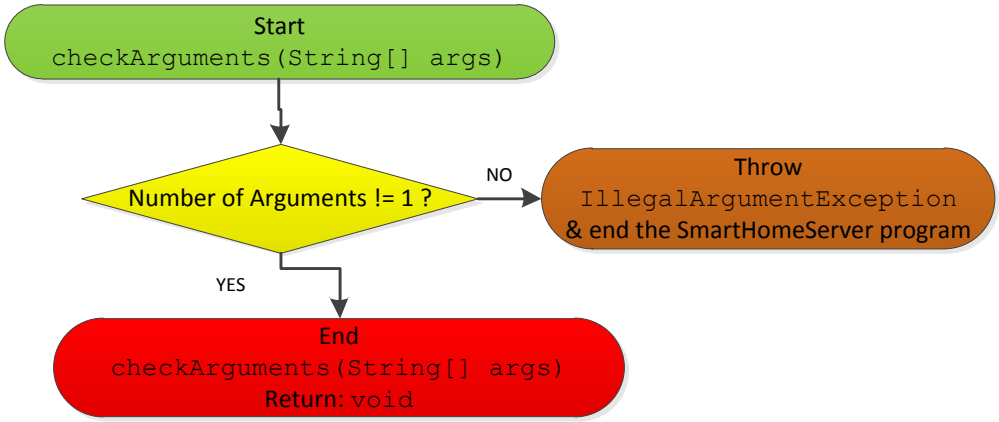
Legends of colour code

Green – start of a method	Red – end of a method	Dark Orange - exception
Yellow – decision making	Blue – processing/execution	

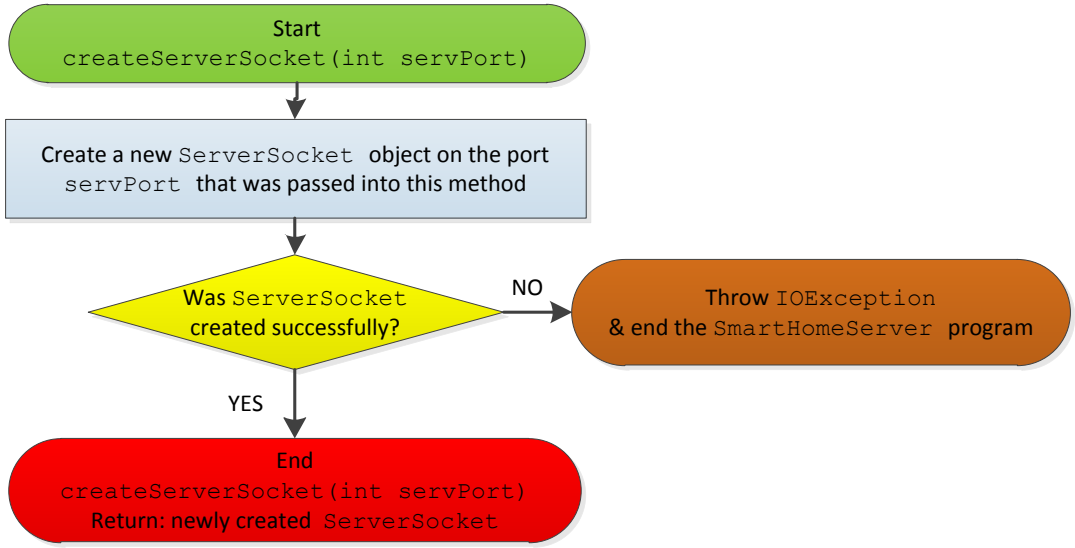
Method: public static void main (String[] args)



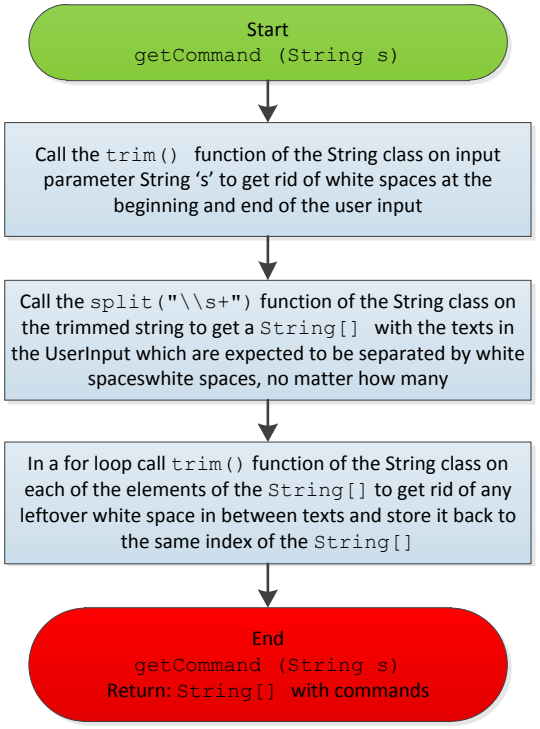
Method: private static void checkArguments(String[] args)



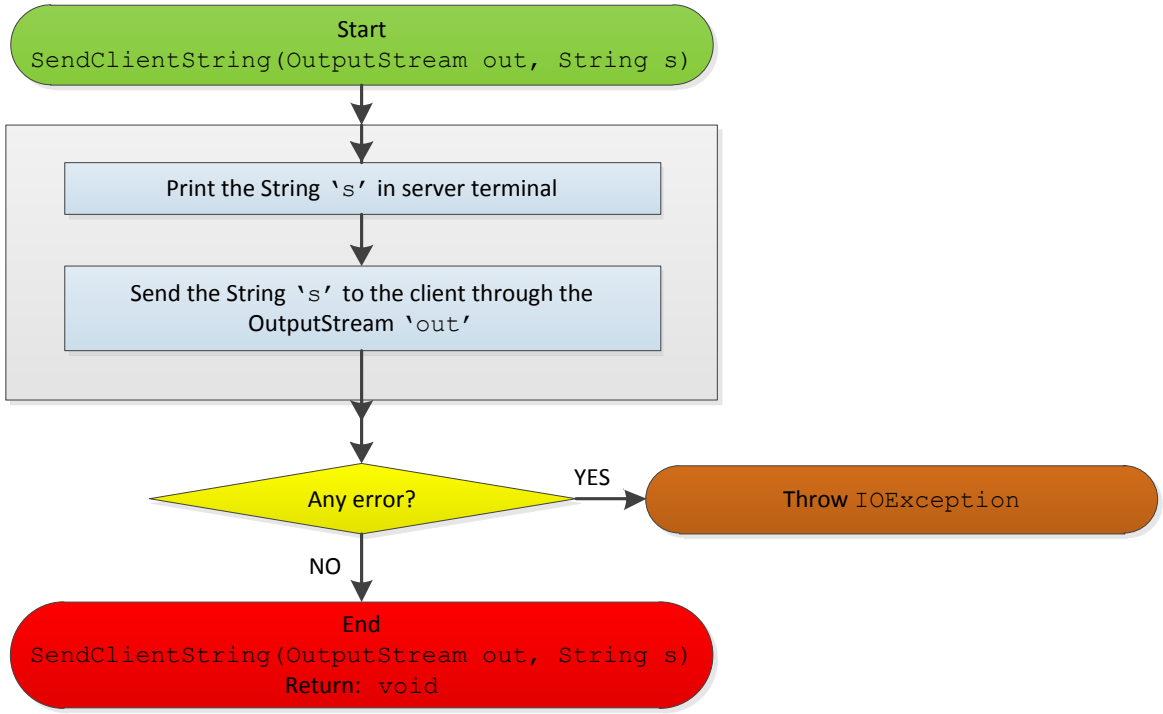
Method: private static ServerSocket createServerSocket(int servPort)



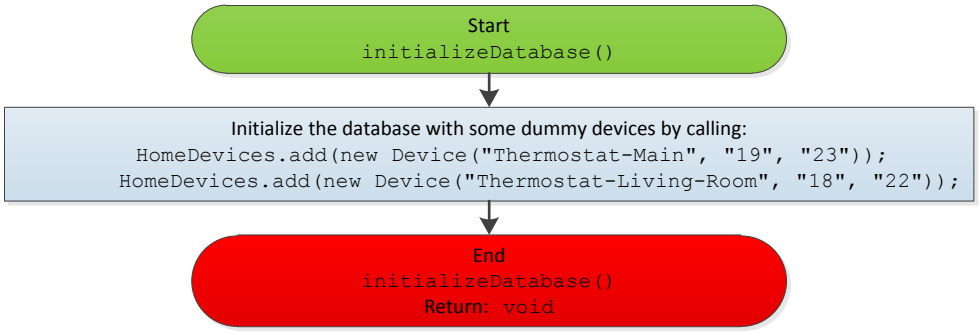
Method: private static String[] getCommand (String s)



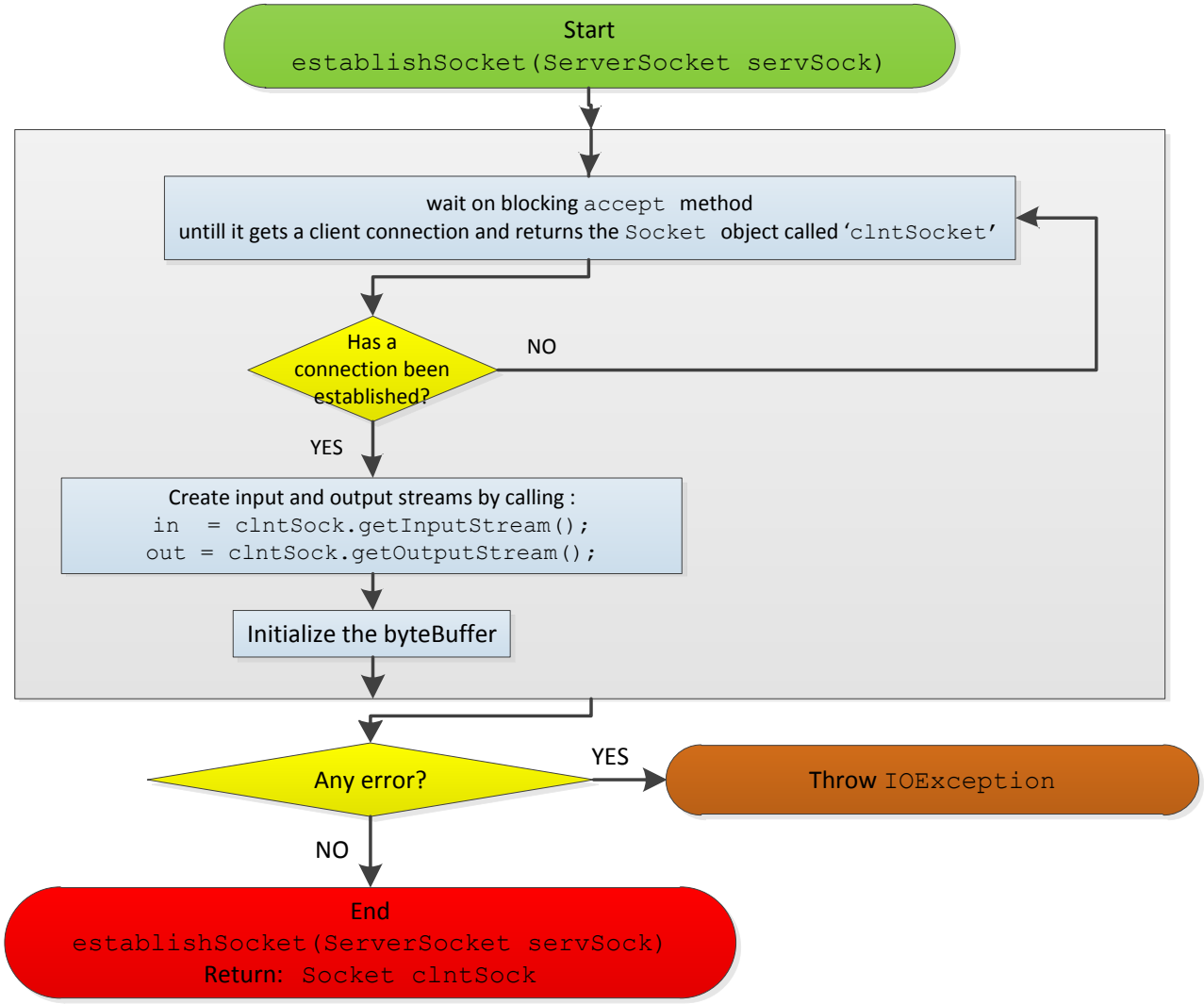
Method: private static void SendClientString(OutputStream out, String s)



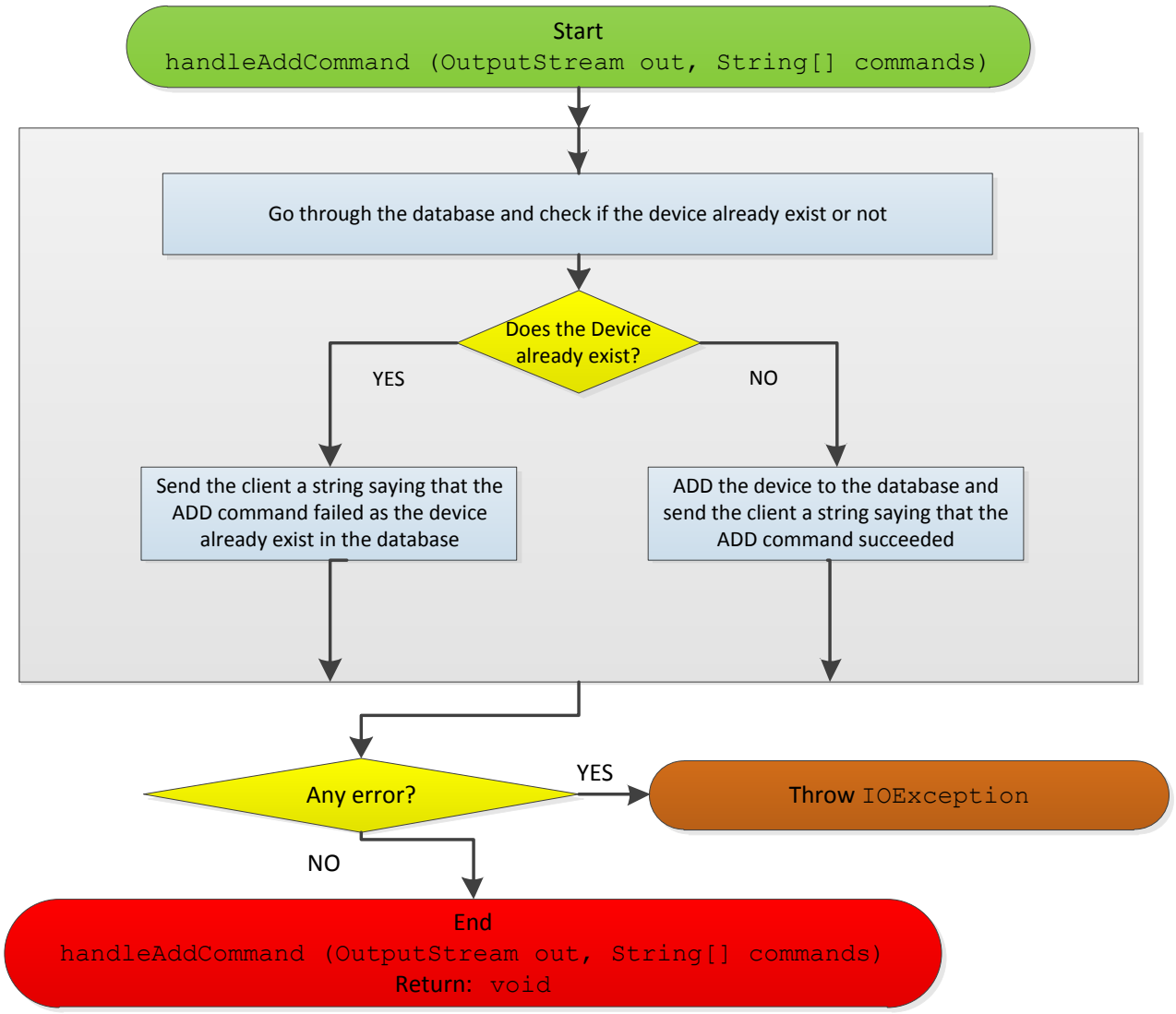
Method: private static void initializeDatabase()



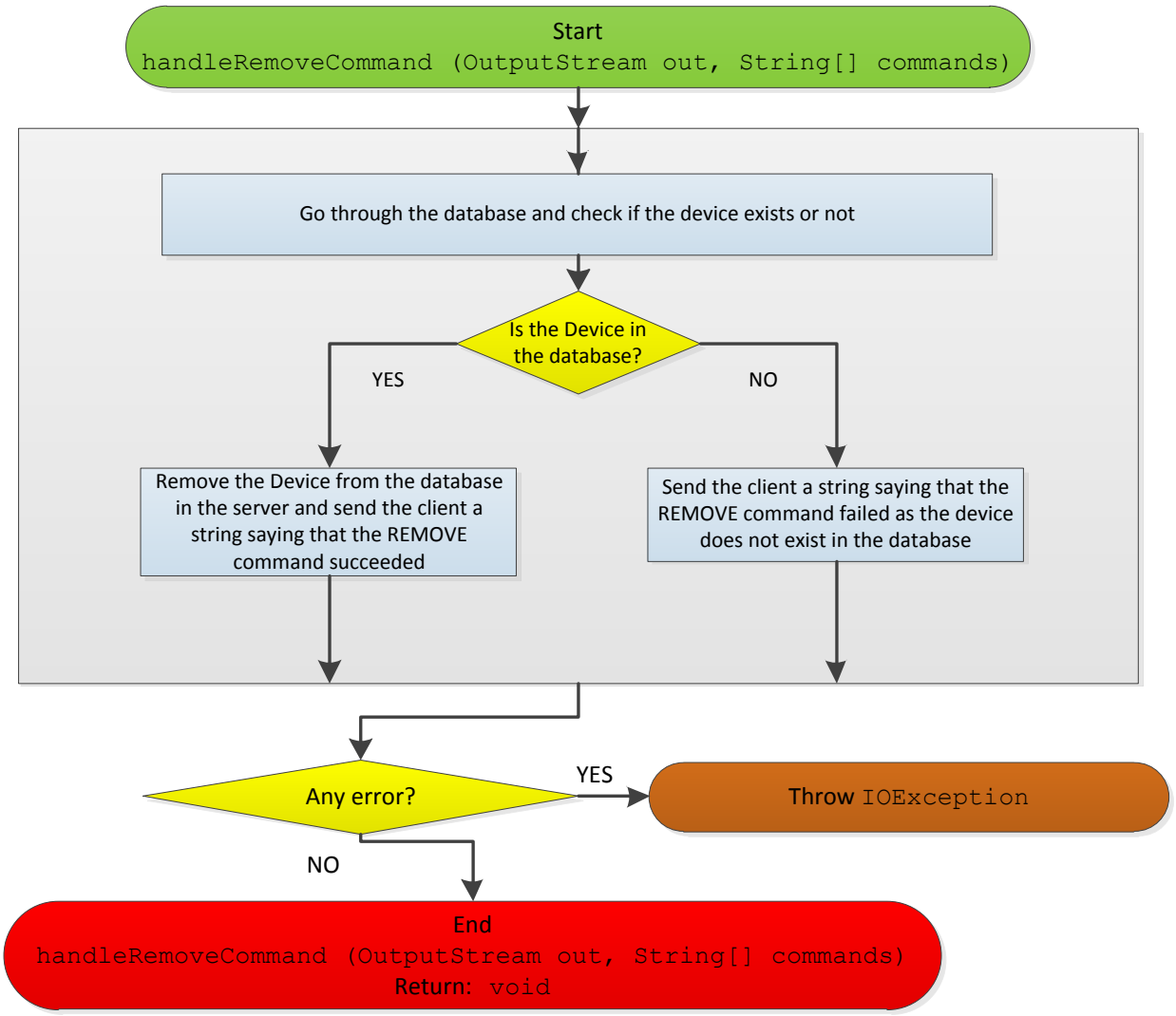
Method: private static Socket establishSocket(ServerSocket servSock)



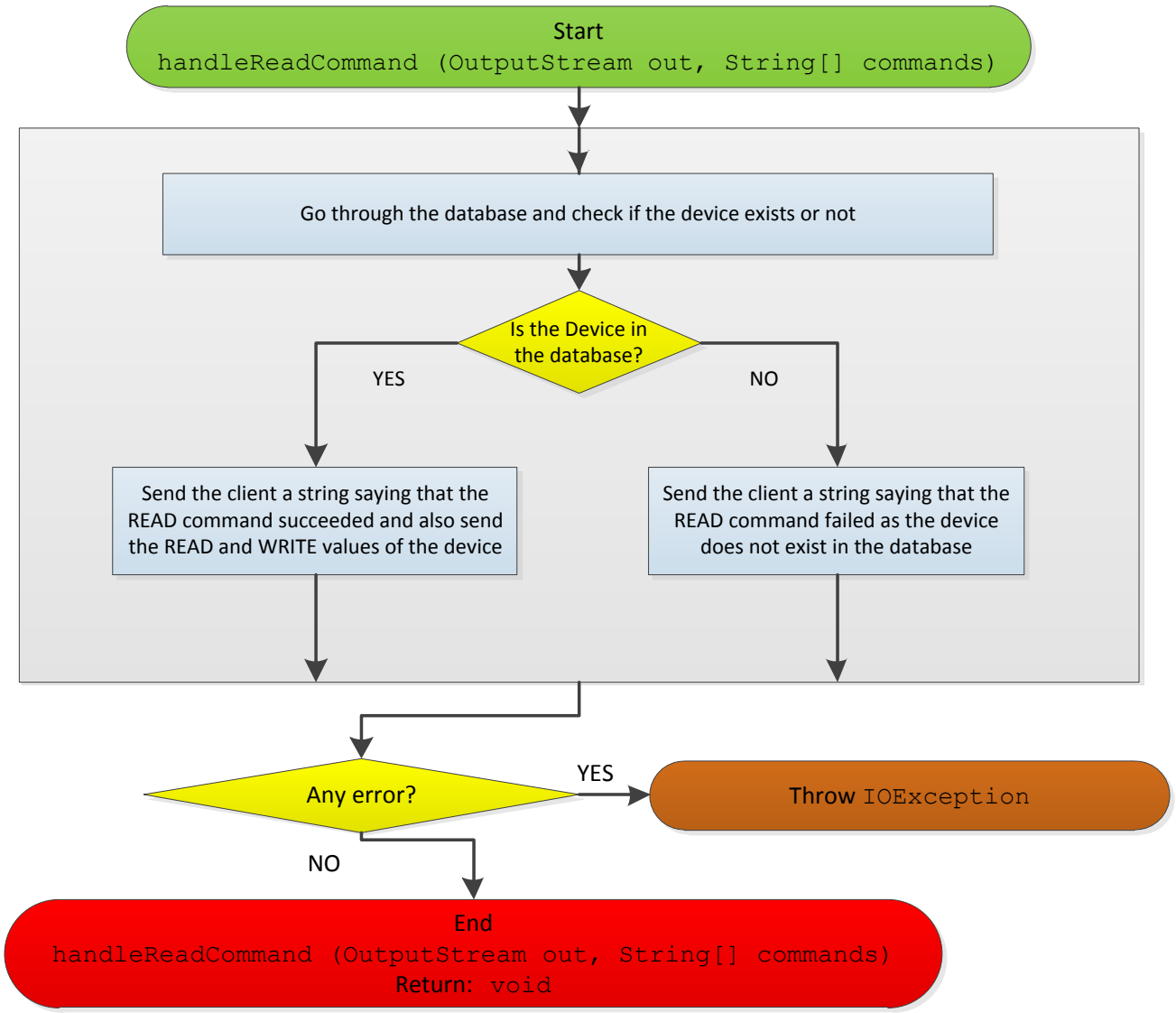
Method: private static void handleAddCommand (OutputStream out, String[] commands)



Method: private static void handleRemoveCommand (OutputStream out, String[] commands)



Method: private static void handleReadCommand (OutputStream out, String[] commands)



Method: private static void handleWriteCommand (OutputStream out, String[] commands)