ABSTRACT

A service processing method, device, and system are disclosed in this application. The method includes: receiving RF signals including device identifiers and sent by terminal device(s); selecting an RF signal from the received RF signals, a terminal device corresponding to a device identifier included in the RF signal being taken as a target payment device; collecting first biometric feature information of a user using the terminal device; and after obtaining a verification result of verifying the user's identity based on the first biometric feature information, sending a payment request to a server if the verification result is passing the verification, wherein the payment request is configured to request for completing payment based on a payment account corresponding to the target payment device. A payment device is selected through the RF signal sent by the terminal device, identity authentication is performed on the user by using the collected biometric feature information, and payment is completed when the authentication is passed, thereby ensuring both security of payment operations and convenience in processing the payment operations, simplifying processes of the payment operations, and effectively improving the user experience in electronic payment.