

Fig.1: Signin

* Exception: Instead of CMD\_SIGNIN, server may respond:

1. SIG\_EXCEPTION: Incorrect username and password
2. SIG\_ALI: This user has already signed in.



Fig.2: Signup

* Exception: Instead of CMD\_SIGNUP, server may respond:

1. SIG\_EXCEPTION: This username has already existed.



Fig.3: History



Fig.4: Signout



Fig.5: Join auction

* Exception: Instead of CMD\_JOIN, server may respond:

1. CMD\_REJECT: The auction phase hasn't started yet. Unable to join.



Fig.6: Bidding

* Exception: Instead of CMD\_BID, server may respond:

1. SIG\_NEM: User doesn't have enough money for that bid.
2. SIG\_LOWBID: User bid lower than expected amount.



Fig.7: Deposit

* Exception: Instead of SIG\_SUCCESS, server may respond:

1. SIG\_FAIL: Incorrect serial.