

## 5. ALLEGATO 1. Specifiche delle operazioni

Di seguito le specifiche sui messaggi scambiati tra il client e il server per ogni operazione. Il formato dei messaggi in JSON indicato è obbligatorio (tutti gli elementi indicati devono essere presenti e con la chiave specificata), ma possono essere aggiunti elementi opzionali se necessario.

Operazione	Formato dati	
	Richiesta	Risposta
register	<pre>{   "operation": "register",   "values":   {     "username": STRING,     "password": STRING   } }</pre>	<pre>{   "response": NUMBER,   "errorMessage": STRING }</pre> <p>Fixed codes for response: 100 - OK 101 - invalid password 102 - username not available 103 - other error cases</p>
updateCredentials	<pre>{   "operation": "updateCredentials",   "values":   {     "username": STRING,     "old_password": STRING,     "new_password": STRING   } }</pre>	<pre>{   "response": NUMBER,   "errorMessage": STRING }</pre> <p>Fixed codes for response:</p>

	<pre>         "new_password": STRING       }     } </pre>	100 - OK 101 - invalid new password 102 - username/old_password mismatch or non existent username 103 - new password equal to old one 104 - user currently logged in 105 - other error cases
login	<pre> {   "operation": "login",   "values": {     "username": STRING,     "password": STRING   } } </pre>	<pre> {   "response": NUMBER,   "errorMessage": STRING } </pre> Fixed codes for response: 100 - OK 101 - username/password mismatch or non existent username 102 - user already logged in 103 - other error cases
logout	<pre> {   "operation": "logout",   "values": {   } } </pre>	<pre> {   "response": NUMBER,   "errorMessage": STRING } </pre> Fixed codes for response: 100 - OK 101 - <del>username/connection mismatch or non existent username or</del> user not logged in or other error cases
insertLimitOrder	<pre> {   "operation": "insertLimitOrder",   "values": {     "type": STRING(ask/bid),     "size": NUMBER,     "price": NUMBER   } } </pre>	<pre> {   "orderId": NUMBER(or -1 to represent an error) } </pre>

insertMarketOrder	<pre>{   "operation": "insertMarketOrder",   "values": {     "type": STRING(ask/bid),     "size": NUMBER   } }</pre>	<pre>{   "orderId": NUMBER(or -1 to represent an error) }</pre>
insertStopOrder	<pre>{   "operation": "insertStopOrder",   "values": {     "type": STRING(ask/bid),     "size": NUMBER,     "price": NUMBER   } }</pre>	<pre>{   "orderId": NUMBER(or -1 to represent an error) }</pre>
cancelOrder	<pre>{   "operation": "cancelOrder",   "values": {     "orderId": NUMBER   } }</pre>	<pre>{   "response": NUMBER,   "errorMessage": STRING }</pre> <p>Fixed codes for response:  100 - OK  101 - order does not exist  or  belongs to different  user or has already  been finalized or  other  error cases</p>
getPriceHistory	<pre>{   "operation": "getPriceHistory",   "values": {     "month": STRING(MMYYYY)   } }</pre>	To be defined by the student
Invio notifica trade(s) evaso(/i)	<pre>{   "notification": "closedTrades",   "trades": [     {       "orderId": NUMBER,       "type": STRING(ask/bid),       "orderType": STRING(limit, market, stop)       "size": NUMBER,       "price": NUMBER, </pre>	Nessuna risposta

	<pre>        "timestamp":         NUMBER(epoch time         format)     }, ... ] }</pre>	
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