Login

```
Server                                                                        Client
  |                                                                              |
  | JSON: {"Command":"Welcome to MyShelfie game! (type 'help' for available commands)"} |
  |   {"Command":"Welcome to MyShelfie game! (type 'help' for available commands)"} |
  |----------------------------------------------------------------------------->|
  |                                                                              |
  |            JSON: {"Command":"Type your command here: "}                      |
  |----------------------------------------------------------------------------->|
  |                                                                              |
  |            JSON: {"Command":"login","Params":["dani"]}                       |
  |<-----------------------------------------------------------------------------|
  |                                                                              |
  |            on ok: JSON: {"Command":"You are logged in!"}                     |
  |----------------------------------------------------------------------------->|
  |                                                                              |
  | on error (invalid name): JSON:{"Command":"Nickname already used!"}           |
  |                  {"Command":"What about these nicknames:"}                   |
  |                  List of JSON with similar nickname                          |
  |----------------------------------------------------------------------------->|
  |                                                                              |
```

SetPlayers

```
Client                                                                        Server
  |                                                                              |
  |            JSON: {"Command":"setplayers","Params":["2"]}                     |
  |----------------------------------------------------------------------------->|
  |                                                                              |
  | on ok:                                                                       |
  | JSON: {"Board":[{"color":"WHITE","x":-3,"y":-1}, ... ,{"color":"CYAN","x":-2,"y":-1},"Command":"Board"} |
  | JSON: {"Command":"CommonGoals","CommonGoals":[{"Score":8,"Number":11},{"Score":8,"Number":4}]} |
  | JSON: {"Score":0,"Command":"HiddenScore"}                                    |
  | JSON: {"Command":"PersonalGoal","PersonalGoal":[{"color":"YELLOW","x":0,"y":3}, ... ,]} |
  | JSON: {"Bookshelves":[{"Bookshelf":[{"color":"NOCOLOR","x":0,"y":0}, ... , ],"Nickname":"dani"}, |
  |        {"Bookshelf":[{"color":"NOCOLOR","x":0,"y":0}, ... ,],"Nickname":"marco"}],"Command":"BookshelfAll"} |
  | JSON: {"Command":"Players","Players":[{"Nickname":"dani"},{"Nickname":"marco"}]} |
  | JSON: {"Command":"Number of players in this game: 2"}                        |
  | JSON: {"Command":"CurrentPlayer","Nickname":"marco"}                         |
  |<-----------------------------------------------------------------------------|
  |                                                                              |
```
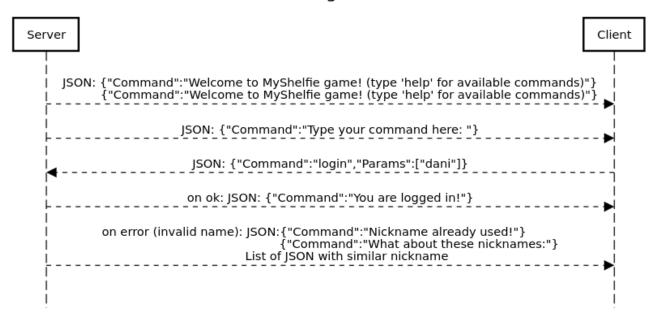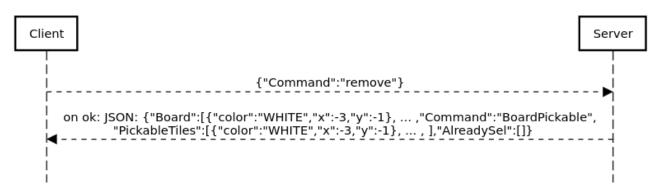
Select

```
Server                                                                        Client
  |                                                                              |
  |            JSON: {"Command":"Type your command here: "}                      |
  |----------------------------------------------------------------------------->|
  |                                                                              |
  |            JSON: {"Command":"select","Params":["int","int"]}                 |
  |<-----------------------------------------------------------------------------|
  |                                                                              |
  | on ok:                                                                       |
  | JSON: {"Board":[{"color":"WHITE","x":-3,"y":-1}, ... , {} ,"Command":"BoardPickable", |
  |        "PickableTiles":[{"color":"WHITE","x":-3,"y":0}, ... ,],"AlreadySel":[{"x":-3,"y":-1}]} |
  | JSON: {"Command":"Type your command here: "}                                 |
  |----------------------------------------------------------------------------->|
  |                                                                              |
  |       on error: JSON: {"Command":"This tile can't be selected!"}             |
  |----------------------------------------------------------------------------->|
  |                                                                              |
```

Remove

```
Client                                                                    Server
  │                                                                          │
  │                      {"Command":"remove"}                                │
  │ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ▶│
  │                                                                          │
  │   on ok: JSON: {"Board":[{"color":"WHITE","x":-3,"y":-1}, ... ,"Command":"BoardPickable",   │
  │         "PickableTiles":[{"color":"WHITE","x":-3,"y":-1}, ... , ],"AlreadySel":[]}           │
  │ ◀ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ │
  │                                                                          │
```
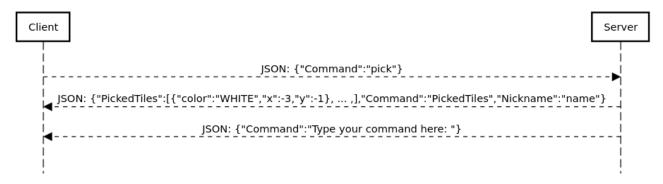
Pick

```
Client                                                                    Server
  │                                                                          │
  │                    JSON: {"Command":"pick"}                              │
  │ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ▶│
  │  JSON: {"PickedTiles":[{"color":"WHITE","x":-3,"y":-1}, ... ,],"Command":"PickedTiles","Nickname":"name"}  │
  │ ◀ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ │
  │                JSON: {"Command":"Type your command here: "}              │
  │ ◀ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ │
  │                                                                          │
```

Order

```
Client                                                                    Server
  │                                                                          │
  │              JSON: {"Command":"order","Params":["int","int"]}            │
  │ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ▶│
  │                   JSON:{"Command": ok}                                   │
  │ ◀ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ │
  │                                                                          │
  │  on error:                                                               │
  │  JSON: {"Command":"The order specified is not compatible with the number of tiles picked!"}  │
  │  JSON: {"Command":"Type your command here: "}                            │
  │ ◀ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ │
  │                                                                          │
```

Insert

Client   Server

JSON: {"Command":"insert","Params":[]}

on ok:
JSON: {"Score":0,"Command":"HiddenScore"}
JSON: {"Bookshelves":[{"Bookshelf":[{"color":"NOCOLOR","x":0,"y":0},{"color":"YELLOW","x":2,"y":0}],"Nickname":"name_1"},
       {"Bookshelf":[{"color":"NOCOLOR","x":0,"y":0}],"Nickname":"name_2"}],"Command":"BookshelfAll"}
JSON: {"Command":"CommonGoals","CommonGoals":[{"Score":8,"Number":12},{"Score":8,"Number":4}]}
JSON: {"Score":0,"Command":"HiddenScore"}
JSON: {"Command":"PersonalGoal","PersonalGoal":[{"color":"YELLOW","x":0,"y":0},{"color":"BLUE","x":1,"y":2},
       {"color":"CYAN","x":1,"y":4},{"color":"WHITE","x":2,"y":2},{"color":"GREEN","x":3,"y":0},{"color":"VIOLET","x":4,"y":1}]}
JSON: {"Board":[{"color":"NOCOLOR","x":-3,"y":-1},...,{"color":"WHITE","x":0,"y":-2},{"color":"VIOLET","x":-2,"y":-1}],"Command":"Board"}
JSON: {"Command":"Players","Players":[{"Nickname":"name_1"},{"Nickname":"name_2"}]}

on error: JSON: {"Command":"The index of the column is too low"}

on error: JSON: {"Command":"The index of the column is too high"}

on error: JSON: {"Command":"column is full"}

Chat

Client   Server

JSON : {"Command":"chat", "Param" : ["receiver","message"]}

on Ok: JSON: {"Command":"chat","Authors":"nickname","Receivers":"nickname","Messages":"argument"}
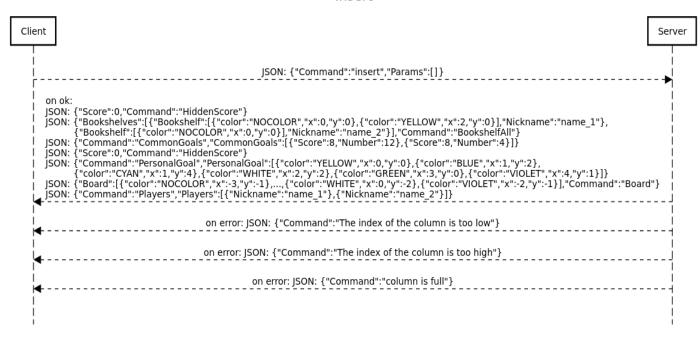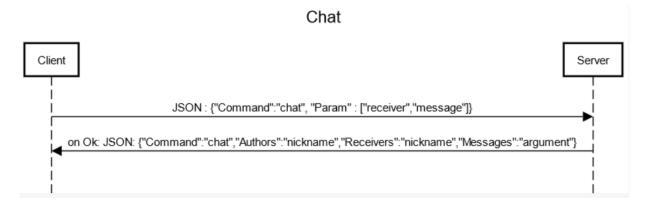
All the phases of the game can trigger these types of error:

Error

Client   Server

sending non existing command

JSON:{"Command":"msg"}

error: JSON: {"Command":"Unknown command"}

sending incomplete command

JSON:{"Command":"select"}

error: JSON:{"Command":"Incomplete command"}