

LOGIN

CLIENT -> SERVER

- POST

```
{
  "command_code": "LOGIN",
  "info": {
    "username": "duongdz",
    "password": "abcdef"
  }
}
```

SERVER -> CLIENT

- METHOD: GET

```
{
  "command_code": "LOGIN",
  "info": {
    "session_id": "AOSJHBGASLGJB",
    "username": "duongdz",
    "elo": 1500/0
  },
  "status_code": "success"/"error"
  "error": ""
}
```

REGISTER

CLIENT -> SERVER

```
{
  "command_code": "REGISTER",
  "info": {
    "username": "abc",
    "password": "xyz",
  }
}
```

SERVER -> CLIENT

```
{
  "command_code": "REGISTER",
  "info": {
    "session_id": "AOSJHBGASLGJB",
    "username": "duongdz",
    "elo": 1500
  },
  "status_code": "success"/"error",
  "error": ""
}
```

MATCH-MAKING

CLIENT -> SERVER

- POST METHOD

```
{
  "command_code": "JOIN_QUEUE",
  "info": {
    "mode": "normal"/"ranked",
    "session_id": "AOSJHBGASLGJB"/"", // NOTE: if session_id length == 0,
    then it's a join request from guest
    // Server must return a new session_id and temporary
    username for guest
  }
}
```

SERVER -> CLIENT

```
{
  "command_code": "JOIN_QUEUE",
  "info": {
    "session_id": "AOSJHBGASLGJB"/"ASLJGLJSBGEF",
    "username": "duongdz"/"anon1234",
  }
  "status_code": "success",
  "error": "",
}
```

```
{
  "command_code": "MATCH_FOUND",
  "info": {
    "match_id": 1234,
```

```

    "opponent": "phuc"/"anon1234",
    "elo": "1969"/"",
  }
}

```

MOVES

CLIENT -> SERVER

- POST METHOD

```

{
  "command_code": "MOVE",
  "info": {
    "match_id": 1234,
    "session_id": "AOSJHBGASLGJB",
    "move_player": "duongdz",
    "move_position": {
      "x": "6",
      "y": "9"
    },
    "state": "valid"/"invalid",
    "result": "win"/"lose"/"draw"/""
  }
}

```

```

{
  "command_code": "DRAW_REQUEST",
  "info": {
    "match_id": 1234,
    "session_id": "AOSJHBGASABCD",
    "move_player": "phuc",
  }
}

```

```

{
  "command_code": "DRAW_CONFIRM",
  "info": {
    "match_id": 1234,
    "session_id": "AOSJHBGASLGJB",
    "move_player": "duongdz",
    "acceptance": true/false
  }
}

```

SERVER -> CLIENT (client hears from server)

- GET

```
{
  "command_code": "MOVE",
  "info": {
    "match_id": 1234,
    "move_player": "duongdz",
    "move_position": {
      "x": "6",
      "y": "9"
    },
    "state": "valid"/"invalid",
    "result": "win"/"lose"/"draw"/""
  },
  "status_code": "success",
  "error": "",
}
```

```
{
  "command_code": "ENDGAME",
  "info": {
    "match_id": 1234,
    "winner":{
      "username": "duongdz",
      "elo": 1510
    },
    "loser":{
      "username": "phuc",
      "elo": 1490
    },
    "draw": true/false
  }
  "status_code": "success"/"error",
  "error": ""
}
```

```
{
  "command_code": "DRAW_REQUEST",
  "info": {
    "match_id": 1234,
    "move_player": "phuc",
  },
  "status_code": "success"/"error",
  "error": ""
}
```

```
{
  "command_code": "DRAW_CONFIRM",
  "info": {
    "match_id": 1234,
    "move_player": "duongdz",
    "acceptance": true/false
  },
  "status_code": "success"/"error",
  "error": ""
}
```

LEADERBOARD

CLIENT -> SERVER

```
...
{
  "command_code": "LEADERBOARD"
  "info": {
    "session_id": "AOSJHBGASLGJB",
    "username": "duongdz"
  },
}
...
```

SERVER -> CLIENT

```
...
{
  "command_code": "LEADERBOARD",
  "info": {
    "username": ["duongdz", "phuc", "einh", "lanhonglee"],
    "elo": [1390, 1490, 1470, 1460],
    "rank": [69, 1, 2, 3]
  },
  "status_code": "success"/"error",
  "error": ""
}
...
```