OOPP state machine

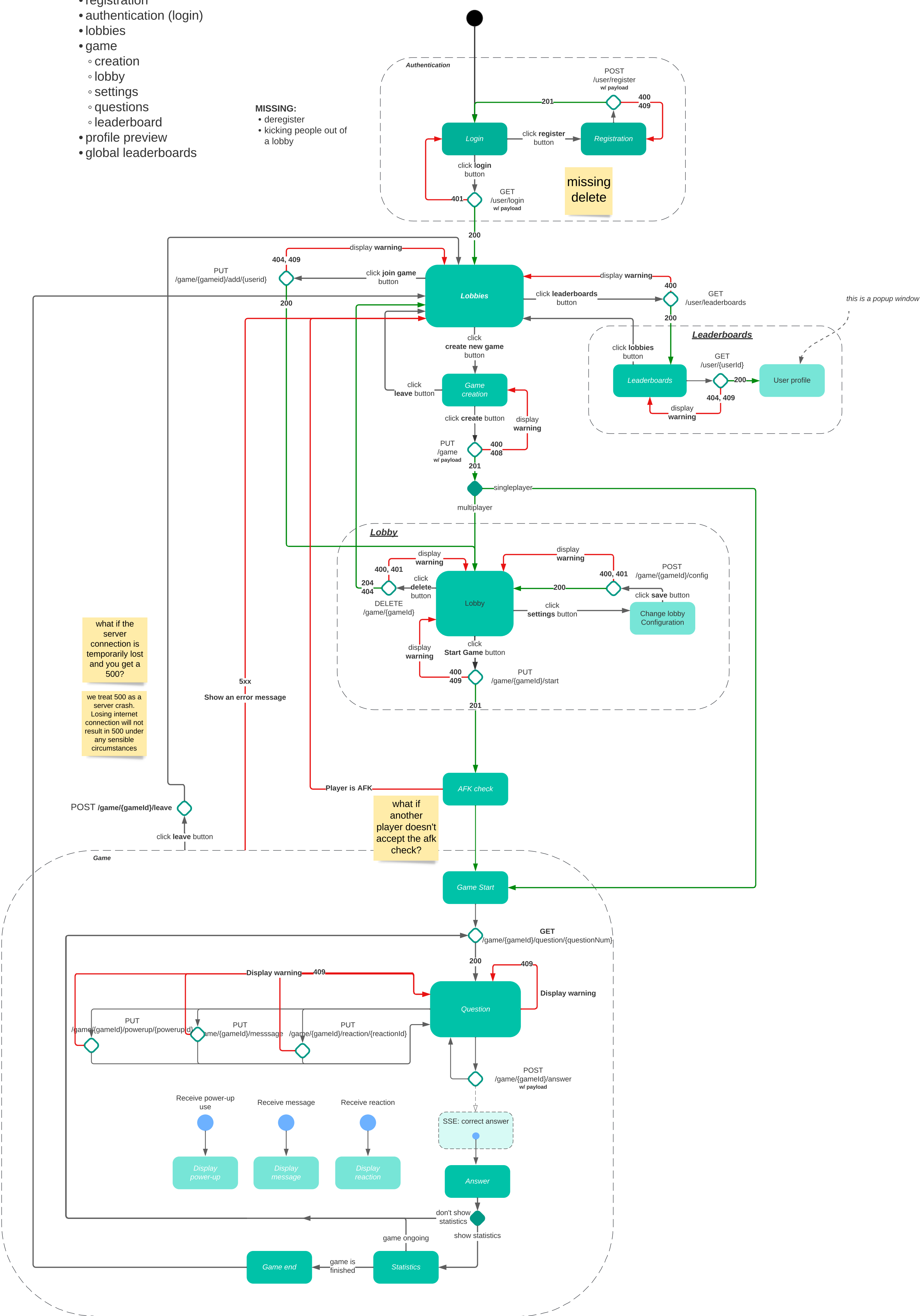Paul Misterka | March 6, 2022

- registration
- authentication (login)
- lobbies
- game
  - creation
  - lobby
  - settings
  - questions
  - leaderboard
- profile preview
- global leaderboards

MISSING:
- deregister
- kicking people out of a lobby

Authentication

POST /user/register w/ payload

Login — click **register** button → *Registration*

201 / 400 409

click **login** button

GET /user/login w/ payload — 401

missing delete

200

Lobbies

PUT /game/{gameid}/add/{userid}

404, 409 — display **warning**

click **join game** button

200

display **warning** — 400

GET /user/leaderboards — 200

this is a popup window

click **create new game** button

click **leaderboards** button

Leaderboards

click **lobbies** button

Leaderboards — GET /user/{userId} — 200 — User profile

404, 409 — display **warning**

click **leave** button

Game creation

click **create** button — display **warning**

PUT /game w/ payload — 400 408

201

singleplayer

multiplayer

Lobby

display **warning** — 400, 401

204 404 — click **delete** button

DELETE /game/{gameId}

display **warning** — 400, 401

POST /game/{gameId}/config

200 — click **save** button

Change lobby Configuration

click **settings** button

display **warning**

click **Start Game** button

400 409

PUT /game/{gameId}/start

201

Error codes:

2xx success
200 OK
201 Created
202 Accepted
203 Non-Authoritative Information (since HTTP/1.1)
204 No Content
205 Reset Content
206 Partial Content (RFC 7233)
207 Multi-Status (WebDAV; RFC 4918)
208 Already Reported (WebDAV; RFC 5842)
226 IM Used (RFC 3229)

4xx client errors
400 Bad Request
401 Unauthorized (RFC 7235)
402 Payment Required
403 Forbidden
404 Not Found
405 Method Not Allowed
406 Not Acceptable
407 Proxy Authentication Required (RFC 7235)
408 Request Timeout
409 Conflict
410 Gone
411 Length Required
412 Precondition Failed (RFC 7232)
413 Payload Too Large (RFC 7231)
414 URI Too Long (RFC 7231)
415 Unsupported Media Type (RFC 7231)
416 Range Not Satisfiable (RFC 7233)
417 Expectation Failed
418 I'm a teapot (RFC 2324, RFC 7168)
421 Misdirected Request (RFC 7540)
422 Unprocessable Entity (WebDAV; RFC 4918)
423 Locked (WebDAV; RFC 4918)
424 Failed Dependency (WebDAV; RFC 4918)
425 Too Early (RFC 8470)
426 Upgrade Required
428 Precondition Required (RFC 6585)
429 Too Many Requests (RFC 6585)
431 Request Header Fields Too Large (RFC 6585)
451 Unavailable For Legal Reasons(RFC 7725)

5xx server errors
500 Internal Server Error
501 Not Implemented
502 Bad Gateway
503 Service Unavailable
504 Gateway Timeout
505 HTTP Version Not Supported
506 Variant Also Negotiates (RFC 2295)
507 Insufficient Storage (WebDAV; RFC 4918)
508 Loop Detected (WebDAV; RFC 5842)
510 Not Extended (RFC 2774)
511 Network Authentication Required (RFC 6585)

what if the server connection is temporarily lost and you get a 500?

we treat 500 as a server crash. Losing internet connection will not result in 500 under any sensible circumstances

5xx — Show an error message

POST /game/{gameId}/leave

click **leave** button

Game

Player is AFK

AFK check

what if another player doesn't accept the afk check?

Game Start

GET /game/{gameId}/question/{questionNum}

200 — 409 — Display warning

Display warning — 409

Question

PUT /game/{gameId}/powerup/{powerupId}

PUT /game/{gameId}/messsage

PUT /game/{gameId}/reaction/{reactionId}

POST /game/{gameId}/answer w/ payload

Receive power-up use — *Display power-up*

Receive message — *Display message*

Receive reaction — *Display reaction*

SSE: correct answer

Answer

don't show statistics

show statistics

game ongoing

Game end — game is finished — *Statistics*