murderer.js

Insights into a social interaction game backed by a node.js webserver

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1 The game

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- groups of ∼15 to ∼200 participants
- a few days up to weeks
- perform individual murder contracts
  - by object handovers
  - in multiple rings in parrallel
  - and/or in a single ring in series
- don't have witnesses
- full rules on https://www.frissdiegurke.com/

https://www.frissdiegurke.com/contracts

murderer.js – Node.js implementation of 'Mörderspiel'

WANTED

ROOT

TEST

PAI42 - Ring #1

Token to hand over your murderer

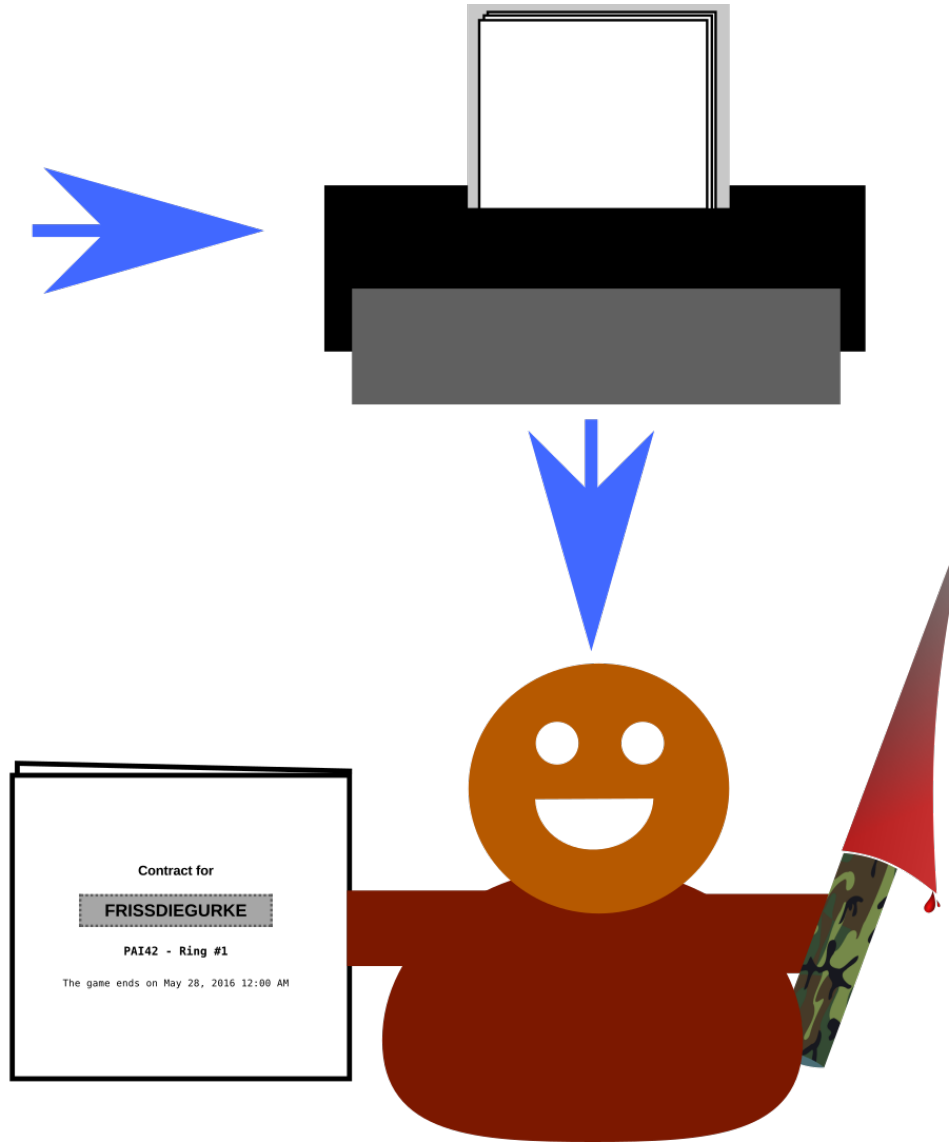
† **C112ED86** †

Contract for

FRISSDIEGURKE

PAI42 - Ring #1

The game ends on May 28, 2016 12:00 AM



- multikill
- one at a time
- active witness
- sanctuaries
  - as declared by authorities
  - rest rooms

Determine the winner:

1. most fulfilled contracts
   - not entered in time $\Rightarrow$ does not count
2. fewest remaining lives
3. most upvotes on cause of death notes
4. tie

There is no such thing as a 2nd winner.

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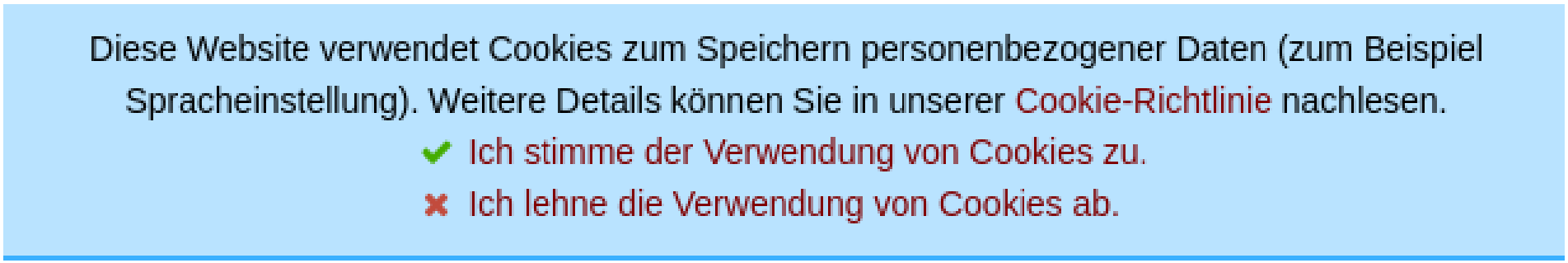
- freely adapted from "Mörderspiel": KIF-Wiki, spielewiki.org
- made for the OPhase 2015

- initial working instance within two weeks
  - created by Asterix and me
- few features, just one game
  - game creation = game start
  - registration = join games created later on

- re-written database structure
  - multiple games support
  - not every user takes place in every game
- re-written layout
- switch from MIT to GPLv3
- research laws and stuff
  - server-side rendered pages
  - imprint
  - privacy policy
    - store IP addresses for comments
  - EU cookie law



Just because I want users to be able to save the selected language.

- applies to local storage and similar technologies too
- delay saving any cookies/localstorage until any option is selected
- dedicated page containing detailed information on cookie usage

The cookie law requires websites to gain consent from visitors to store or receive any information on a computer or any other web connected devices (e.g. smartphone or tablet).[1]

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- source code on GitHub
- node.js - widely used javascript server
  - ECMAScript 5
- grunt (with CoffeeScript)
- mongodb - NoSQL database
- angular.js - MVW client-side framework
- font-awesome - Web oriented icon set
- socket.io - bidirectional connection client $\leftrightarrow$ server
- bunyan - structured logging

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- debian hosted on DigitalOcean (referral)
- murderer.js
- nginx
  - HTTP/2
    - binary, rather than text, protocol [3]
    - a single, multiplexed connection per domain [3]
    - HTTP/2 is used by 7.6% of all the websites [4]
  - TLS provided by letsencrypt
  - reverse proxy, HTTP/1.1
- forever

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- angular.js 2
  - server-side rendering
  - better performance
  - better code structure
- switch programming language
  - typescript
    - transpiles into javascript
    - static typing
  - or plain ES2015 (ES6) / ES2016 / ...
    - ECMAScript is the standard implemented by JavaScript
    - beginning with ES2015, relabeled and annual release cycle
- switch task runner
  - gulp
  - no more CoffeeScript

- create a module "author"
- create a user profile view
- add some nice statistics
- ... smaller details

- fulfill jetbrains' open source license criteria
  - in active development for a minimum of 3 months
  - have an active community
  - regularly updated News on a website
  - updated builds on a regular basis
  - would save €149 (all their products) / €35 (WebStorm) annually

  [2]
- allow anyone to create games on my hosted instance

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https://www.frissdiegurke.com

- game "sIT2016"
- starts 2:30PM today, ends 11PM tomorrow
- 7 rings, 5 lives

Thanks for your attention!
:-)

http://www.computerweekly.com/guides/How-to-comply-with-the-EU-cookie-law

https://www.jetbrains.com/buy/opensource/?product=webstorm

https://www.nginx.com/blog/7-tips-for-faster-http2-performance/

http://w3techs.com/technologies/details/ce-http2/all/all