

CHALLENGE TASK

BETTER

DISTRIBUTED SYSTEMS & BLOCKCHAIN

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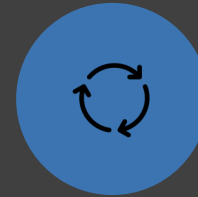
CONTENT



Goal



Software Design



Implementation



Fulfillment of
requirements



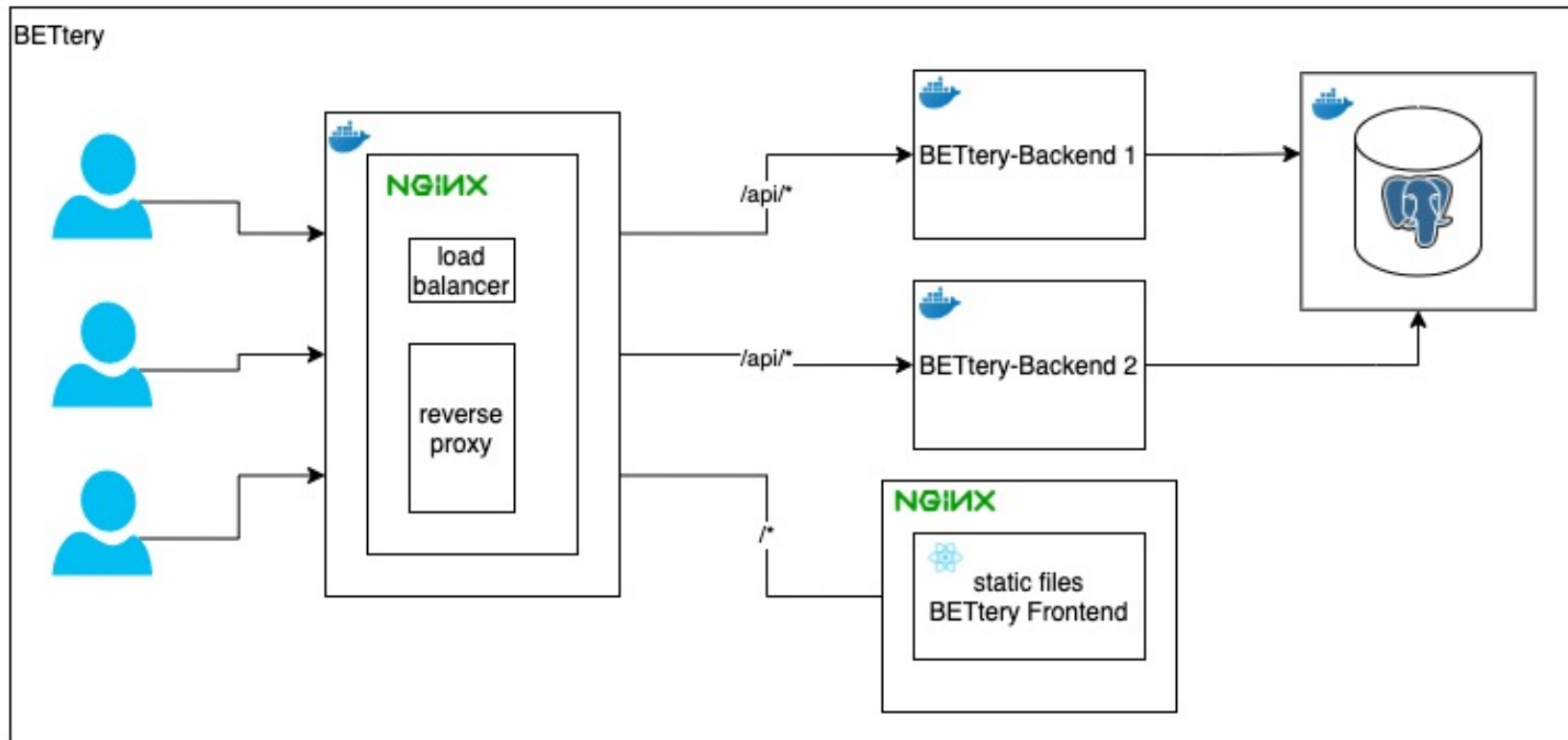
Demo

GOAL

Betting forum for private person to person bets

- User:
 - User is able to create a bet, giving
 - Description
 - Betting amounts
 - Number of times willing to make this bet
 - Win condition
 - Open until, evaluated at date
 - Once a bet is created, the bet is visible to all users
 - A user can view the bet and is able to join it
 - Betted money is put into a BetPot
- Admin:
 - Resolves bets that need evaluation. Picks winner of a bet
 - Resolving a bet causes the "money" to be payed out accordingly

SOFTWARE DESIGN



IMPLEMENTATION

Frontend (HTML/ JS)

- [React](#)
- [Chakra UI](#)
- [Axios](#)
- [Formik](#)
- [React Router](#)

Backend (Java)

- [Spring-Boot](#)
 - [Spring Data JPA](#)
 - [Spring Web](#)
 - [Spring Validation](#)
 - [Spring Security](#)
 - [Spring Actuator](#)
- [Mapstruct](#)
- [Swagger](#)

Persistence

- [Postgres](#)

Source Repositories

- <https://gitlab.com/paknecht1/bettery-frontend>
- <https://gitlab.com/paknecht1/bettery-backend>
- <https://gitlab.com/paknecht1/bettery-application>

FULLFILLMENT OF REQUIREMENTS

1. Load balancing ✓
2. Scalable Service ✓
3. JWT authentication ✓
4. Dockerized ✓
5. Use latest stable releases of chosen libraries and frameworks ✓

DEMO

Name	Max. num. Participants	Better amount	Joiner Amount	Amount that joined	Bet Pot
Football Match	4	20	10	2	$4 * 20 + 2 * 10 = 100$
Acing Studies	10	30	10	2	$10 * 30 + 2 * 10 = 320$

Name	Current Balance	Expected Balance after resolve	Expected Balance after Demo
user	1000	$1000 + 100 + 40 = 1140$	$1140 - 250 - 30 = 860$

1. Resolving Bets with admin
2. Logging in as client
 1. Creating Bet (5 participants * 50 (better amount), 250 transfer to betpot)
 2. Joining Bet (transfer 30 to betpot to join)