NEWS
APPLICATION

GIC - 2022/2023

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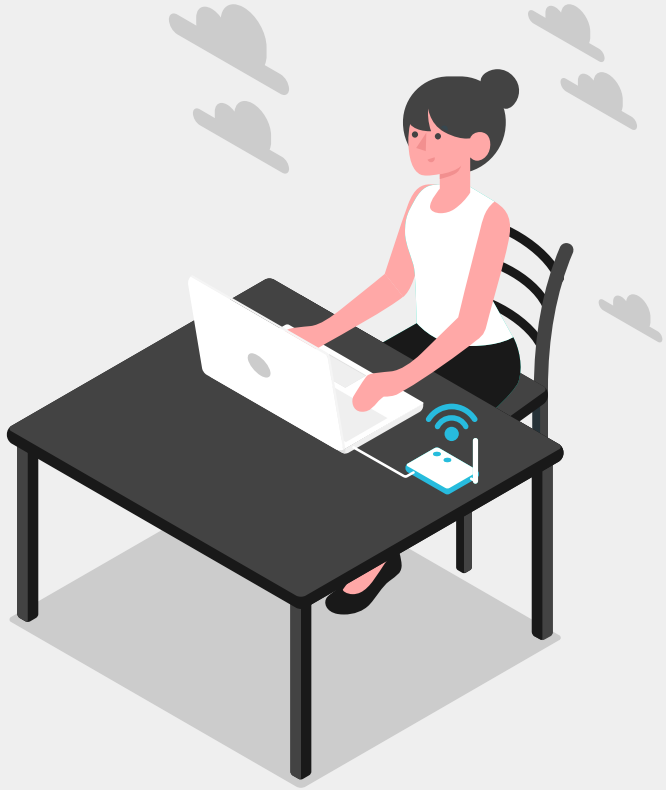
THE IDEA
& CONCEPT

THE IDEA

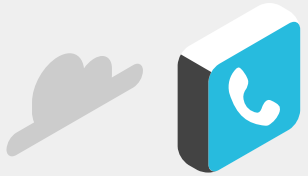
Implementation of a **News web platform** with the following features and functionalities:

- **Storage of news publications/articles**, so that users can **read**, **like** and **comment** on them, which will belong to a topic/section (*e.g.* sports, politics, etc.)
- **Advanced text editor** available for writers to write and submit a publication
- **Administrator user interface** to manage all entities of the platform (publications, publication topics, users, etc.)
- **Display of sections** which present recent publications, the most viewed in a period, etc.

SCENARIOS



USERS



ANONYMOUS

Normal reader not logged in, can read news

READER

Logged in reader able to like and comment news

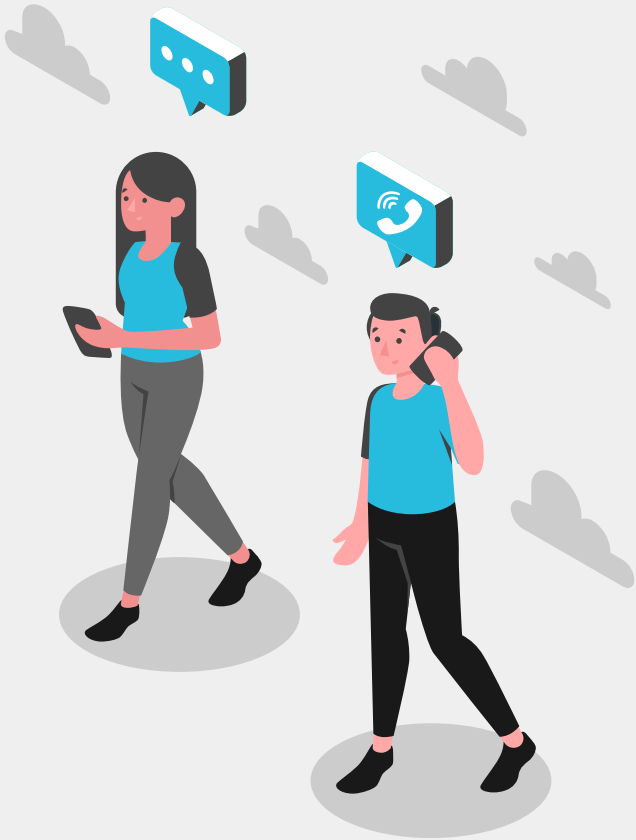
WRITER

Writer who can submit news

ADMIN

Manages news, writers, users, topics and comments

100k expected users per day!



SYSTEM REQUIREMENTS

CPU

8 Cores

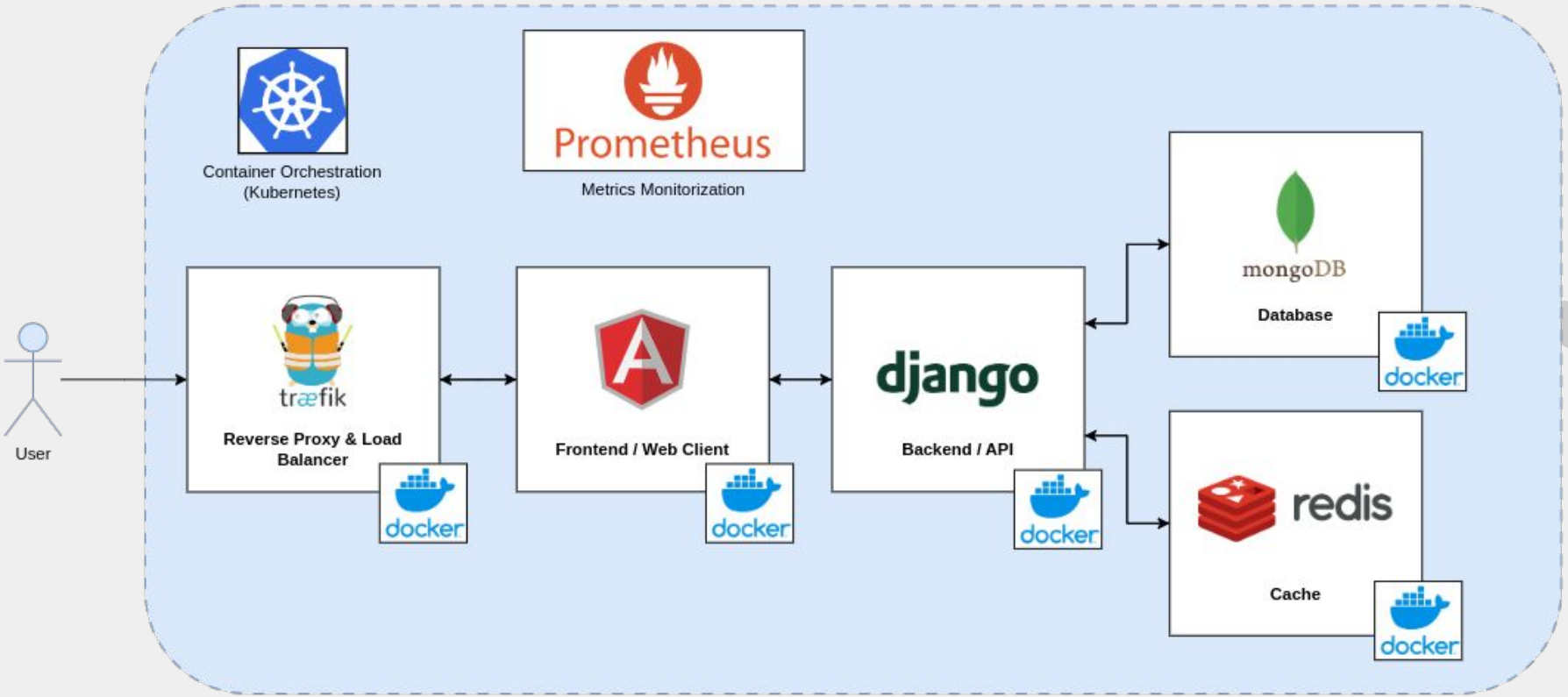
RAM

8 GB

STORAGE

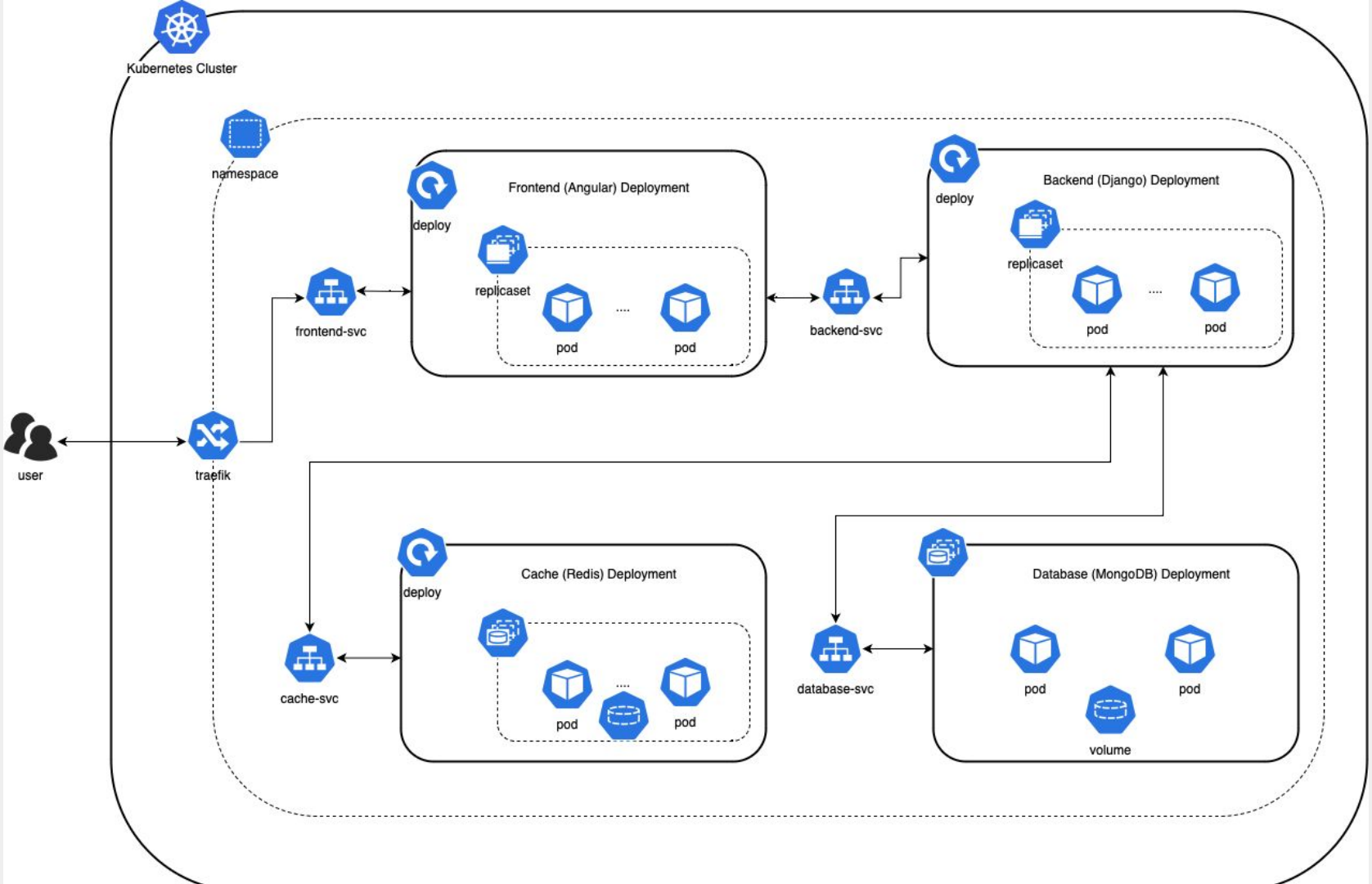
20 GB

SOFTWARE & *TECHNOLOGIES*


Container Orchestration
(Kubernetes)
Prometheus
Metrics Monitorization
User
træfik
Reverse Proxy & Load Balancer
docker
Frontend / Web Client
docker
django
Backend / API
docker
mongoDB
Database
docker
redis
Cache
docker

DEPLOYMENT

STRATEGY


Kubernetes Cluster
namespace
Frontend (Angular) Deployment
deploy
replicaset
pod
pod
frontend-svc
backend-svc
Backend (Django) Deployment
deploy
replicaset
pod
pod
user
traefik
Cache (Redis) Deployment
deploy
pod
pod
cache-svc
database-svc
Database (MongoDB) Deployment
pod
pod
volume

THANKS!