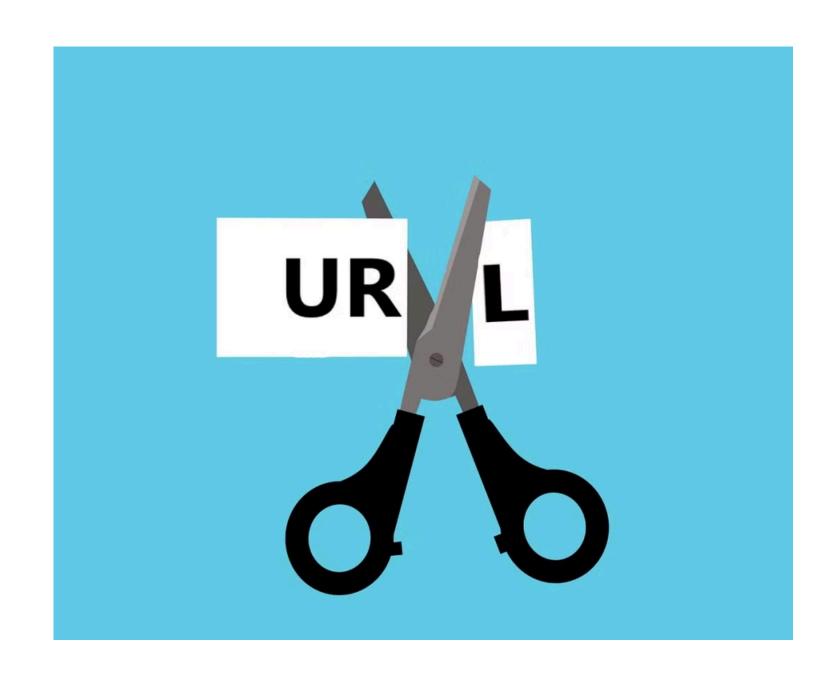
WHAT IS A URLSHORTENER?

A URL Shortener is a service that transforms long web addresses into short, user-friendly links.

For example:

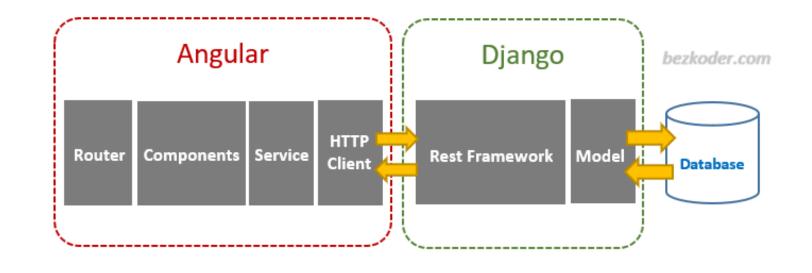
https://www.youtube.com/watch? v=H6P6Cdyt8e0 → http://127.0.0.1:8000/5yEqa8 Shortened links are often used in:

- Social media
- Messaging apps
- Email campaigns
- QR codes



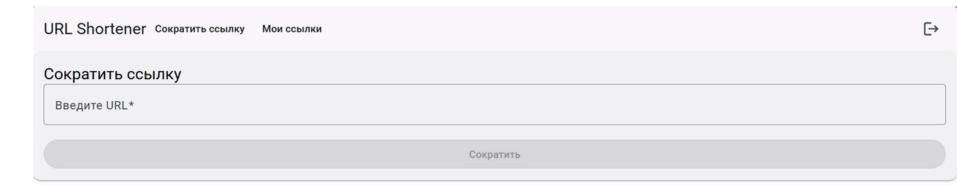
PROJECT ARCHITECTURE

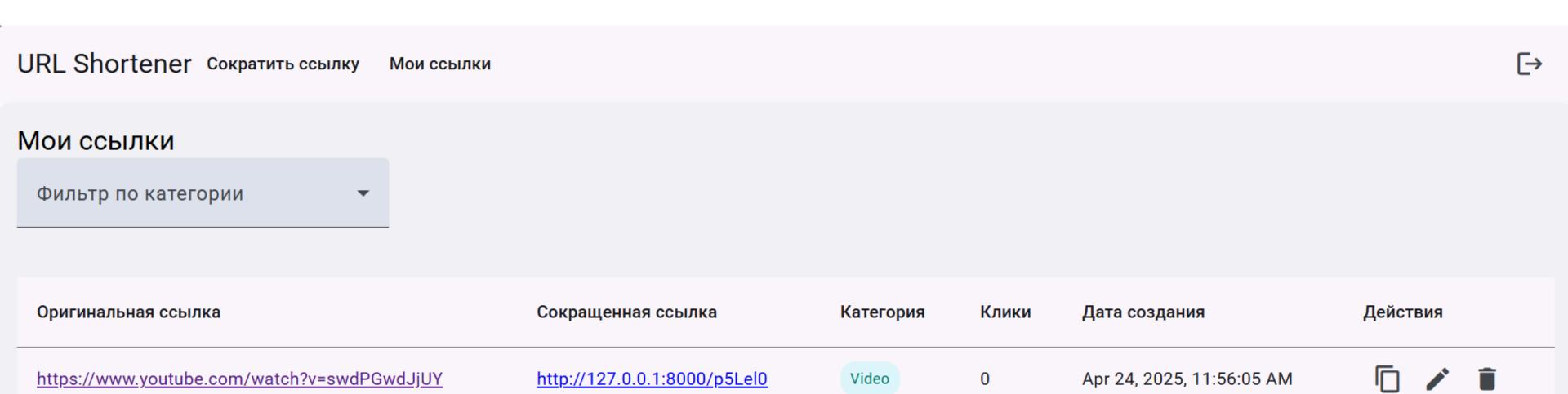
- Frontend: Angular. Handles the user interface, forms, and communication with the API.
- Backend: Django + Django REST Framework.
 Processes requests, stores data, generates short links, and handles redirects.
- Database: Stores users, links, click analytics and categories
- JWT Authentication: Secures private routes and user sessions.



KEY FEATURES AND HOW IT WORKS

- User Registration & Login. Secured using JWT tokens.
- Short Link Creation. Users submit a long URL → a unique short code is generated.
- Redirection via Short URL. Visiting the short URL redirects to the original address.
- Analytics Tracking. Each click stores IP address, browser (User-Agent), and timestamp for stats.





THANKS FOR ATTENTION!