# Developing a URL shortener system with Golang

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#### 1 Introduction

URLs shortener systems are used to create tiny URLs that will redirect to actual URLs. The main reason for their existence is to create shorter addresses that are **easier to remember** and **easier to share** like in tweets or SMSes. Some examples are yun.ir and zaya.io. Please go ahead and test their websites.

## 2 Requirements

- 1. Given a URL, the service should generate short URL.
- 2. When accessing a short URL, the service should redirect to the original address.
- 3. Users should have the option to pick their custom short URL.
- 4. Short URLs should be expired at some time. Users should be able to specify the expiration time.
- 5. Users should be able to check how many times their short URL is used.

#### 3 Notes

1. Please create a GitHub repository and share it with us as soon as you start working on the assignment.

- 2. Try your best to have reasonable commits. Write meaningful commit messages.
- 3. Try your best to write unit tests for important parts of your application.
- 4. Write documentation about your functions as comments.
- 5. Provide a docker-compose file and include everything a user needs to run your application.
- 6. Provide a Dockerfile with two-stage build for your application.
- 7. Write a README.md file and write documentation about your service in it.

After you finished your work, please send us an email with the following information:

- 1. How much time did you spend working on this assignment?
- 2. What did you learn by working on this assignment?

Please be prepared to answer questions about your application. Feel free to ask us any questions you have about this assignment.

Good Luck! Snapp! Team

