

Set up project

For this project our team decided to use tools we are most familiar with to achieve set goals in shortest amount of time and in steady pace. Backend part of the project is based on Golang language to achieve maximum efficiency of query execution. Visual part of the project, web application, is handled using Angular framework of Typescript with additional use of Bootstrap UI for easier and smoother layout development.

Information gathering

Team members:

- Zhumagaliyev Alibek – Frontend Developer.
- Ayaganov Aitbek – Backend Developer.

The idea behind the project is to create a service using which people and businesses could create hyperlinks and track the data traffic going through them. For this project to be considered complete a web-application meeting all requirements for frontend with working backend system should be fully working.

For the project to be successful, it is necessary to fulfill the following goals:

- New system is developed by all requirements of the customer.
- Web-application is clean and easy to interact with causing no trouble in use for customers.
- Potential users should be satisfied with the new system.
- Fulfill the requirements of all deadlines.
- The system must have high performance and meet all non-functional requirements.

Project Charter

Project Name

Web application for installing and analyzing Internet traffic.

Project Sponsor

None

Project Scope

Project Description

Analyzing online traffic that flows in and out of resources and targets is one of the challenges of digital marketing and advertising. A web application should be designed to tackle this problem. There are a few components of the application that must be considered. The application should be split into two parts: frontend and backend. While the frontend should be not only user friendly, but also give users with quick and simple access to the application's primary features, the backend should be constructed to manage a high and constant demand. The web application should give users with a link that will allow them to view statistics on the individuals and devices who have followed the link. To produce such application, is to do everyone, from small business owners to big corporations a favor.

Preliminary Understanding of Business Need

The idea for this project arose from a side project named 'SAKTAN.KZ,' a vehicle insurance web-aggregator, where the team was having trouble displaying genuine numbers of diverted visitors to partner's websites. It was evident currently that there was no tool on the market that was adequate for our endeavor. As a result, developing our own online traffic analyzer was the next natural step. There is a plethora of tools available for tracking and collecting data, but there are a few issues with them. For starters, they are difficult to utilize and are not ubiquitous between platforms. Second, most of them are tied to the system for which they were built. Owner of the products that required such tools left them for their private use only. In order to trace web traffic between target resources, the application should give users with some gates in the form of a universal link, so that it is not tied to a specific system. It should also be capable of handling traffic in high-volume systems, and it should be able to create traffic not only on the web application itself, but also remotely via API calls. The whole process should be fast and simple enough to be mass used.

Project Deliverables and Objectives

Objective	Owner	Measure of Success
Manual	Zhumagaliyev Alibek	The plan outlines the important components of the project that must be completed. The project plan includes details such as the length, collaborators, and resources, among other things.
Backend System	Ayaganov Aitbek	The system should be working and be ready to store all the data that will be collected and managed by the customers.
Web application Timetables	All team members	Complete application that must meet all the requirements made.

Project high level deliverablesIn Scope

- Web application
- Backend System

Out of Scope

- Manual

Work and Project Process Description

Preliminary Description of Work

On the first week of the work project team gathers the information needed and focuses on bringing about a prototype on which the prognostication of future needs and requirements would be done. After that additional analysis will consider new or better ways of creating the project. Additional researches would be made. Then the long process of development.

Project Processes

For communications and easy updated with PM our team uses Discord and Microsoft Teams. It provides all necessary utility. Of course, Github is used to connect back and front ends of the project without collision.

Change Management

Because the project is our idea and we have a small crew, we don't have to perform any reporting other than to PM. Despite this, we are considering locating our target clients as soon as possible so that we may make product adjustments in accordance with their vision. Of course, any requests will be brought for consideration during a team meeting.

- Change Request information sent to project manager.
- Project manager observes the progress made and analyzes the best course of actions for dynamic and flexible development process.
- Project manager works with the team on every step achieving maximum cooperation.

[Development of a web application of the AITU schedule using API and graphic visual support]
Project Charter

Known Risks

Risk	Risk Description	Impact –low, medium, high and note what is impacted (budget, schedule, scope)	Likelihood of Occurrence	Mitigation and Contingency Plan	Owner and Trigger
Lack of knowledge	We currently lack knowledge with a technology that will be used often during the development period.	Medium - scope	Medium	Conduct additional studies on adjacent technologies in advance.	A. Zhumagaliyev Trigger: All team members

Slow response of the potential users	Customers may have doubts about our product's dependability and necessity	Low - schedule	Low	Make advancements in marketing field, conduct social experiments and early test.	A. Zhumagaliyev Trigger: Potential users
--------------------------------------	---	----------------	-----	--	---

Impact and Dependencies and Assumptions

Impact:

- Current state of widely available data traffic analysis.
- Shape of internet traffic-oriented companies' market.
- Team state as solid and experienced development team.

Dependencies:

- Hardware: personal computer, server
- Software: IntelliJ IDEA GoLand, Visual Studio Code, Postman, Discord, Sublime Text, Angular, Microsoft Teams
- Online Platforms: Github, Trello, OneDrive, YouTube
- Focus-group: friends, students, online people.

Assumptions

By May 2022, the project must be completed. It must be tested and polished in order for the entire system to be automated and operate without human involvement. By the 1st of January, we must have found similar solutions and conducted study on them in order to assess any dangers and difficulties. The web application and API should be finished by March 1st. The next month should be devoted to marketing the product, attracting first customers, and gathering input on how it may be improved and developed further.

Initial Project Team

Role	Resource	Responsibility
Project Sponsor	None	Provide direction for project
Stakeholder Committee	Tursynkulova Akbota Maksutovna	Provide feedback from their unit
Project Manager	Aitbek Ayaganov	Lead team in completion of project tasks
Application Support	Alibek Zhumagaliyev	Upgrade the application and infrastructure
Frontend work	Alibek Zhumagaliyev	Development of the visual part of the Project.
Reporting	Alibek Zhumagaliyev	Transition of reporting
Deployment	Aitbek Ayaganov	Coordinating the rollout of the upgrade
Testing	Aitbek Ayaganov	Testing the functionality of the application
Functional Admin Testing	Aitbek Ayaganov	Initial testing of application and learning the upgrade process

Preliminary Cost Benefit Analysis

Because this is a personal endeavor, there are no sponsors. The costs aren't excessive. Team in small and maintenance cost is partially nonexistent; in fact, throughout the development stage, they may be kept to a bare minimum. In addition, the finished product may be monetized using a subscription business model,

which will pay all of the production costs.

Agreement

Role	Name	Approve or Review	Review Date
Project Sponsor	None	-	-
Project Manager	Tursynkulova Akbota	Approve	2022/01/15

Revision History

Date	Version	Description	Author
15 January 2022	beta	Initial Creation	Zhumagaliyev Alibek , Ayaganov Aitbek