

Project Management

Assignment II – Project Initiation

Web application for analyzing and tracking web traffic.

Set up project

To achieve project goals, the following tools will be used in developing the web application:

- 1) Angular framework for the frontend application.
- 2) Golang programming language and Gin framework.
- 3) GitHub for version control and developing purposes.
- 4) MySQL and Redis as database management systems.
- 5) Swagger and Draw.io for technical documentation and schemas.
- 6) VPS on Ubuntu 18.04 with Nginx web server.
- 7) Discord for communication purposes.

Information Gathering

Team members:

- 1) Ayaganov Aitbek – Backend Developer
- 2) Zhumagaliyev Alibek – Frontend Developer

The aim of the project is development of an application that will fulfill the market needs and provide people with the tools which will help them in web-traffic analysis, advertising strategies and more.

There are few requirements for the project to be successful:

- To work with big web traffic backend should be capable to handle enormous overload.
- Frontend application should be user-friendly, it's interface should be comfortable for any type of users.
- System should have appropriate business model to have resources to self-sustain.

Project Name

Web application for analyzing and tracking web traffic.

Project Sponsor

Nobody.

Project Scope

Project Description

One of the problems of digital marketing and advertising is analyzing web traffic that comes in and from the resources and targets. To solve this, web application should be created. There are few aspects that's need to be taken into consideration about the application. The application should be divided into frontend and backend parts. While the frontend part should be not only user friendly, but also provide users with very easy and comfortable access to the main functions of the application, backend part should be designed in the way it could handle high and consistent workload. Web application should provide users with the link, and with this link they will be able to see the statistics about the web traffic passing through this link. Users will also be provided with variety of tools which can be used to do analysis and visualization on the gathered data. To integrate with other systems, we want to provide an API, so that our users could create links dynamically and access to their data from any other system.

Preliminary Understanding of Business Need

Idea for this project came from another side project called 'SAKTAN.KZ', car insurance web-aggregator, when team faced the problem of presenting real numbers of redirected visitors to partner's websites. At this point it became clear that there was no tool suitable enough for this project on the market. There are a vast number of tools that can be used to track and collect information, but there are few problems related to them. Firstly, they are not easy to use and not universal for different systems. Secondly, most of them are bind to the system they are created for. So, creation of a web-traffic analyzer of our own was the next logical step.

Project Deliverables and Objectives

Objective	Owner	Measure of Success
Manual	Zhumagaliyev Alibek	Guides for both web application and API to help our users in deep understanding of the tool usage
Backend	Ayaganov Aitbek	The backend application that will be capable of handling big amount of web traffic

Public API	Ayaganov Aitbek	System that will provide users with same functionality through the API
Frontend Web Application	Zhumagaliyev Alibek	A application that will be responsible for delivering data between backend and users.

Project high level deliverables

In Scope

- Public API
- Frontend Web Application
- Backend

Out of Scope

- Manual

Work and Project Process Description

Preliminary Description of Work

First week should be spent on understanding what data models should be created. We need to deeply understand and design all data flow and user behavior scenarios on the system. We also will be searching for potential future users to get their thoughts on the project and its impact.

Next, the implementation phase kicks in. After an analysis, the creation of the system should start. We predict the finishing the MVP in the first two weeks. After that, we need more time to perform tests and polish the web-application, so that it will be ready to be deployed.

Change Management

Currently, we do not observe any reasons to change anything in the prepared development plan. We set up the MVP goal, and we want to achieve it as soon as possible. Any changes and suggestions that will be delivered by future users will be discussed in team and released with new patches.

Known Risks

Risk	Description	Impact	Likelihood of Occurrence	Mitigation and contingency Plan	Owner and Trigger
Lack of knowledge	Currently, we lack experience in a technology that we will be actively using during the development phase.	Low - scope	Low	Study of official documentation of tools that are in use	A. Ayaganov Trigger: All team members
Slow response from users	Customers might doubt our product's reliability and need.	Low - budget	Low	Provide users with different media content about a product to increase involvement	A. Ayaganov Trigger: All team members
Lack of time	We are team of 2, and it is very hard to maintain such a big project in such a small team.	High - schedule	High	Work on time management.	A. Ayaganov Trigger: All team members

Impact and Dependencies

Impact

- Advertising strategies
- New data gathering and analysis tools
- Relationship between marketing managers and content suppliers

Dependencies

- Hardware: Personal computers, Servers
- Software: Visual Studio Code, Discord and programming languages.
- Hosting: VPS Provider
- DBMS: MySQL and Redis

Assumptions

1. Prepare initial platform for customers by 1st February
2. Conduct survey considering availability of product by 15th February
3. Finish the project and publish online documentation about the usage of product and API by 1st March

Initial Project Team

Project Sponsor	None	Provide direction for project
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 is 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	Aitbek Ayaganov	Approve	2022/01/15

Revision History

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