SYSTEM MANUAL

For Analytics Software

_____

Nicolas Argyrou

Alexandros Argyrou

Andreas Papaconstantinou

Nicolas Papaconstantinou

1

1

Introduction

_____

This software will give functionality on WordPress websites and provide detailed website analysis. Users will be able to examine the areas their visitors are giving more attention or ignoring.

Description

Users will be able to view their site statistics at a glance: browsers, operating systems, visitors, etc.

This lightweight plugin is carefully integrated in WordPress, which makes it fast, secure and reliable.

They can claim back their privacy: no third-party services, all statistics are private on their hosting and are accessible only by them.

Charting is provided by Google Chart library, which does not collect any information.

Statistics features:

- Page views
- Devices
- Traffic sources
- Browsers
- Operating systems
- Geographical location
- Search terms
- Viewed posts
- Referrers

Technical Requirements

_____

Since the software will be a plugin for WordPress, it will be developed with PHP and store data into the users' WordPress database using Mysql. Users should already have a database to run their WordPress website. This plugin will add data to that existing database that is connected with WordPress. System will use Google chart library to visualize the data to the user's dashboard and will be implemented with some JavaScript. Users will login into their WordPress Dashboard and view the analytics. The software shall be available 100% of the time to the users for any 24-hour period as soon as the hosting provider is up and running.

Financial Feasibility Analysis

Users will download the software from our website as soon as they pay. Users that buy the software are provided with one-year software updates.

Income:

It will be an annual cost of €38.50 and the software will only be available for purchase from our website.

Expenses:

- An approximation of €250 will be invested for advertising
- An approximation of €650 will be spent for the development of the software. (Time, energy, goods, money spent during the software development)
- €10 per hour for maintaining and bug fixing the software

	Project Development	Project Maintenance	Project Marketing
Income	€38.50 per year	-	-
Expenses	€650 fixed price	€10 per hour	€250 fixed price

Functional Requirements

_____

Our Functional requirements drive the software _architecture_. A system in order to be functional need to function as intended meaning it must do what the designer programed the system to do. In order to show that, a document displaying the functional requirements of the system has to be created.

The following functional requirements show the specific behavior on what the plugin should do.

The system must be able to do the following tasks:

- Analyze and display to the owner's website what are the most and less popular Links
- Analyze and display how many visitors and pageviews per month, week and day a website is getting.
- Analyze and display a map with the countries of the visitors
- Analyze and display how many visitors visit the website using a mobile device, tablet and desktop
- Analyze and display an analysis of the browsers and operating systems the visitors are using.
- Analyze and display a percentage of the traffic source of the visitors. (Search engine, links, Direct)

Comments:

#1: A link can be a page with a product, a blog page, a content, or whatever page.

Non-functional requirements:

_____

Our non-functional requirements drive the *technical architecture* of the software.

- **Performance**

  This lightweight plugin should not use any images or unnecessary services; Thus it will not slow down website speeds. It will be accessible through WordPress dashboard and will be fully responsive for all kind of devices.

- **Scalability**

This open source plugin will be installed by the users on their website, so it is not a problem how many users will use it as it will run on their backend.

- **Capacity**

Program should not exceed 5mb in size.

It will be installed on the web servers of the users using WordPress.

It will run on Web servers that support PHP 5 and above.

It will of course require internet to work as it runs on the browser.

- **Availability**

First of all users have to buy the software. Then, users will be able to use it as soon as their host is up and running their Wordpress Website. During website downtime, the plugin will not be accessible by the users.

- **Reliability**

The software will be updated very frequently, in order to be compatible with the latest wordpress and theme versions.

- **Maintainability**

    WP-Update-server library will be used to allow users (with license) to be notified that an update is available for download. Then they will download the files directly from our web-server.

- **Security**

    no third party services, all statistics are private on the users' hosting and are accessible only by them. So users have to worry about the security of their WordPress website in general.

- **Data Integrity**

Plugin data will be accurately stored in our users' database they use for their Wordpress website. They can export plugin data as pdf, xsl, word or anything through their database.

- **Usability**

    First of all, we will provide to the users useful documentation of the plugin with all the essential steps to use the plugin. It will be very easy to install, and will be very straightforward to use with no need of coding knowledge.

Architectural Model

_____

The following diagram is our **architectural Diagram**. The terms **front end** and **back end** refers to the separation of concerns between the presentation layer, and the data access layer of a piece of software, or the physical infrastructure or hardware Our software will store data in the database with Mysql. The browser will send http requests to the server and the server will respond back. PHP is the scripting language we are going to use for the development of the software. Front end will consist of JavaScript to visualize the data to the users using Google chart library.


WordPress Plugin Architecture Diagram
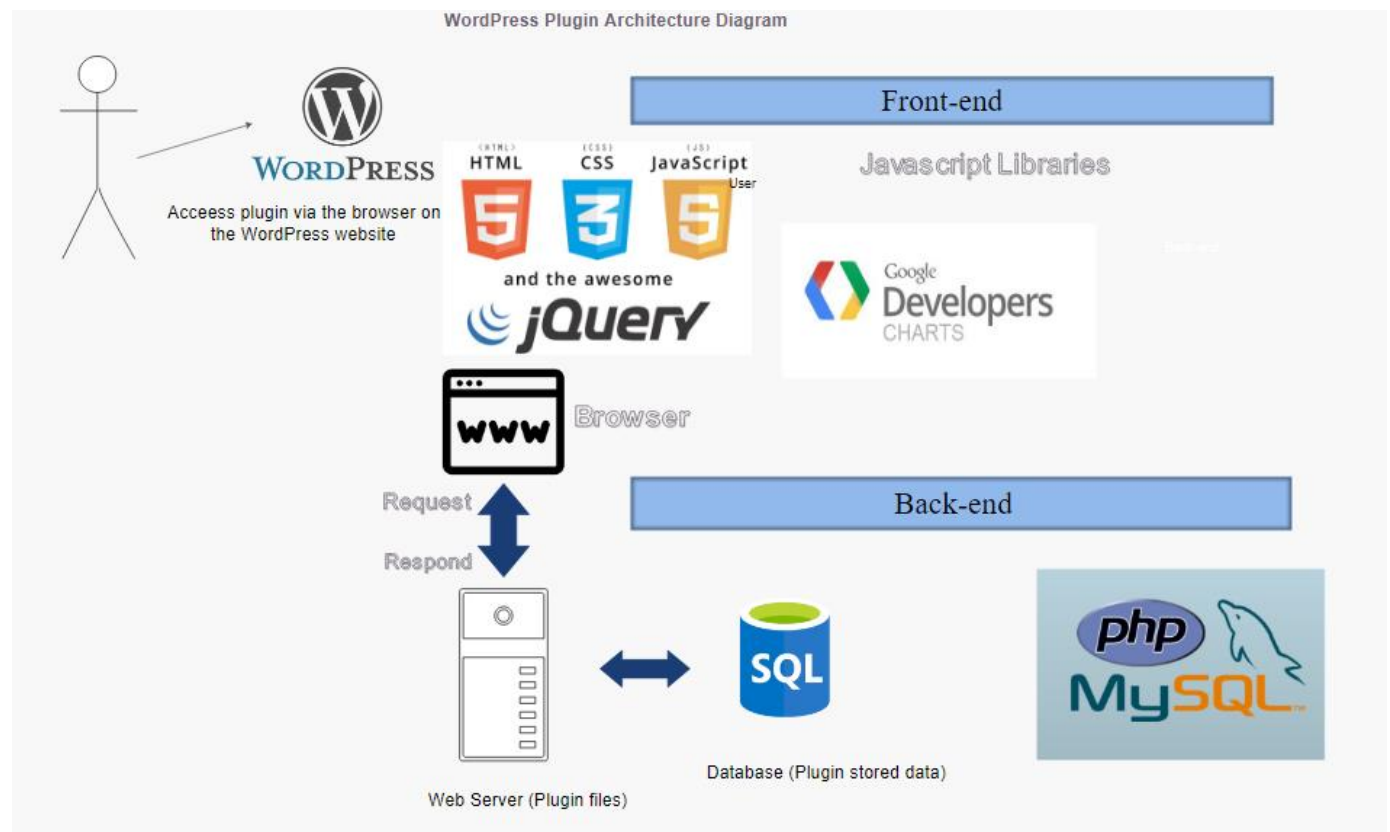
Used Case Model

_____

Our **Use case** is the list of actions or event steps typically defining the interactions between a role and a system to achieve a goal. The user will login into the WordPress website. If the user is an administrator he will be able to access the plugin via the WordPress dashboard and view analytics and customize plugin settings.
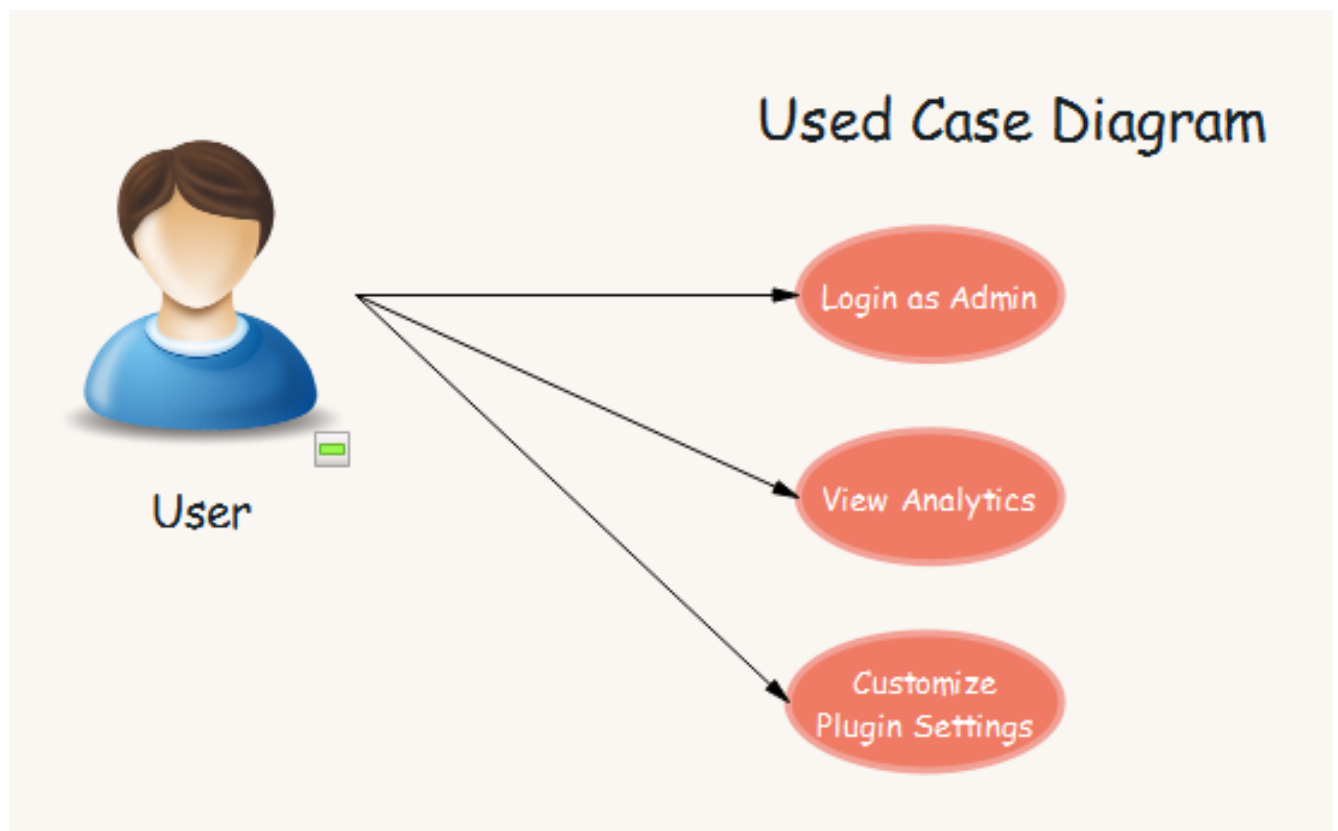
Sequential Model

_____

Our **sequence diagram** shows how objects operate with one another and in what order. The WordPress website has to be connected with the database (same database the plugin adds data to). The user has to login to WordPress website using his admin account (browser sends http requests to the server). The server checks from the database if the user exists, then responds back to the user - browser (http responds). If the administrative user entered their information correctly then the browser proceeds to the WordPress dashboard where the user can view analytics and customize the plugin settings. Finally, the user can logout from the WordPress dashboard.
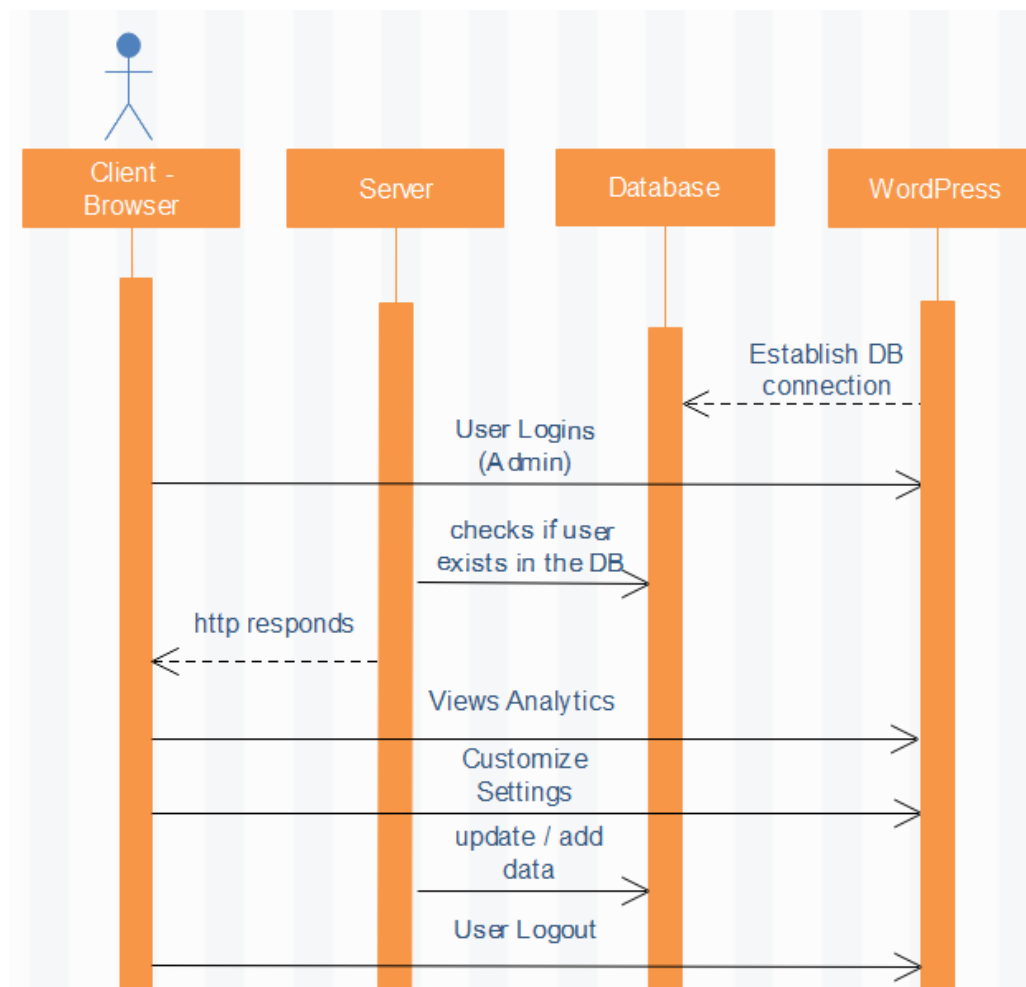
Entity Relationship Model

_____

Our **entity relationship** model, is the graphical representation of **entities** and their **relationships** to each other, used in our software. View it larger here.
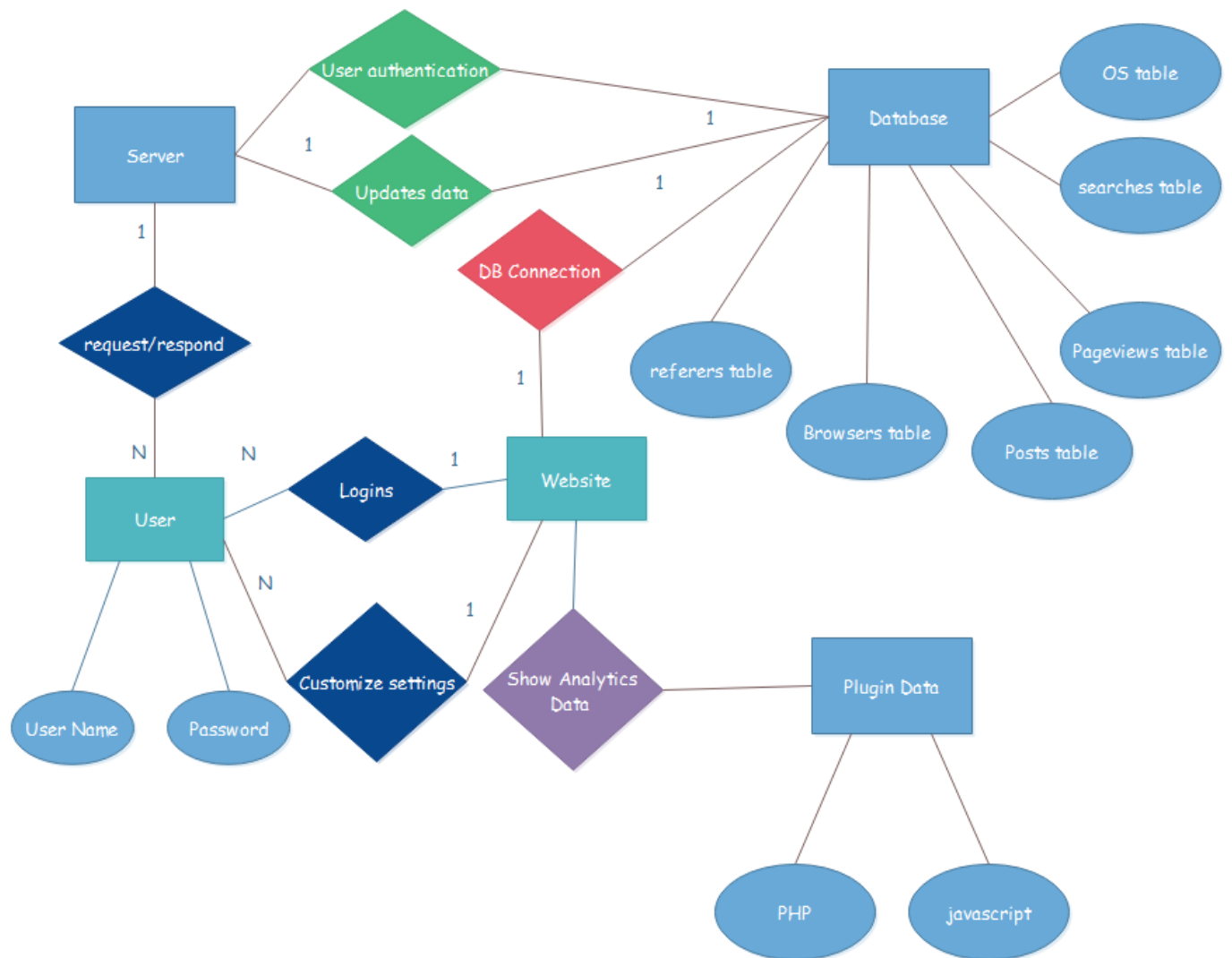
Activity Model

_____

Our **Activity diagram** is the graphical representation of workflows of stepwise **activities** and actions.