

Back-end Website Technical Document

The server-side system includes the administrative panel and the scripts to interface with the client applications; these should be separated prior to release.

The interface scripts are stored in the home directory.

post_chrome.php	Receives bulk browser data and inserts it into the database.
post_android.php	Receives bulk mobile data and inserts it into the database.
login.php	Receives an email and password, and outputs the user's ID on successful credentials.

The remainder of the files make up the administrative panel. Each section of the administrative panel is stored its own directory.

index.php	The landing page for the administrative panel.
src/	Stores libraries, scripts, and headers.
src/header.php	Included at the top of every page. Includes scripts and libraries, and displays the login page if the user is not logged in.
src/login.php	Administrative login page.
src/lib/db.php	Wrapper object for mysqli functions.
src/scripts/	Contains functions for simplifying tasks.
src/misc/	Contains database and database user credentials.
install/	Contains scripts for the initial installation of the system on a server.
account/	Wrapper to manage/edit/ for the current user's account. This page is protected from modification on the "Edit Own Account (M)" privilege.
download/	Displays a preview of filtered data and downloads a CSV file of browser or mobile data. Browser data is indicated by <i>?browser</i> , while mobile data is indicated by <i>?mobile</i> . This page is protected by the "Access Data (D)" privilege.
flush/	Empties the browser or mobile data table. Browser data is indicated by <i>?browser</i> , while mobile data is indicated by <i>?mobile</i> . This page is protected by the "Flush Data (F)" privilege.
manage/	Lists the administrative users. This page is protected by the "View Admin Accounts (a)" privilege.

manage/edit/	Displays administrator information and modifies administrator accounts. This page is protected on read by the "View Admin Accounts (a)" privilege and on write by the "Edit Admin Accounts (A)" privilege.
manage/add/	This is a wrapper to manage/edit/ for new accounts. This page is protected by the "Edit Admin Accounts (A)" privilege.
users/	Lists the participant users, and provides functionality to filter and export to a CSV file. Protected on the "View User Accounts (u)" privilege.
users/edit/	Protected from read on the "View User Accounts (u)" privilege, and from write on the "Edit User Accounts (U)" privilege.
users/add/	Wrapper of users/edit/ for new limited users. This page is protected by the "Edit User Accounts (U)" privilege.
privacy/	Displays the privacy statement, which is linked to by the client applications.

Database Installation

The database system is developed using SQL, and is intended for use with a MySQL database.

User_Login	Stores user credentials and tracker application variables.
Admin_Login	Stores administrative user credentials.
Collection_Chrome	Stores user browsing data.
Collection_Android	Stores mobile application sessions.

Domain Setup

A domain name can be pointed to the server hosting the website. If the website already has a domain name, a CNAME record can be used to reference that name. Otherwise, an A record can be used to point the domain name to the IP address of the server. Records can be managed under the DNS settings of the domain name; access and use of these vary by provider.

SSL/HTTPS

It is important to encrypt the connection when sending potentially sensitive data. This can be done with the HTTPS protocol, but an SSL certificate is required. Certificates are issued by trusted authorities, and typically range from \$50 to \$200 per year. Some services, such as Amazon Web Services, may offer certificates for free, but may require the purchasing of additional services.

Technical Skills

The back-end system is mostly written in PHP, with CSS and Javascript used for the front-end of the administrative panel. Anyone working on the system should have experience

with procedural PHP, should be comfortable with JavaScript, and should have basic knowledge of JQuery with an emphasis on HTTP requests.

Primary Administrative Account

The primary administrative account has an identification number of 1. This account cannot be deleted and cannot be modified by other accounts. This account is intended as a top-level account for the purpose of managing other administrative accounts. Access to it can be restricted by manually deleting its password field in the database.