

Systems Manual - Developer's Guide

Product Identification Information

Product Name: Longworth Dashboard Story

Model Number: V1.0

Hardware Specification

Server: loki.trentu.ca

Database: phpMyAdmin (loki)

The above specifications provided pertain to the Development (DEV) and Testing (TST) environment for Version 1.0 (V1.0) of the product including both the Server and Database. It should be noted that Longworth Dental Clinic is responsible for providing the server and database for the deployment of the application to Production (PROD) environment, which will require modifications to the source code when establishing connections to the Server and Database. .

Tech Stack and Libraries

Web Design Languages: HTML, CSS,

Front-end Languages: PHP, JavaScript

Back-end Languages: MySQL

Data Visualization Libraries: Chart.js, CanvasJS

PHP Version: 8.1.16

MySQL Version: 2019

Product Information

Longworth Dashboard Story is a Data Analysis Web Application that allows the Business owners to access a comprehensive overview of the company performance through data visualization tools. One platform to be able to track all their patients, to track their service providers' success, and to make informed decisions and come up with solutions based on the analytical visualizations of various condensed reports based on client's requests..This will improve the efficiency and results of the decision making process for the business while also keeping their finances in check.

Database Tables

Below is the list of all the Database Tables, their Columns names and descriptions that are currently used for the application. Please note that when adding additional functionalities, there may or may not be a need for new additional database tables.

role

The database table stores the information about the different types of user roles available. This database table is needed to define access for users.

Key	Column Name	Data Type	Description	Foreign Key TableName
PK	role_id	int(11)	PK used to define role type in other tables	
	position_name	varchar(255)	Dentist, Manager, Hygienist, Receptionist, General Manager (HR)	

month_goal

The database table stores the information about the monthly goals of the clinic which the Manager can add.

Key	Column Name	Data Type	Description	Foreign Key TableName
PK	goal_id	int(11)	Identification Number of the goal	
	month	int(2)	What Month's Goal	
	year	int(4)	What Year for the Month	
	base_value	int(7)	The goal of the month	

operatories

The database table stores the information about the different operating rooms in the clinic.

Key	Column Name	Data Type	Description	Foreign Key TableName
PK	op_id	int(11)	Operating Id of the Room	
	name	varchar(250)	Full NAME of the operating Room	

patient

The database table stores limited information about the patients of the clinic

Key	Column Name	Data Type	Description	Foreign Key TableName
PK	patient_id	int(11)	Patient Identification Number	
	first_name	varchar(256)	First Name of the Patient	
	last_name	varchar(256)	Last Name of the Patient	

app_type

The database table stores the information about the different types of appointments the clinic takes booking by patients for.

Key	Column Name	Data Type	Description	Foreign Key TableName
PK	app_type_id	int(11)	Identification Number for the type of appointment	
	app_name	varchar(256)	Name of the type of the appointment	
	app_Description	varchar(256)	Description of the appointment type	

user_name

The database table stores the information about all the employees

Key	Column Name	Data Type	Description	Foreign Key TableName
PK	user_code	varchar(5)	Identification Number of the User Employee	
	email	varchar(255)	Email which will be the username of the user	
	password	varchar(255)	Hash Password of the user	
	first_name	varchar(45)	First Name of the user	
	last_name	varchar(45)	Last Name of the user	
	verification	int(4)	Hashed Verification Password	
FK	role_id	int(11)	What type of role is assigned to the user	role

	entrydate	timestamp	NOW() - the date and time when user account is registered	
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ledger

The database table stores the information about the revenue earned

Key	Column Name	Data Type	Description	Foreign Key TableName
PK	transaction_id	int(11)	Identification for the Transaction	
	transaction_date	date	Date of transaction	
	total	float	Total Revenue earned from the transaction	
FK	user_code	varchar(5)	Provider who took care of this appointment related to this transaction	user_name

appointment

The database table stores the information about the appointments.

Key	Column Name	Data Type	Description	Foreign Key TableName
PK	app_id	int(11)	Identification Number to identify the appointment	
FK	app_type_id	int(11)	Type of appointment	app_type
Fk	patient_id	int(11)	Which Patient's appointment this was	patient
FK	user_code	varchar(5)	Which provider took care of the appointment	user_name
FK	op_id	int(11)	Operating room in which the appointment was taken care of	operatories
	start_time	datetime	Start time of the appointment	
	end_time	datetime	End time of the appointment	

provider_schedule

The database table stores the information about the schedule of the providers

Key	Column Name	Data Type	Description	Foreign Key TableName
PK	schedule_id	int(11)	Identification to identify the schedule	

FK	user_code	varchar(5)	Which provider's schedule is this	user_name
	schedule_date	date	Date of the schedule	
	start_time	time	Start time of shift	
	end_time	time	End time of shift	
	Memo	varchar(256)	To store comments related to this shift of a day	

User Roles

In the system, there exist various user roles that influence the nature of access and information that users can access upon logging in. Specifically, the information pertaining to user roles is stored in the "role" database table.

Role_id = '1' (Dentist) and '3' (Hygienist)

Users with role id 1 (i.e., Dentists) and role id 3 (i.e., Hygienists) have identical access and view privileges. Such users can only access their respective individual revenue and performance metrics.

Source Code Files with this role_id functionalities are:

- dashboard.php
- dashboardNumbers.php
- analysis.php

In all other source code pages with Manager Exclusive Access, limitations like hiding certain <div> sections and limiting editing access have been implemented.

Role_id = '2' (Manager) and '5' (General Manager (HR))

Users with role id 2 and role id 5 have similar view privileges but with extra data being displayed. They can access the revenue and performance metrics of all the providers in the entire clinic.

Besides the source codes that are for users with role id 1 and role id 3 functionalities, these users also have access to additional functionality with codes in the following source code files:

- dashboard.php
- dashboardNumbers.php
- analysis.php
- addGoal.php
- deleteGoal.php
- upload.php

Role_id = '4' (Receptionist)

Users with role id 4 (i.e., Receptionists) have an entirely different view and access privileges. As they are not authorized to access revenue data, they are only able to view existing timesheets, schedule reports of providers, and add or delete timesheets.

Source codes Files for such users are:

- timesheet.php
- scheduleReport.php.

Source Code Files and Folders they are in

[Link to the Github Repository](#)

HTML and PHP files - /4000Y/

- account.php
- addGoal.php
- analysis.php
- dashboard.php
- dashboardNumbers.php
- deleteGoal.php
- login.php
- logout.php
- password.php
- passwordVerification.php
- resetPassword.php
- scheduleReport.php
- signup.php
- timesheet.php
- upload.php

PHP Include Files - /4000Y/includes

- footer.php
- library.php
- navAccount.php
- receptionistNav.php

CSS Files - /4000Y/styles/

- main.css

JavaScript File - /4000Y/script/

- main.js

SQL Queries to Set up DB Tables - /4000Y/sql/

- mySQL.sql

Images - /4000Y/images/

- appleicon.png
- googleicon.png
- linkedinicon.png

PowerShell Script - /4000Y/shellScripts/

- SQL_exportApptdata.ps1
- SQL_exportApptdata.txt
- SQL_exportLedgerdata.ps1
- SQL_exportLedgerdata.txt

Export Appointment and Ledger Data from ClearDent Database

The application and the current database are not on the same server. Longworth Dental do not want ClearDent and Longworth Dashboard Story on the same server as of now. Therefore, a powershell script has been developed that will export Appointment and Ledger Data from the ClearDent Database as 2 csv files. *The job is scheduled to run Weekly Every Sunday at 10pm until interrupted.*

Source Code Files:

- SQL_exportApptdata.ps1
- SQL_exportLedgerdata.ps1

Import Appointment and Ledger Data to Application Database

The exported csv files need to be uploaded on the Longworth Dashboard Story by the Manager. The Source Code with the functionalities are:

- upload.php

User Logins and Credential

All functionalities related to the user's account are as follows:

- account.php - to view the information about their account
- login.php - log in to the application
- logout.php - logout functionality
- password.php - forgot Password functionality
- passwordVerification.php - First page when the forgot password is sent to verify user email
- resetPassword.php - reset password OTP code is sent. Verify the OTP
- signup.php - new user account registration

Shared Pages Among Managers and Service Providers

Managers and Service Providers have the same code for the following pages. Please Note that the data differs (Manager can see all users data while providers only see their individual Data). Also, for the dashboardNumbers Page (“Numbers” Page on the application, the manager can edit the memo field while providers can not)

- Dashboard.php - “Dashboard”, the main landing Page
- dashboardNumbers.php - “Numbers” Page, the page with horus and revenue data displayed in tabular format
- analysis.php - “Analysis” Page, the data is analyzed and displayed in Chart format. Managers can see 3 graphs while Providers see only 1 chart.

Exclusive Manager Functionalities

The following source code files store the functionalities that are exclusive to the Manager Role only:

- addGoal.php - “Add Goal”, The page allows Manager to add a new monthly goal for the clinic
- deleteGoal.php - “Delete Goal”, The page displays all the existing goals and allows the manager to delete an existing monthly goal if it was changed

Receptionist Functionalities

Receptionist has a different view altogether. Source code files with the functionalities for receptionist are:

- scheduleReport.php - “Schedule Report”, The page displays all the existing timesheets and allows receptionist to delete a shift if schedule changed
- timesheet.php - “TimeSheet”, Receptionist can add new shifts and schedule for the providers via this page