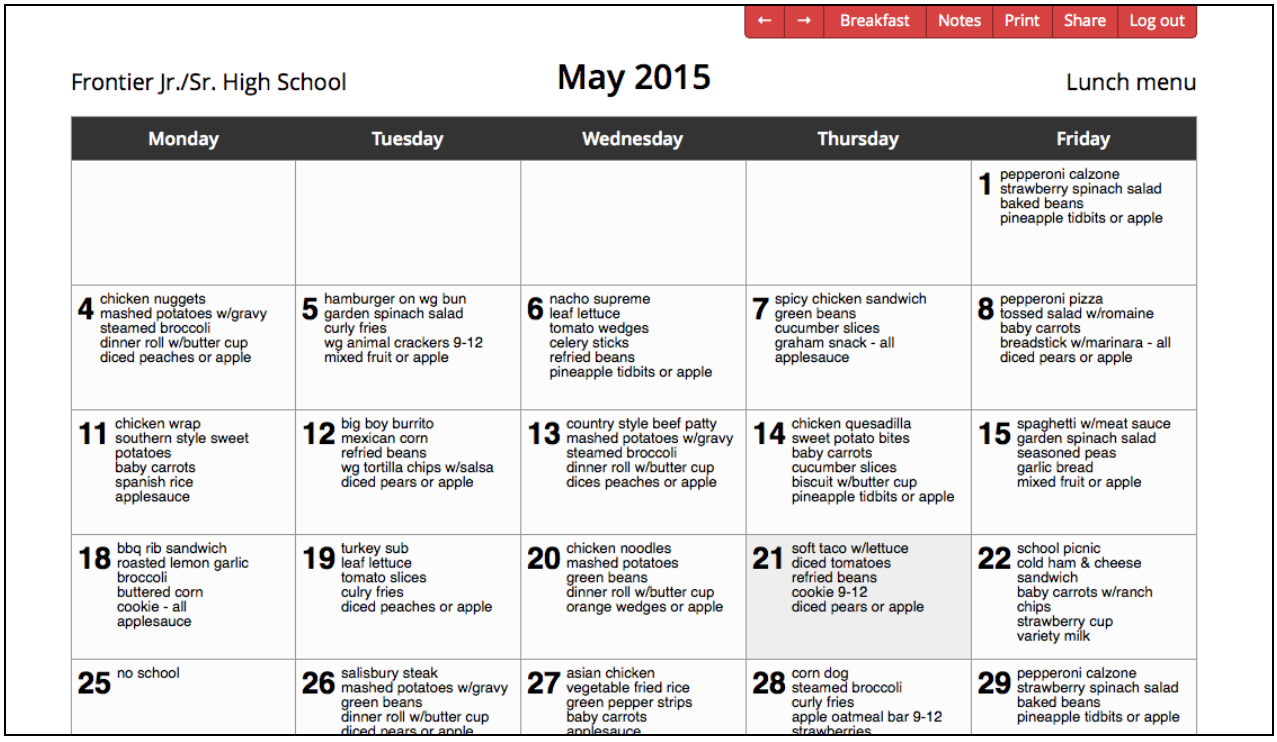
Lunch Menu Manager Technical Documentation

Description

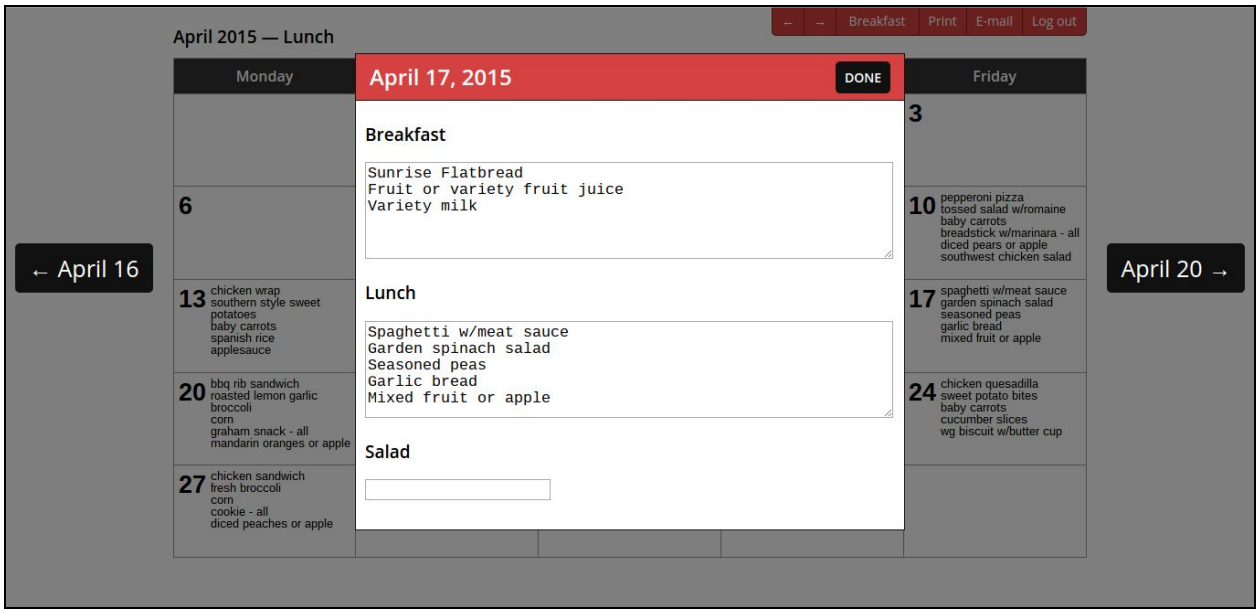
This document serves as the technical documentation for the operation and maintenance of the breakfast and lunch menu management system titled Lunch Menu Manager (LMM).

The purpose of Lunch Menu Manager is to provide a centralized menu management solution that will consolidate a number of processes into a single process. The goal is for all of the places where menu data may be required to retrieve that data from the same source.

Administrator view



Menu editor



Requirements

The following are required for LMM to operate:

- PHP-enabled web server; e.g. Internet Information Services (IIS)
- Proper file permissions for web server
- Proper firewall settings to access off-site
- Instructions/training for someone(s) to input the menu data

Features

- Straightforward design that is easy to use
- Provides a centralized source for all menu data
- The suite is independent of website CMS, making potential future changes simpler
- Pre-input menus weeks or even months in advance

- Administrators can generate printable PDFs for monthly menus, nullifying the need for manually-updated Microsoft Publisher menus
- Provides a JSON API for fetching and displaying menu data on various websites and other sources

Design

LMM is written in PHP. It operates as a web application that is completely independent of all other websites which fetch data from it.

The interface is very straightforward. Upon logging in, the administrator is presented with a calendar view of the current month which displays only weekdays. At the top, there are buttons to switch between months, toggle between breakfast and lunch views, and tools that make menu distribution simpler.

To add menu content for a particular day, the administrator simply clicks on the calendar cell for that day. LMM will then present a dialogue overlay box with text input fields for breakfast, lunch, and salad information. Changes are automatically saved as they are input. The administrator can toggle quickly between days with left and right arrow buttons, or they may dismiss the dialogue and select another day from the calendar table.

There are two ways to display data from LMM. The suite provides a JSON API for fetching data. It also generates pages that are intended to be embedded in an `<iframe>` tag.

Setup

LMM should run on just about any web server running PHP. For simplicity, we will assume that IIS 7.5 and Windows Server 2008 are being used. Below are the steps for setting up the web server:

1. Copy the LMM directory to the default web root directory (typically located at `C:\inetpub\wwwroot`) or a subdirectory of it.
2. In the IIS Manager, expand the tree for “Default Website.” The LMM directory should now appear as a subdirectory of “Default Website.”
3. Skip steps 4 through 7 if you are not setting up SMB sharing OR if the LMM directory is placed within a directory that is already shared (e.g. jshs/elem).
4. Right click on “Default Website,” and click “Add Virtual Directory.”
5. For the short name, type “lmm” or whatever the subdirectory for the LMM page will be. It should match the physical directory name from above. For example, in http://frontierschools.cloudns.pw/lmm, “lmm” is the Virtual Directory’s short name.
6. For the physical path, browse to where you placed the LMM directory, probably somewhere in `C:\inetpub\wwwroot`.
7. Click OK to create the Virtual Directory. The folder icon for the LMM directory should now have a shortcut arrow icon in the corner, indicating that it is a Virtual Directory.
8. Browse to the LMM directory and access the permission settings.
9. Ensure that both the “IIS_IUSRS” and “Authenticated Users” groups have read permissions on the directory and its contents. Create the `db` subdirectory if it does not exist, and ensure that those two groups also have read, write, and modify access on the that subdirectory.
10. If you are not setting up SMB sharing or if the LMM directory is within an already-shared directory, skip steps 11 and 12.
11. Access the LMM directory’s SMB sharing settings.
12. Share the directory with the Administrators group and/or any other desired entities.
13. The page should now be accessible from a web browser.

JSON API

LMM provides a JSON API for fetching menu data. This could be useful for a variety of applications. All of the API functions are within the api subdirectory of LMM. For example, the fetch-month function is at `api/fetch-month.php` within that directory. The API is documented here in case of any future applications.

Arguments are passed as GET parameters (e.g. `?year=2015&month=1`).

fetch-month

Parameters

`year`	the four-digit year to fetch
`month`	the one-or-two-digit month to fetch, 1 through 12; e.g. 1 for January

Returns

A JSON-encoded dictionary is returned. Keys are dates written in the format of `m-d-yyyy` or `mm-dd-yyyy`; in other words, days and months from 1 to 9 will NOT include a prefixing zero.

The values associated with each date key are dictionaries with the following:

`breakfast`	the day's breakfast choice string
`lunch`	the day's lunch choice string
`salad`	the day's salad choice string
`timestamp`	the UNIX timestamp of when the entry was added/updated

In addition to these date-specific data, the dictionary at the root level includes other values regarding the month as a whole:

`topLeft`	text to be displayed in the top left corner of a monthly calendar

fetch-day

Parameters

`year`	the four-digit year to fetch
`month`	the one-or-two-digit month to fetch, 1 through 12; e.g. 1 for January
`day`	the one-or-two-digit day to fetch, 1 through 31

Returns

A JSON-encoded dictionary is returned with the following:

`breakfast`	the day's breakfast choice string
`lunch`	the day's lunch choice string
`salad`	the day's salad choice string
`timestamp`	the UNIX timestamp of when the entry was added/updated

Embed

In addition to the JSON API, LMM provides pages which can be embed into a website using the `<iframe>` tag. The embed mechanism is currently used by the school wordpress site here and here. All of the embed pages are within the embed subdirectory of LMM. For example, the weekly embed is at `embed/week.php` within that directory. These pages are designed to adjust appropriately for any desired width.

week

Displays both the breakfast and lunch menus for a five-day period (M-F), starting with Monday of the current week and sending with Friday of the current week. Additionally, a link is displayed to to open a full monthly menu.

day

Displays both the breakfast and lunch menus for the current day.

Notes

Passwords

See `verify_login.php` in each of the LMM directories. At this time, the authentication mechanism is hard-coded. It is possible to implement other forms of authentication by expanding on the `verify_login()` function within this file.

Updating

See “Resources” below for the repository location. Before updating LMM, be sure to back up the `db` directory for each instance. After updating, ensure that all file permissions are correct as per the “Setup” section of this document.

Last updated: 16 June 2017