Centrum.ca   
Architecture and Design Specification

Author:

TCS

# Approval Signatures

This template is designed to accommodate digital signatures. The use of digital signatures is not mandatory; however, it is mandatory that all signatories of this project deliverable use the same method of signing (digital signature OR handwritten signature).

This project deliverable may be signed digitally. If digital signatures are used, they will be attached to the end of this document and this section will identify the names, roles and intent of the signatories. Otherwise, handwritten signatures will also be included in this section.

|  |
| --- |
| Signatures |

|  |  |
| --- | --- |
| I have authored this deliverable to document the architecture and design specifications for centrum.ca | |
| TCS DEV TEAM | 21/04/16 |

QA signatures may be required based on compliance risk.

|  |  |
| --- | --- |
| I have reviewed the content of this record and found that it meets the applicable compliance requirements. | |
| <Name>, BT QA | DD-MMM-YYYY |
| <Name>, BU QA | DD-MMM-YYYY |

**Table of Contents**

Contents

[1. Approval Signatures 2](#_Toc449032859)

[2. Introduction 5](#_Toc449032860)

[2.1 Purpose 5](#_Toc449032861)

[2.2 Scope 5](#_Toc449032862)

[3. Architectural Goal 6](#_Toc449032863)

[3.1 Architectural Overview 6](#_Toc449032864)

[3.1.1 Capability Roadmap and Technology Strategies 6](#_Toc449032865)

[3.1.2 Overview 6](#_Toc449032866)

[3.1.3 3rd Party vendors 13](#_Toc449032869)

[3.2 Architecture Configurability 14](#_Toc449032870)

[4. Architecture Quality & Alignment 14](#_Toc449032871)

[4.1 Development Guidelines 14](#_Toc449032872)

[4.2 Repeatable Patterns 14](#_Toc449032873)

[4.2.1 Language translation and localization 14](#_Toc449032874)

[4.2.2 Vendor Ids for the 3rd party vendors 15](#_Toc449032875)

[4.2.3 Other admin interfaces to configure 15](#_Toc449032876)

[4.2.4 SOA Services 15](#_Toc449032877)

[4.3 Master Data Management: Data Types 15](#_Toc449032878)

[4.4 Architecture Exceptions 15](#_Toc449032879)

[5. Architecturally Significant Design Packages 15](#_Toc449032880)

[6. Database Schemas 15](#_Toc449032881)

[7. Deployment View 15](#_Toc449032882)

[8. Implementation View 15](#_Toc449032883)

[8.1 Overview 15](#_Toc449032884)

[8.2 Layers 15](#_Toc449032885)

[8.2.1 Client Tier 16](#_Toc449032886)

[8.2.2 Presentation Layer 16](#_Toc449032887)

[8.2.3 Control Layer 16](#_Toc449032888)

[8.2.4 Business Logic Layer 16](#_Toc449032889)

[8.2.5 Data Access Layer 16](#_Toc449032890)

[8.2.6 Enterprise Information Layer 16](#_Toc449032891)

[9. System Design 16](#_Toc449032892)

[10. Directory Structure 16](#_Toc449032893)

[11. File Naming Conventions 16](#_Toc449032894)

[12. Development Technologies 16](#_Toc449032895)

[13. Conversion Design 17](#_Toc449032896)

[14. System Interface Design 17](#_Toc449032897)

[14.1.1 Interface Technical Requirements 17](#_Toc449032898)

[15. Security Design 18](#_Toc449032899)

[16. System Components 18](#_Toc449032900)

[16.1.1 Overview 18](#_Toc449032901)

[16.1.2 Minimum Configuration Requirements 18](#_Toc449032902)

[16.1.3 Processing 18](#_Toc449032903)

[16.1.4 Outputs 18](#_Toc449032904)

[16.1.5 Implications for Business Process/Operations 18](#_Toc449032905)

[17. Source Code Compiling and Linking 18](#_Toc449032906)

[18. Supporting References 18](#_Toc449032907)

[19. Revision History 19](#_Toc449032908)

[20. Appendices 19](#_Toc449032909)

# Introduction

This documentation is intended to capture architecture and design specification for centrum.ca website. This document will serve as the main input to the development and testing activities of the project. The document will be managed by the Development Leads with support from the Architects.

## Purpose

This documentation is intended to capture architecture and design specification for centrum.ca website. It outlines the steps required to build the components necessary to commence development activities on the functionality described in section 2.2 titled “Scope” of this document. The audiences for this document are those individuals who need to approve the design to ensure compliance to Pfizer’s technology and architecture guidelines.

## Scope

The scope of this document is to provide the architectural details of the centrum.ca applications in terms of different views. The different level views include the following

* Presentation Architecture View explains the Presentation Layer of the application.
* Business level view which explains the implementation of back-end business logic
* Information level view gives details about the data flow and data storage.
* Infrastructure view gives details about the physical components involved.

# Architectural Goal

The website is intended for Centrum brand. This helps patient to quit the smoking habits.

Patients can register themselves/Medical director/through Guildcare and they could see their journey till 100% nicotine free day.

The application follows up with patient via Email/SMS to help the patient till their nicotine free journey.

## Architectural Overview

### Capability Roadmap and Technology Strategies

The website is built on the custom drupal platform. The version of Drupal is 7.

**Website Visitors**

Visitors can register to the nicotine free program with valid barcode. Upon validation user will prompt to fill the basic information along with Smoking information ie. Smoking start year, total number of Cigs smoke per day etc. Upon completion user will receive an activation email through which he can successfully enroll to the program.

My Progress

The my progress page captures and shows patient journey

My Champix

My champix page shows patient journey.

**Content types:**

* Articles: *articles* for time-sensitive content like news, press releases or blog posts.
* Basic page: *basic pages* for your static content, such as an 'About us' page.
* Brand content: created to add banner image for landing pages of home page and AtoZinc library.
* Coupon: coupon system to avail offers on centrum products (user can print, share, email individual coupons for offline discount purpose).
* FAQ:  Used for frequently asked section of the site. Contains questions and related answers.
* Key prenatal nutrients: created to display information of the key nutrients.
* Minerals: created to display information of minerals..
* Other nutrients: created to display information of other nutrients..
* Other nutrients without link
* Products:  To create products.
* Promo banner: Created to add promo banner images.
* Section Landing Pages: Create separate landing pages for different links.
* Stages of pregnancy:
* Vitamins: created to display information of vitamins..

**Views**

* **A to Zinc Library:** Displays title of vitamins content type.
* **Articles listing:** Displays details of Article type. Also, contains exposed filter for filtration according to article category.
* **Coupon promo tile:**
* **Coupons landing page:**
* **Dropdown list:** Contains a jump menu dropdown list. Redirects to the related node path when clicked.
* **Facet products:** Combined with facet search module, this view is used to search products according to user inputs.
* **Faq:** Displays frequently asked questions. Contains internal 4 different view blocks.

1. **Top5:** Filtered according to top 5 content categories.
2. **General:** Filtered according to general content categories.
3. **Safety:** Filtered according to safety content categories.
4. **Ingredient information:** Filtered according to ingredient information content categories.

* **health benefits:** Displays health interest details from taxonomy. Contains internal 5 different view blocks.

1. [**Product health benefits**](https://pfcentrumvcadev7.prod.acquia-sites.com/admin/structure/views/nojs/display/health_benefits/block/display_title)**:** Displays taxonomy values in relation with health interest field.
2. [**Vitamins health benefits**](https://pfcentrumvcadev7.prod.acquia-sites.com/admin/structure/views/nojs/display/health_benefits/block_1/display_title)**:** Displays taxonomy values in relation with vitamin health benefit field.
3. [**Minerals health benefits**](https://pfcentrumvcadev7.prod.acquia-sites.com/admin/structure/views/nojs/display/health_benefits/block_2/display_title)**:** Displays taxonomy values in relation with mineral health interest field.
4. [**other nutrients health benefits**](https://pfcentrumvcadev7.prod.acquia-sites.com/admin/structure/views/nojs/display/health_benefits/block_2/display_title)**:** Displays taxonomy values in relation with other nutrients health interest field.
5. [**key prenetal health benefits**](https://pfcentrumvcadev7.prod.acquia-sites.com/admin/structure/views/nojs/display/health_benefits/block_2/display_title)**:** Displays taxonomy values in relation with other key prenetal health interest field.

* **PFE facet filter promo banner**
* **PFE Featured Article:** Displays details according article content type. Filtration is done according featured article.
* **PFE Key Nutrients:** Displays details according key prenatal nutrients content type.
* **PFE Nutrients info:** Displays nutrients information of product content type.
* **PFE Product Category tout**
* **Product block**
* **Promo tile:** Displays banners depending on the content type.
* **Related Content:** Displays related contents of their respected content types.
* **Related Coupon**
* **Related products of product:** Displays related products depending on the referenced entity.
* **Section banner**
* **Stages of pregnancy**
* **view\_search**

**Custom Modules**

* centrum\_article: Creates the previous and next buttons in article pages depending on the weight of the article page (weight field is created in the article content type).
* contact\_us: Creates a contact form where the user can fill in their details.
* find\_your\_centrum: Creates an ajax multi-step form, where products related to the inputs provided by the user in the form are displayed.
* new\_coupons:
* fetility calculator:

|  |  |
| --- | --- |
|  | **Find your centrum page:** |

This page contains a multi-step form which searches for products depending on the values like age, gender, other considerations, health interests provided by the user .

**Key features**

**Product search -**

User enters age, gender, other considerations and health interest values and this module searches the related products.

The custom module is created to achieve this functionality: **find\_your\_centrum**

* The age value provided by the user is divided in two parts:

1. Value can be directly provided by the age tout widget provided in the home page. Once the user provides value from age tout widget, the user is redirected to the second step (gender) of the find\_your\_centrum page.
2. Value can be provided from the first step of the find\_your\_centrum page.

* Age and gender values are mandatory, only after selecting values from age and gender, the user can proceed to the third step.
* User can select multiple values in other considerations and health interest steps.
* Other considerations and health interest steps are not mandatory. Even if user doesn’t provide values in these fields, the search will be done on the basis of values provided in age and gender.
* The input provided by the user (age, gender, other considerations, health interests) are compared with the fields(age, gender, other considerations, health interests) provided in the product content and accordingly searches the related products.

|  |  |
| --- | --- |
|  | **Contact us page:** |

This page contains a form where users have to provide the required details.

**Key features**

**Contact form -**

The custom module is created to achieve this functionality: **contact\_us**

* Users have to provide their personal details like first name, last name, address, email id etc.
* Once, the user provides all the required values and submits the form, an email is generated and the healthconnect team receives an email with user details .

## Architecture Configurability

Solution will consist on some Drupal custom, contributed modules and javascript files.

# Architecture Quality & Alignment

## Development Guidelines

Development will follow Drupal Best Practices <http://drupal.org/best-practices>

## Repeatable Patterns

The application built for US will be configurable to migrate to different region or different Brand for similar reminder pattern. In different region, the vendor’s configuration needs to be done separately.

### Language translation and localization

NA

### Vendor Ids for the 3rd party vendors

3rd Party Pharmacy Vendors will be identified with a unique Vendor Id.

### Other admin interfaces to configure

NA

### SOA Services

NA

## Master Data Management: Data Types

NA

## Architecture Exceptions

*NA*

# Architecturally Significant Design Packages

NA

# Database Schemas

NA

# Deployment View

The solution will be deployed into the Drupal platform of Acquia.

# Implementation View

## Overview

*NA*

## Layers

*NA*

### Client Tier

*NA*

### Presentation Layer

*NA*

### Control Layer

*NA*

### Business Logic Layer

*NA*

### Data Access Layer

*NA*

### Enterprise Information Layer

*NA*

# System Design

*NA*

# Directory Structure

*NA*

# File Naming Conventions

| **Design Item** | **Naming Convention** | **Description** |
| --- | --- | --- |
| *NA* |  |  |

# Development Technologies

| **Application** | **Tool, System, Database,**  **Platform, Etc.** | **Comments** |
| --- | --- | --- |
| Application Development | Drupal |  |
| Browser | IE8+, Firefox 3.5+, Chrome 26+, Safari 5+ |  |
| Business Rules | NA |  |
| Client Server Architecture | NA |  |
| Database | NA |  |
| Database Access | NA |  |
| Database OS Platform | NA |  |
| Security | NA |  |
| Software Version Control | Git |  |

# Conversion Design

Source Databases: NA

* Source Elements: NA
* Validation Rules: NA
* Processing Rules: NA
* Conversion Component: NA
* Conversion Contingency Arrangements: NA
* Reporting Controls: NA
* Data Security: NA

# System Interface Design

### Interface Technical Requirements

| **Interface Technical Requirements** | | |
| --- | --- | --- |
| *<Technical Requirements ID>* | NA | |
| **Hardware Interfaces** | | |
| Hardware Devices | | NA |
| Supporting Devices | | NA |
| **Software Interfaces** | | |
| Name | | Drupal |
| Specification Number | | NA |
| Version Number | | 7 |
| **Communications Interfaces** | | |
| Protocols | | HTTP/ HTTPS for interfaces |
| **Data Interfaces** | | |
| Data processing | | NA |
| Backup and Recovery | | Github repository will ensure timely Backup and Recovery |

# Security Design

The design will ensure that the Web Services built will exchange data over secured protocols. Also while building functionalities using custom code the best practice of sanitizing user input via Drupal core functions check\_plain() and filter\_xss() and/or PHP htmlspecialchars() will be used.

# System Components

### Overview

NA

### Minimum Configuration Requirements

NA

### Processing

| **File Name** | **Functional Description** | **Location** | **Inputs/Outputs** |
| --- | --- | --- | --- |
| NA |  |  |  |

### Outputs

NA

### Implications for Business Process/Operations

NA

# Source Code Compiling and Linking

The source code will be loaded to the Acquia environments using the GIT repository

# Supporting References

*NA*

| **Record Number** | **Reference Title** |
| --- | --- |
|  |  |

# Revision History

| **Version** | **Author** | **Date** | **Revisions** |
| --- | --- | --- | --- |
| 1.0 | Dakshayani C | 21st April 2016 | Initial Draft |

# Appendices

| **Appendix** | **Appendix Name** |
| --- | --- |
|  |  |

|  |  |
| --- | --- |
|  |  |
|  |  |