**Secure Web Application – Team Component**

**Recipe Web Application**

**Solution Design Document**

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**Table of Contents**

[Introduction](#_Toc401238542)

[Purpose](#_Toc401238543)

[System Overview](#_Toc401238544)

[Design Constraints](#_Toc401238545)

[Roles and Responsibilities](#_Toc401238546)

[Project References](#_Toc401238547)

[System Architecture](#_Toc401238548)

[Database Design](#_Toc401238549)

[System Security and Integrity Controls](#_Toc401238552)

# Introduction

This System Design Document has been created to outline the proposed system design for a recipe web application for PAZ Food Corporation. It is intended to be a fresh take on a recipe/cooking application accessible through the web from multiple device types. By designing, testing, and deploying the new recipe app we will increase customer base and revenue for PAZ food corp. This document and the technical specifications listed herein comply with all PAZ Food Corp. technical standards and infrastructure.

# Purpose

The purpose of this System Design Document is to provide a description for how the new application will be constructed. The Systems Design Document was created to ensure that the design meets the requirements specified in the project requirements documentation. The System Design Document provides a description of the system architecture, software, hardware, database design, and security.

# System Overview

The recipe web application will provide the following capabilities:

* Access to a database of recipes accompanied by images.
* Registration to an email list for any user.
* Gallery Users and administrators can upload to.
* Reporting capabilities of new users/ users unsubscribing etc.

One of the primary benefits here being a growing database of customers and details.

It will be designed on PC using Django and Python for use across any device on any web browser.

A dedicated PC for a database will be required in a fixed location and setup for easy expansion if needed in the future.

# Design Constraints

Our Project Team identified several constraints which will impact and limit the design of the application.

* Must be compatible with any device that can access the web.
* Must comply with all industry regulatory policies and guidelines.

These policies and guidelines will impact the app by requiring certain standards of coding, user interfaces, security, and management of the application.

* Must be compatible with all web browsers.

# Roles and Responsibilities

The following table defines the System Design roles and responsibilities. This matrix also serves as the list of points of contact for issues and concerns relating to the System Design.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Role** | **Phone** | **Email** |
| 1. Drew | Project Manager |  |  |
| 1. Peter | Lead Designer |  |  |
| 1. Anthony | Lead Designer |  |  |
| 1. Zaine | Lead Designer |  |  |

# Project References

The application is designed in accordance with PAZ food corporations, standards, analyses, and findings. These references serve as the basis for the requirement of a new Recipe web application. The following is a list of references. It should be noted that some of these documents are periodically updated and if more detailed information is needed, they should be referred to individually.

* PAZ Food Corp. IT Security Policies and Guidelines, Oct 10, 2020
* PAZ Food Corp. Hardware and Software Catalog, Jun 2, 2020
* PAZ Food Corp. Program Management Office (PMO) Policies and Guidelines Feb 7, 2020
* PAZ Food Corp. 20xx Strategic Goals and Objectives Dec 27, 2020

# System Architecture

**Hardware:**

Hardware for the Database PC will be the following:

* Dell Precision 5820 Tower Workstation.

**Software:**

The software design is coded by PAZ Food Corp. IT Engineers to provide customized functionality specific to the operations of PAZ Food Corp. It was determined through various analyses and studies that there is not an existing commercial-off-the-shelf (COTS) product with the ability to capture specific business operations unique to PAZ Food Corp.

* New System Data – contains specific fields required for entering new assets into the database for the first time
* Existing System Maintenance Updates - contains specific fields required for adding, removing, or editing data which already exists in the maintenance database
* System Location Updates - contains fields specific to geographic locations to include site, city, state, zip code, latitude, and longitude. As assets are relocated.
* System History - contains fields specific for reference past maintenance activities.

Automated Reporting Module: This module includes coding which provides users with a selection of pre-built automated reports. The coding allows the user to select a report and uses this input to initiate a pre-built database query to pull the appropriate data from the data base in response to the user’s selection.

# Database Design

A simple Database for the Recipes and images, customer and subscription details, Staff and payment details.

The database will also have the capability of importing and exporting data from/to MS Office applications.

Structured data stored in the database will be searchable and sortable in order to meet both automated and manual reporting requirements.

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# System Security and Integrity Controls

The application design incorporates several security and integrity controls to ensure that the system and its data are continually protected. This is done through a multi-tiered approach to ensuring data integrity is achieved through only authorized user functions and assignments.

The next design consideration is data backup. The database will be backed up in accordance with PAZ Food Corp. IT Security Policies and Guidelines dated Oct. 10, 2020. This will provide a fail-over capability to revert to in the event of a database corruption or system failure. The application was also designed to perform in degraded modes of operation should maintenance need to be performed on a particular module.

Sponsor Acceptance

Approved by the Project Sponsor:

Date:

<Project Sponsor>

<Project Sponsor Title>