*intoeyes.com*

**Author Name:** *Ian A. Higgins*

**Professor:** Christopher Kreider

**Executive Summary:**

First impressions mean everything in today’s society because, they set the tone for any relationship. A website is not just a place for information, but in fact the introduction to a business as a whole. It can confirm to a customer whether they want to trust a business with their money and/or health based on how they present themselves online. My project will be focusing on updating the optometry site, intoeyes.com, home to Eye Care Doctors of Optometry. A small business established in Fredericksburg, VA that is in desperate need of a new website that both modern and functional.

Table of Contents

Introduction 3

Project Background 3

Project Description 3

Proposed Solution 3

Development Approach 3

High Level Plan 3

Project Schedule 3

Work Breakdown Structure 3

Project Calendar 3

Intermediate Milestones 3

Intermediate Milestone #1 3

Intermediate Milestone #2 3

Weekly Updates 3

Weekly Update #1 3-4

Weekly Update #2 4

Weekly Update #3 4

Weekly Update #4 4

Weekly Update #5 4

Weekly Update #6 4

Weekly Update #7 4

Weekly Update #8 4

Weekly Update #9 4

Project Deliverables 4-5

Conclusion 5

Work Cited 6

# Introduction

20% of small businesses fail within their first year of opening and 75% of the successful 80% that have made it past the first year will decline within the first five years (McIntyre). As the businesses edge into the ten-year mark 70% of them will fall and many contributing factors play into these failing businesses (McIntyre). For my project, I will be updating my previous employers’ website, intoeyes.com, in hopes to help better present his businesses and provide functionality to multiple users to better compete with many of the other optometrists in the surrounding area.

## Project Background

The importance of this project is severe. Intoeyes.com has not been updated since its first release in 2013 and has multiple flaws within its design due to the fact the person who scripted the site had no knowledge of how to do so when first starting out. The website itself is not terrible but for an optometrist’s small business, image is everything and with other competing businesses in the area no mistakes can be made.

## Project Description

Once the site is completed, patients will be able to sign in or register for accounts, schedule appointments, view their patient documents, order contacts for pick up, and take a survey. Employees will be able to read patient accounts and sign in with passwords that have been given to them to clock in and out while the admin is able to read and write to patient and employee accounts.

# Proposed Solution

## Development Approach

The development approach I intend to take is the iterative process being that it has high adaptability and provides quick turn around with low risk. During this process things could change, and I want to make sure that if the project does, I will be able to handle it properly and accordingly.

## High Level Plan

First, is the System Vision Document and second is the setup of AWS. This requires configuring the security groups, acquiring the private key, and the connection and configuration of the webserver using PuTTy and the saved key to login to Ubuntu to install Apache, MySQL, PHP, and GIT. Third, is the establishment of the stakeholders, use cases, and user stories. Fourth, is the design of the mockups for the website using Balsamic and making three different mockups for each webpage styling each to mobile, tablet, and desktop views. Fifth, is the utilization of the use cases to build the database using MySQL workbench. Sixth, is the development of the website itself and seventh, is connection of the website to the database using PHP.

# Project Schedule

## Work Breakdown Structure

System vision document (5 hours), server setup (5 hours), stakeholder and use case identification (5 hours), website mockups (15 hours), database design/implementation (15 hours), website implementation (45 hours), backend development (20 hours), testing (45 hours).

## Project Calendar***.***

### Intermediate Milestones

#### Intermediate Milestone #1

* System Vision Document, server setup, stakeholder and use case identification, website mockups, and database design/implementation.

#### Intermediate Milestone #2

* Website implementation.

### Weekly Updates

#### Weekly Update #1

* System Vision Document (5 hours)
* Server setup (5 hours)
* Stakeholder and use case identification (5 hours)

#### Weekly Update #2

* Website mockups (15 hours)

#### Weekly Update #3

* Database design/implementation (15 hours)
* Testing (5 hours)

#### Weekly Update #4

* Website implementation (15 hours)
* Testing (5 hours)
* Intermediate Milestone #1 (3 hours)

#### Weekly Update #5

* Website implementation (15 hours)
* Testing (5 hours)

#### Weekly Update #6

* Website implementation (15 hours)
* Testing (5 hours)

#### Weekly Update #7

* Backend development (10 hours)
* Testing (5 hours)
* Intermediate Milestone #2 (1 hour)

#### Weekly Update #8

* Backend development (10 hours)
* Testing (5 hours)

#### Weekly Update #9

* Testing (15 hours)

# Project Deliverables

Documentation

* System Vision Document: 1-2 page brief description of the vision for this project/system being built
* Stakeholder Identification: Discussion of who the target users will be, and potential users in the future if relevant. May only be 1 or 2 users, or a larger group of users, but should still be addressed!
* Analysis Results/User Stories: Results of analysis phased in the form of user stories
* Database Entity Relationship Diagrams: graphical representation of the normalized database to be implemented
* GUI Mockups: initial graphical representations of the graphical user interface to be developed
* Architecture Diagrams: graphical representation of the architecture this system will utilize

Technical Deliverables

* Zip Archive with completed code for project and scripts for creating databases
* Link to URL with actively working project for instructor review
* Link to GIT repo with completed code for project including scripts for creating databases
* Instructions/readme document explaining how the instructor can install/test the system that was demonstrated, both from a URL of the active site, as well as if the instructor desires to set it up themselves.

Final Presentation Deliverables

* Final Report
* Website

# Conclusion

This project is for an optometry business, Eye Care Doctor of Optometry, who is in desperate need of a new website. I expect this project to take roughly 160 hours with goals such as a system vision document, server setup, stakeholder and use case identification, website mockups, database design/implementation, website implementation, backend development, and testing. My greatest concern for the project is myself becoming too enamored with the design of the site that I will perhaps sacrifice functionality and I am also with the backend development.

# Work Cited

McIntyre, Georgia. “What Percentage of Small Businesses Fail?” *Fundera Ledger*, Fundera, 10 Sept. 2019, https://www.fundera.com/blog/what-percentage-of-small-businesses-fail.