**WebBIT 4030 Senior Project  
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Project: Website Design, Development & E-Commerce Integration**

**OVERVIEW**

1. **Project Purpose**

The purpose of this project is to design and develop an e-commerce enabled website. My “customer” for this project is my 12-year old niece. An aspiring baker, she has been baking cupcakes, cakes and other deserts for neighbors, her parents’ coworkers and others in the community. She has been accepting orders via a Google webform and working with her on building a full e-commerce enabled storefront that allows her to demonstrate her capabilities, show off some of her prior works and allow potential customers to navigate, select items, choose preferences and provide specific instructions, and complete their order through a secure integrated payment gateway would be an excellent opportunity to demonstrate some of the many skills that I have learned over my 4+ years in the WeBSIT program.

1. **Project Description / Scope**

The scope of this project will include all aspects of designing and developing a fully functional and integrated e-commerce website. This will include registration of a domain name, selection of a web hosting provider, integration of a content-management system, integration of a database, integration of an e-commerce shopping cart solution, securing transactional information and integrated contact and inquiry forms.

Communication with the customer will be crucial, as it is very much my intent to provide a professional product that she will be able to utilize to further her “business” and potentially enable her to move in a direction that fully embraces her entrepreneurial spirit. The website design, font selections, graphic design and other visual elements should be based on her vision and demonstrate her personality, while also adhering to best practices of digital design and accessibility – all skills learned during Web Applications Development, Introduction to Digital Media, Database Design, Development and Deployment and Systems Analysis and Design.

The site will include full ordering capabilities, including an online shopping cart solution and payment integration for real-time acceptance and processing of transactions, skills learned during Introduction to E-Commerce and Systems Acquisition, Design and Development.

I will serve as my own Project Manager for this effort and plan to utilize the many skills acquired over the course of the WeBSIT program, particularly Information Technology Project Management. As an early step, I have prepared the following Work Breakdown Structure to detail the elements of website design and development that I anticipate being a part of this project:

**Work Breakdown Structure**

1. Requirements

1.1 Technical specification

1.1.1 Expected bandwidth

1.1.2 User registration

1.1.3 Restricted areas

1.2 User requirements

1.2.1 Menu navigation

1.2.2 Interactive modules

1.2.3 Static pages

1.2.4 Flash elements

1.3 Reporting requirements

1.3.1 Bandwidth & usage

1.3.2 Page views

1.3.3 Session length

2. Design

2.1. Design elements

2.1.1 Banner

2.1.2 Footer

2.1.3 Logo

2.1.4 Color scheme

2.1.5 Font usage

2.2 Overall layout

2.2.1 Column setup

2.2.2 Optional modules

2.2.3 Navigation layout

2.3 Content elements

2.3.1 About page

2.3.2 Contact page

2.3.3 Services page

2.3.4 FAQ page

2.3.5 Photo Gallery

3. Technical Framework Selection

3.1 Evaluate options against requirements

3.2 Evaluate cost and time to develop

3.3 Make decision

4. Technical Framework Implementation

4.1 Build or acquire back end

4.2 Build or acquire front end (user interface)

4.3 Integrate back end and front end

5. Content Creation

5.1 Create content summary

5.2 Establish content details

5.3 Assign content creation

5.4 Create detailed content

6. Content Load

7. Site Testing

7.1 Navigation

7.2 Interactive elements

7.2.1 Contact form

7.2.2 User registration

7.3 Browser compatibility

8. Site Go-Live

8.1 Establish target date

8.2 Create communication plan

8.3 Make site live

1. **Assumptions and Risks**

As part of my project, I am providing all of my services at no cost to the customer, but do expect that there will be costs associated with domain registration, hosting services, SSL certificate and other technology solutions that will be incorporated into the site. I am expecting that my customer, and her investors (brother and sister in-law), will cover these costs. As a result of the use of an online shopping platform, the website and its use will need to meet all regulatory requirements.

1. **Work Location**

All work will be performed from my home office and will be recorded and reported throughout the entirety of the project. Milestones will be tracked and signed off on by both my customer and her investors.

1. **Learning Objectives**

This project will allow me to demonstrate my mastery of many of the technologies acquired during my pursuit of a Bachelor’s Degree in Information Technology, as part of Georgia Southern’s participation is the USG WeBSIT program. Although I have been involved in the technology industry for over 20-years, many of the skills that I will be utilizing for this project are outside of the scope of my role and position with my current employer and will challenge me to go outside of my normal work role and into a role that I’ve not previously served in.

1. **Tentative Summary Schedule of Milestones**
   1. Secure domain name and hosting services 9/6
   2. Gather and document user requirements 9/13
   3. Select and install CMS solution 9/20
   4. Logo and web design implementation 9/27
   5. Creation of static content 10/4
   6. Select and install e-commerce platform 10/11
   7. Build and configure product database 10/18
   8. Configure and populate e-commerce platform 10/25
   9. Incorporate payment services into e-commerce platform 11/1
   10. Document site management tools and processes 11/8
   11. Site testing 11/15
   12. Site Go-Live 11/22
   13. Post project review and documentation 11/29