**Software Development Proposal**

February , 2024

Josh

Heather

Grasshopper General Construction

Dear Josh and Heather,

Please find enclosed our proposal for development of a web app for the Grasshopper General Construction.

We want you to know that we are committed to delivering a product that delights both you and your end users. We will do this by listening closely to your requirements so that we fully understand your needs. We will continue to get your feedback at each step of the way as we develop your web app. We also know that it is important to you that we finish this app on time and that it be something you can maintain with minimal cost and effort. We are committed to finishing the project within your timeframe and giving you a product you can easily maintain.

Our team, consisting Angel Amores, Charlese, Orion, and Kelsie McDonald, have learned to write a variety of different web apps. We are excited to design a software solution that does exactly what the end users need.

We look forward to discussing the details of this proposal with you further and making any adjustments that might be needed. Once we have fine-tuned the proposal we will send you a contract document for review and signatures.

All the best,

CIT Capstone Project Team

**Proposal to Develop a Web App**

1. Project Overview

The goal of this project is to develop a web app to be used by GGC Business owners and customers. The goal is to help GGC business owners to build their brand and credibility with their customers.

Here are some of the features:

1. Site-wide Branding
2. Real Customer Reviews
3. Easy-to-Update Pictures
4. Better SEO

Additional features:

1. Online merch store

The web app will be designed to work well in both desktop browsers and mobile browsers.

1. Deployment

The web app and the “back-end” will be hosted on Microsoft Azure during development, which will be provided by the team. Hosting and pricing for beyond the project timeframe will be discussed towards the end of the project. Expect around $10 per month.

1. Documentation

The app will feature a built-in “help” documentation for the Admin users.

1. Estimate of Effort

We are providing two sets of estimates. The first estimate is for a system that includes all features that were originally requested. The second estimate is based on a subset of those features.

1. Full Featured System

*281 hours*

* 1. Web App

*245 hours*

* + 1. Site-Wide Branding: *15 hours*
       1. Home Page

*4 hours*

* + - 1. Company logo

*1 hour*

* + - 1. Uniform color scheme

*4 hours*

* + - 1. Consistent design

*4 hours*

* + - 1. “About Us” page

*2 hours*

* + 1. Real Customer Reviews: *56 hours*
       1. Website-based Reviews

*24 hours*

* + - * 1. Database/Entities

*16 hours*

* + - * 1. Web page display

*8 hours*

* + - 1. Facebook-based Reviews

*32 hours*

* + - * 1. Connect to facebook API

*8 hours*

* + - * 1. Collect reviews into database

*8 hours*

* + - * 1. Display reviews on website

*16 hours*

* + 1. Easy-to-Update Pictures: *72 hours*
       1. Upload photos from files

*32 hours*

* + - * 1. Admin-only upload page

*8 hours*

* + - * 1. Database section for photos

*16 hours*

* + - * 1. User-facing photo display on website

*8 hours*

* + - 1. Remove photos

*12 hours*

* + - * 1. Admin-only remove page

4 hours

* + - * 1. Remove from database

*8 hours*

* + - 1. Upload photos from facebook photos

*28 hours*

* + - * 1. Connect to Facebook API

*8 hours*

* + - * 1. Admin-only selection page

*8 hours*

* + - * 1. Store selected photos in database

*8 hours*

* + - * 1. Display photos on website

*4 hours*

* + 1. Search Engine Optimization: *10 hours*
    2. Online Merch store: *92 hours*
       1. Merch browsing page

*16 hours*

* + - * 1. Merch search

*8 hours*

* + - * 1. Database of products

*8 hours*

* + - 1. Shopping Cart page

*16 hours*

* + - * 1. Products List view

*8 hours*

* + - * 1. Individual product view

*8 hours*

* + - 1. Checkout page

*28 hours*

* + - * 1. Payment (API)

*16 hours*

* + - * 1. Layout and styling

*4 hours*

* + - * 1. Database

*4 hours*

* + - * 1. List of products in cart

*4 hours*

* + - 1. Admin stock management page

*32 hours*

* + - * 1. Create database fields

*8 hours*

* + - * 1. Create admin interface for updating

*8 hours*

* + - * 1. Invoice page

*16 hours*

Database entities

*8 hours*

Display of invoices

Layout and styling

*4 hours*

Database connection

*4 hours*

* 1. Project Management

*36 hours*

* + 1. Planning/tracking

*24 hours*

* + 1. Writing documentation

*12 hours*

1. System with Reduced Features

*116 hours*

* 1. Web app

*91 hours*

* + 1. Site-Wide Branding: *13 hours*
       1. Home Page

*4 hours*

* + - 1. Company logo

*1 hour*

* + - 1. Uniform color scheme

*4 hours*

* + - 1. Consistent design

*4 hours*

* + 1. Real Customer Reviews: *24 hours*
       1. Website-based Reviews

*24 hours*

* + - * 1. Database/Entities

*16 hours*

* + - * 1. Web page display

*8 hours*

* + 1. Easy-to-Update Pictures: *44 hours*
       1. Upload photos from files

*32 hours*

* + - * 1. Admin-only upload page

*8 hours*

* + - * 1. Database section for photos

*16 hours*

* + - * 1. User-facing photo display on website

*8 hours*

* + - 1. Remove photos

*12 hours*

* + - * 1. Admin-only remove page

4 hours

* + - * 1. Remove from database

*8 hours*

* + 1. Search Engine Optimization: *10 hours*
  1. Project Management

*25 hours*

* + 1. Planning/tracking

*18 hours*

* + 1. Writing documentation

*10 hours*

1. Timeframe and Workflow

We will use an “agile” approach in which we work in two week “sprints”. In each sprint we will implement a subset of the application’s features. Each sprint will progress in this way:

* At the beginning of each sprint we will meet with you to decide:
  + Which features to implement and their priorities
* We will implement and test the features during the sprint.
* At the end of the sprint we will meet with you to:
  + Demonstrate the features we’ve added to the app.
  + Get your feedback on any changes you would like us to make.

We can allocate at least 40 hours per week of developer time to this project. At 40 hours per week, here are the projected project durations for each variant of the project:

* System with reduced features: 3 weeks
* Fully featured system: 7 weeks

1. Cost Estimate and Payment Terms
   1. As this project is for a college class and we are students, our hourly rate is $0. There will be a cost for hosting after our team hands off the project. Expect around $10 per month.