Software Proposal for Waka Daiko

Date: February 22th, 2024

Organization: Waka Daiko

Client: Jean Lee

RE: Website Proposal for Waka Dako

Hi again Jean,

As I previously mentioned, my team has been planning and designing a new website for Waka Daiko this term, which we'll be creating next term. Currently, our team consists of Kamau Gatson and I, and we look forward to designing and creating this project together for Waka Daiko.

We want to assure you of our commitment to delivering a product that not only meets your needs, but satisfies both you and your end users. One of our foremost priorities is to attentively listen to your requirements, ensuring a comprehensive understanding of your needs. Your feedback is crucial to our success and we will actively seek it at every stage of development, ensuring the final product aligns with your vision. Our goal is to empower you with a sustainable product that continues to serve your needs long after its initial launch.

Please see below for further information on our current proposal. Additionally, please feel free to share any recommendations or ideas that you may have.

Thanks,
Trung Nguyen
CIT Capstone Project
nguyent11@my.lanecc.edu

Software Proposal for Waka Daiko

1. Project overview

Plans & goals include:

- Creating a basic, revamped website.
- Constructing basic admin user accounts, to support restricted areas or features.
    - However, we plan to still keep and link to the private Google Site from the public website side.
- Building an educational web app.
- Converting corporate hosted forms to local, native forms.
- Making an events / announcements page that also supports admin capabilities.

2. Deployment

The web project itself will be hosted on SMARTERASP.NET. This includes the website / educational app, as well as the database. The hosting service offers cheap, server-side hosting for ASP.NET projects, as well as the option to share ownership for hosted projects. This feature allows other accounts to be able to collaboratively access the project content and settings, similar to the project owner.

3. Educational app

A web app that'll contain:

- A digital, metronome tool.
- Soundtracks of shime drumming for background pacing.
- A curated collection of educational videos or text about taiko drumming.

4. Database interactions

Process will involve the porting of currently used; corporate hosted, Google Forms, to local submission forms, as well as the setting up of other database related features.

This will involve:

- Replicating the form fields.
- Receiving submitted form field values and storing them in a local Excel (or remote Google Spreadsheet) file and / or storing the results in a database.

5. Events / announcements page

A page where events / announcements can be:

- Added, deleted, or modified by logged-in admin users.
- Pinned and displayed globally as a navbar banner.

6. Estimate of Effort

Landing Page: ~8 hrs

- A sleek minimalist landing page to present your organization.
    - ~8 hrs

Educational app: ~40 hrs

- Metronome Tool: A component where verified users will be able to interact with a metronome.
    - ~8 hrs
- Metronome Page: A page that holds the metronome component and facilitates search functionality with the sound archive.
    - ~8 hrs
- Shime Resource Page: A page dedicated to the visualization of curated Taiko videos and interaction with text to learn Taiko drumming.
    - ~8 hrs
- Shime Soundtrack Archive: Users will be able to access shime soundtracks to play alongside real Taiko drumming.
    - ~8 hrs
- Collection of Educational Resources: A variety of Taiko videos and text that can be used to learn Taiko drumming.
    - ~8 hrs

Authentication: ~16 hrs

- Create Roles: Create the validated users (Admin, Team Lead, Team Member, Parent, etc.).
    - ~8 hrs
- Login Component: A page to handle login processes.
    - ~8 hrs

Software Proposal for Waka Daiko

Database creation: ~8 hrs
- Cloud Based Database: Creation of a private database holding several schemas for internal use (pics, videos, forms, events, etc.).
  - ~8 hrs

Database interactions: ~40 hrs
- Admin Page: A page for admin users to perform CRUD operations on database related data (pics, vids, forms, events, etc.).
  - ~8 hrs
- Private Team Page: A page for: authenticated users to view team assigned duties; for admin users to assign team members to certain groups (teaching, performing, etc.) and schedules.
  - ~8 hrs
- Performance Request Page: A bot-proof page where site visitors can request a performance by Waka Daiko and provide their own contact information.
  - ~8 hrs
- Signup Page: A bot-proof page where site visitors can apply to join Waka Daiko and provide their own contact information.
  - ~8 hrs
- General Inquiries Page: A bot-proof page where site visitors can reach out to the Waka Daiko leadership about any general questions that they may have and provide their own contact information.
  - ~8 hrs

Database deployment: ~16 hrs
- Backend: Implement the back-end functionality and integrate it into the web app.
  - ~8 hrs
- Frontend: Rollout front-end functionality for securely interacting with the database.
  - ~8 hrs

Events / announcements page: ~36 hrs
- Create Event Feature: An option where an admin can choose to create a new event / announcement.
  - ~4 hrs

- Update Event Feature: An option where an admin can choose to modify an existing event / announcement.
  - ~8 hrs
- Delete Event Feature: An option where an admin can choose to delete an existing event / announcement.
  - ~8 hrs
- Pinned Banner Feature: An option where an admin can choose to 'pin' a certain event / announcement so that it's displayed globally on all site pages, near the top navbar (navigation bar).
  - ~8 hrs
- Search Feature: An option where site visitors can sort for certain events via date presets or a search field.
  - ~8 hrs

Project Management: ~16hrs
- Planning and Tracking: Admin documentation
  - ~8 hrs
- Documentation: Documentation describing how to interact with the app
  - ~8 hrs

Total estimated time: ~180 hrs
- We've carefully estimated the time required to implement each part of the planned project, but we're also aware that work hour estimations are almost never accurate and can fluctuate depending on varying circumstances. The actual time required may be more or less than the provided estimated timeline.

7. Timeframe & workflow

We'll be using 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'll meet with you to decide which features to implement and what their priority statuses are.
- We will implement and test the features.
- At the end of the sprint we will meet with you to:
  - Demonstrate the features that we've added to the app.

○ Get your feedback on any changes you would like us to make.

We'll allocate ~20 hours per week of developer time to this project. At ~20 hours per week, we anticipate completing the project in about three months time, roughly.

Project is estimated to be completed by June 10th, 2024. Our team will be designing and creating the capstone project between two-terms.

8. Cost estimate & payment terms

Financial compensation & cost estimates
- Since our team is composed of students, we're not expecting any financial compensation and are willing to work on this project free of charge, in exchange for the learning experience that helps meet our two-term, class assignments and requirements.
- We also don't plan on billing you any financial charges.
  - However, in the long term, if you'd like to help contribute to financial costs, we can discuss that if and when.

Hosting
- Trung has already purchased a SMARTERASP.NET 'advance' plan subscription for a single year and can set up, host, and share the hosted project's login credentials for those associated with the project on request.
  - In the future; a SMARTERASP.NET 'basic' plan subscription, which includes a singular website and a singular database, should be sufficient enough to host the website project that we're planning to create, if it's agreed upon to actually use it long term, for Waka Daiko.

SSL certificate (for HTTPS)
- Each SMARTERASP.NET plan offers a free SSL certificate, which should be sufficient enough for testing and also perhaps for handling mass site traffic.
  - More information: https://www.smarterasp.net/free_lets_encrypt_ssl_hosting

Domain
- A custom domain name / extension such as wakadaiko.com is not included with a SMARTERASP.NET subscription and will need to be purchased separately.

Software Proposal for Waka Daiko

- ○ Domain names cost about $12 for each.
- ○ SMARTERASP.NET does however, by default, use temporal domain URLs based on your account username and website name. Which means for testing purposes, you can use the temporal URL like an average domain name.
    - ■ For example: wakadaiko-001-site1.itempurl.com
    - ■ The temporal URLs do look ugly and unprofessional, but they get the job done and can be used for simple testing and previews.