# Software Development Proposal for HAO

February 3, 2020

Dr. Joan Smith Health Association of America

Re: Enclosed Software Proposal

Dear Dr. Smith,

Please find enclosed our proposal for development of a conference web app for the HAO (Health Association of Oregon).

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 conference 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 of John Jones, Jane Doe and I have learned to write a variety of different web apps and desktop 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,

Brenda Bright, Team Lead CIT Capstone Project brendab@my.lanecc.edu 123-456-7890 (mobile)

## 1. Project Overview

The goal of this project is to develop a web app to be used by HAO conference organizers and attendees. The app will have similar functionality to the HAA (Health Association of America) conference app. In particular, for each conference, it will have these features:

- a. Main agenda
- b. My Schedule—personal schedule for the attendee
- c. Exhibitors
- d. Speakers
- e. Attendees
- f. Handouts—downloadable pdfs or links to conference web site pages
- g. Surveys
- h. Sponsors—advisements can be added to conference content

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

There will also be a cloud-based "back-end" with a web page that provides a means for conference organizers to enter conference information into a cloud-based database from which the conference web app will pull conference information.

In the future mobile apps could be developed that would also use this same "backend".

## 2. Deployment

The web app and the "back-end" will be hosted on the Microsoft Azure cloud

#### 3. Documentation

The app will feature built-in "help" documentation. We will provide an online administrator's guide for entering conference information via the back-end web page.

#### 4. Estimate of Effort

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

a. Full featured system

#### Web App

- i. Home Page: Displays buttons for each section of the app. *4 hours*
- ii. Login page: Allows users to sign in or sign up with the app. *4 hours*

iii. Navigation menu: Drop-down menu accessed from the app's navigation bar. Allows for quick access of sections of the app (same as the home view), and allows the user to sync data from the backend.

12 hours

- iv. Main Schedule & Personal Schedule: Displays all events in the conference, and events that the user has added to their schedule, respectively. Lists are organized by day. Items can be added to the device's calendar, and can be located using the map.

  16 hours
- v. Posters: List of posters, organized by day appearing. 6 hours
- vi. Exhibits: List of Exhibits at the conference, sortable by name or level. *6 hours*
- vii. Sponsors: List of conference sponsors, sortable by name or pledge level.

  6 hours

## Back-end

- i. Deploy: Deploy back-end, integrate with the web app. *16 hours*
- ii. Data stores: create data stores for each list, and implement datasyncing.

16 hours

- iii. Login back-end: Implement sign-in/sign-up on back-end. *16 hours*
- iv. Maps: Integrate Google maps with the app. 8 hours
- v. Data entry: Create web-app for user-friendly data entry. *30 hours*

### **Project Management**

- i. Planning and tracking
  - 5 hours
- ii. Writing documentation
  - 5 hours

# Total for Web App and Back-end: 150 hours

b. System with reduced features

## Web App

*i.* Home View: Displays buttons for each section of the app. *4 hours* 

ii. Navigation menu: Drop-down menu accessed from the app's navigation bar. Allows for quick access of sections of the app (same as the home view), and allows the user to sync data from the backend.

12 hours

iii. Main Schedule & Personal Schedule: Displays all events in the conference, and events that the user has added to their schedule, respectively. Lists are organized by day. Items can be added to the device's calendar.

10 hours

iv. Posters: List of posters.

4 hours

v. -Exhibits: List of Exhibits at the conference, sortable by name or level.

4 hours

vi. Sponsors: List of conference sponsors, sortable by name or pledge level.

4 hours

### Back-end

- i. Deploy: Deploy back-end, integrate with app front-end (16 hours)
- ii. Data stores: create data stores for each list, and implement datasyncing (16 hours)
- iii. Data entry: Create web-app for user-friendly data entry. (30 hours)

### Project Management

iv. Planning and tracking

5 hours

v. Writing documentation

5 hours

# Total for Web App and Back-end: 110 hours

We have carefully estimated the time required to implement each part of the system, but estimation is never exact. The actual time required may be somewhat more or less than the estimate.

### 5. 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.
  - The maximum number of hours you authorize us to work.
- We will implement and test the features.
- At the end of the sprint we will meet with you to:

- o Demonstrate the features we've added to the app.
- o Get your feedback on any changes you would like us to make.

We can allocate at least 36 hours per week of developer time to this project. At 36 hours per week, here are the projected project durations for each variant of the project:

- Full featured app and back-end: one month.
- Reduced feature app and back-end: three weeks.

## 6. Cost Estimate and Payment Terms

Since OMA is a non-profit organization we are offering a discounted hourly rate of *\$0 per hour*. (Our normal rate is \$75 per hour for development and \$125 per hour for management.) At the discounted rate, these are the cost estimates:

- The full featured app and back-end: \$0
- The reduced feature app and back-end: \$0