Health Passport WebApp Project Proposal

1. Customer

The **Community Health and Social Services Network (CHSSN)** is a non-profit organization whose aim is to support and contribute to the vitality of English-speaking communities of Quebec, in particular addressing their needs on health issues and inequalities.

2. Proposed Product

2.1. Description of Customer Needs

According to the 2006 Canadian Census

[http://www12.statcan.gc.ca/census-recensement/2006/index-eng.cfm], there are 607 165 residents of Quebec whose mother tongue is English. This corresponds to 8.2% of the total population of the province. Also there are 911 892 residents (12% of the province's total population) whose mother tongue is neither French nor English. By the time of this census, 885 445 residents (11.9% of the total population) identified English as their first official language spoken (FOLS). This English FOLS demographic group registered an average annual growth of 1.3% since 2001.

Quebec law

[http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&fil e=/S_4_2/S4_2_A.html] states that "English-speaking persons are entitled to receive health services and social services in the English language, in keeping with the organizational structure and human, material and financial resources of the institutions providing such services and to the extent provided by an access program," and that "Each agency, in collaboration with institutions, must develop a program of access to health services and social services in the English language for the English-speaking population of its area in the centres operated by the institutions of its region that it indicates or, as the case may be, develop jointly, with other agencies, such a program in centres operated by the institutions of another region. Such an access program must take into account the human, financial and material resources of institutions..." Many health institutions, however, do not operate under a sufficiently strong access program, and not all institutions are obligated or able to provide services in English.

Some efforts have been made by private and public entities to aid English speaking communities in accessing health care services in Quebec. The Megantic English-speaking Community Development Corp. has released a "Health Passport"

[http://www.mcdc.info/uploads/pdf/PasseportSanteversion1.5_2010.pdf], a printed booklet that carries personal medical information, terminology, and contact information for the patient. The Health Passport was nominated by their regional Agency for a "most promising initiative prize," and was reportedly used by Francophones traveling outside Quebec, as well as French-speaking communities in other provinces. This booklet inspired a publication of the same name by the Newfoundland and Labrador French Health Network [http://www.francotnl.ca/FichiersUpload/DocumentsPages/20121110Passeport_sante.version finale.octobre2012.pdf]. The success of these initiatives highlights the need for a more flexible and scalable alternative which takes full advantage of modern technology and adapts to the necessities of the growing language minorities in Canada.

2.2. Description of the Product

The Health Passport WebApp aims to mimic the idea of the Health Passport into a fully interactive web application. The design and functionality of the application will be developed with emphasis on usability and accessibility. All of the application's code will be modular, and will allow for future content changes and possible expansion by the original makers and/or other developers. Furthermore, the flexibility of the application's framework should allow for its use in other languages and contexts.

The Health Passport WebApp will include a **front end** (an interactive application for the user), a **back end** (a remote database for managing application content), and a **content management system** (CMS) to allow the customer to modify the content without the need for developer assistance.

The front end of the Health Passport WebApp will support any iOS6+ and any modern Android smartphone, as well as any of the following desktop browsers: Chrome, Safari 6+, Opera 12+, Firefox, and Internet Explorer 9+. Support for older browsers and operating systems may be somewhat restricted.

The front end of the Health Passport WebApp will include:

- 1. A **launch view** to be shown while the application content is being downloaded.
- 2. A **main menu** showing three options for the user: Personal Medical History, Medical Lexicon, and Contact and Information.
- 3. A **Personal Medical History interactive form**, with a **print option**, and a **save to PDF option** available at any time. Any unanswered question will be printed as an empty box for the user to fill up manually.
- 4. A **Medical Lexicon interactive dictionary** with simultaneous search and browse options, including an **interactive pain scale**.
- 5. A **Contact and Information section** with browse and search options. The initial content of this and other sections will be subject to the information made available

by the customer to the developers. However, this content may be expanded in the future using the content management system.

The content management system of the Health Passport WebApp will include:

- 1. A **password protected website** to be accessed only by persons authorized by the customer.
- 2. A user interface within this website to modify the content of the front end application, including questions in the Personal Medical History section, and items in the Medical Lexicon and Information sections.

2.3. Development Platforms and Languages

The front end of the Health Passport WebApp will be developed in **HTML5**, **JavaScript** and **CSS3**.

The back end and content management system will be developed in **PHP** with a **MySQL** database.

Some free third party JavaScript libraries will be used and embedded into the application. These include the **jQuery** library.

3. Phases and Deadlines

All of the deadlines below, except for the final one (June 27th) are subject to change depending on the date the contract is signed. The developers are aware that some of the work outlined below may need to be completed in less time than initially planned in order to meet the final deadline. Since the development and design team consists of several members, most of the listed phases are to be completed parallel to other tasks.

3.1. Content Compilation and Database Setup / Suggested Deadline: May 16th, 2014.

An initial database will be set up and loaded with content.

3.2. Building a framework for the web application / Suggested Deadline: May 17th, 2014.

A skeleton for the web application will be developed so that all of the application's content is downloaded on first launch and the application can be used offline as a web clip. This skeleton will also include a main menu listing all three main sections of the application, as well as the core functionality to dynamically load these sections when needed.

3.3. Setting up a code repository with necessary libraries / Suggested Deadline: May 19th, 2014.

A Git repository will be created for the project. It will include as submodules all of the libraries and third party frameworks necessary to develop the web application.

3.4. Creating the Personal Medical History section / Suggested Deadline: May 31st, 2014.

This phase includes developing a table view with a simultaneous search functionality and cells that become full-screen views on selection, along with three different types of input mechanisms: text field, slider, single/multiple choice. A local database will store the input data, and a free third party JavaScript solution will be used to generate PDF files for printing.

3.5. Creating the Medical Lexicon and Pain Scale section / Suggested Deadline: June 5th, 2014.

This phase involves using the previously developed table view with simultaneous search (see 3.4) and implementing modal views to display cell content. An interactive pain scale using a slider will also be included.

3.6. Creating the Information section / Suggested Deadline: June 9th, 2014.

This phase includes creating an easy-to-use contact page for emergency and other medical services. Depending on the customer's needs, this section may also support simultaneous search.

3.6. Creating and implementing the design of the application / Suggested Deadline: June 12th, 2014.

The design creation part of this phase will be done simultaneously during phases 3.4, 3.5 and 3.6. The implementation of the design will start once phase 3.6 is completed.

3.7. Testing and customer feedback / Suggested Deadline: June 20th.

The customer will be able to test and provide feedback on most of the application's functionality during development. The full application will be available for testing after phase 3.6 is completed.

3.8. Creating the content management system / Suggested Deadline: June 25th.

This phase includes creating a very simple user interface for the customer to decide and manage the content that is available to the user within the application. This interface will be password-protected and will allow direct modification of the MySQL database. A backup system will also be provided for security.

3.9. Application deployment / Suggested Deadline: June 27th.

The application will be made available online on the customer's website with a download option for smartphones and tablets.

4. Team and Financial Proposal

The roles listed below are only the primary roles of each team member. All of the team members have at least some personal experience with web development and design, and each of them will contribute to the completion of most of the tasks enumerated in Section 3.

Team members are to be paid individually as self-employed consultants on the basis of the completed product as described in Sections 2 and 3.

Team Member	Website / Contact	Primary Role	Quote (CAD)
Mariolys Rivas	ca.linkedin.com/in/mariolys/ mariolysrivas@gmail.com 1 - 514 - 589 0972	Project Manager	1250
Gabriela Sue	www.gabysue.com/portfolio/ gabrielasuemora@hotmail.com 1 - 514 - 629 5485	Web Designer	1250
Adolfo Rodriguez	ca.linkedin.com/in/wircho/ adolfo@merchlar.com 1 - 514 - 465 7827	Web Developer	1250
Alexandra Lemus	ca.linkedin.com/in/alexandralem usr/ alexandra.lemus.r@gmail.com 1 - 514 - 892 3878	Research and Content	1250
		TOTAL (CAD):	5000