

## **Regina Food Bank Hamper Booking Service Project**

Team Raspberries:

Eric Chartier, Dinesh Dalip, Mikayla Peterson

Project Sponsor:

Dr. Tim Maciag (ENSE 271 Lecturer)

Course:

ENSE 271: People-Centred Design

Submitted on:

April 11, 2022

## Table of Contents

1.0 Business Need and Opportunity	1
2.0 Reflections on Project Planning	2
2.1 North Star and Carryover Customers	2
2.2 Project Assumptions	2
2.3 Project Constraints	2
2.4 Key Findings from Empathy Mapping and Affinity Diagramming	2
2.5 User Story Map & Minimum Viable Product	3
2.6 Prototyping Findings	3
3.0 Reflections on Project Results	5
3.1 Feelings About the Project	5
3.2 Translating the Prototypes to WordPress	5
3.3 How Lecture Concepts Affected our Project	6
3.4 What Would We Do the Same or Differently in Future Projects	7
3.6 Opportunity Summary and Design Ideas for Future Work	7
4.0 WordPress Theme and Plugins	9
4.1 Theme	9
4.2 Plugin List	9

## 1.0 Business Need and Opportunity

The content below was copied from URCourses:

The Regina Food Bank uses a Customer Relationship Management (CRM) tool for food provisioning built by a company called [Link2Feed](#) (L2F). L2F has signed an exclusive engagement with Food Banks Canada to manage CRM activities. At the beginning of the pandemic, L2F rushed a product to launch that allowed for online scheduling, where the Regina Food Bank was part of the pilot group. Ultimately the project failed because its application was better suited to real-time sign up (i.e. when clients were already inline) and was not a viable solution for advanced booking.

The system provisioned by L2F can import and export data and can integrate through an application programming interface (API). The opportunity here is to design, prototype, and (likely later) explore the development of a solution that allows clients to book hamper pick-ups 24/7. Thus, eliminating barriers to access and potentially freeing up time to grow the overall impact of the Food Bank on the lives of people facing food insecurity.

## **2.0 Reflections on Project Planning**

### **2.1 North Star and Carryover Customers**

We envision the North Star customer to be individual Food Bank users. These individual users are deemed to want ease of access to the Food Bank's service and confirmation of their orders. We envision the Carryover customers to be other Canadian or North American Food Banks who can find utility in our design that would help them give ease of access to their users.

### **2.2 Project Assumptions**

During the initial project planning stage, we established a list of assumptions:

- Most of our users should have internet connectivity; the client pointed out that most users have mobile phones that can connect via Wi-Fi.
- Users should be able to use the system at any time and be able to modify their orders.
- Front-end implementation will be done using WordPress.

### **2.3 Project Constraints**

During the initial project planning stage, we established a list of constraints:

- Any product we create will have to connect with the Food Bank's current online systems. We may be limited in what information we can get or send to the other system components.
- Limit the number of hampers a user can request in a specific time frame.
- The number of hampers that can be prepared in a specific time frame is limited.
- We are getting feedback about our designs from the client, the CEO of the Regina Food Bank, and not actual Food Bank users. The feedback from the client and users could be very different.
- We are limited by the technology of WordPress and its plugins.

### **2.4 Key Findings from Empathy Mapping and Affinity Diagramming**

Affinity diagramming and empathy mapping helped guide our group to make sure we truly understood the problem we were trying to solve. Empathy mapping allowed us to gain a deeper understanding of how users feel and react to the current system. This understanding allowed us to empathize with our North Star customer and identify significant pain points such as only being able to book hampers during a set period, using their possibly limited mobile data to phone in, and the long wait times over the phone. We created two empathy maps; however, we focused on the 'Food Bank Customers as Users' map throughout the rest of the project. Affinity diagramming helped us further define the problem and begin thinking about high-level design choices. We noted concrete facts about the users, hampers, and current ordering process, and then came up with basic design ideas such as the order process flow.

### **2.5 User Story Map & Minimum Viable Product**

No changes were made to the initial User Story Map (USM) or the first Minimum Viable Product (MVP) once they were produced. To produce our MVP, we only considered the bare minimum functionality we would need to get the system up and running. To get the basic system up and running, all we need to do is

collect basic user information, collect the order information, provide instructions to receive the hamper, and provide order confirmation. We felt that the scope of our MVP and USM were appropriate due to the time and technological constraints present in this project. If we had more time and experience with WordPress, we would have moved items from MVP2 into MVP1. For example, we would have added login functionality to MVP1. Below is a screenshot of MVP1:

The screenshot shows a form layout with several sections:

- Fill out information form**: A large text area for user information.
- [30] Request food hamper type**: A dropdown menu.
- Select food hamper time**: A dropdown menu.
- [1] Confirm order screen**: A button.
- [50] From Drive-thru/ pick up**: A button.
- [30] Default confirmation of order**: A button.

## 2.6 Prototyping Findings

After discussing and giving everyone feedback on their individual prototypes, we used Eric's prototype to form our high fidelity prototype. Our final design used several forms to gather all the required information. We focused on the following three class topics:

### *Affordances and Signifiers*

The pickup and delivery method pages have a dynamic text field that updates as the user interacts with the calendar and time selector. The user's selections are highlighted in a different colour on the calendar and time selector. This is an affordance to the user since they are given a visual and a plaintext display of their selections.

< March >						
Mo	Tu	We	Th	Fr	Sa	Su
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

time:

9:00am	9:30am	10:00am	10:30am	11:00am
11:30am	12:00pm	12:30pm	1:00pm	1:30pm

Pick up on March 11, 2022 @ 11:00am

### *Locus of Attention*

If a task takes too long to complete and there are no signifiers to indicate the current step of the task, there is a risk of the user becoming distracted. To help mitigate distractions and indicate how far they are in the ordering process, we provided a linear 'timeline' of the ordering process's steps. This allows users to verify their progress in the ordering process and hopefully prevent disengaging the user.



### *Gestalt Theory*

The Retrieval Method's calendar and time selector have the Gestalt Principles of similarity and proximity. The overall design of the time selector and calendar are very similar. This similarity combined with the proximity of the two controls should indicate to the user that they can be interacted with in the same manner. The proximity of the controls also implies there is connectivity between them; the time they select in the selector means that they are picking that specific time on the date they chose.

### **3.0 Reflections on Project Results**


#### **3.1 Feelings About the Project**

We appreciated the opportunity to work on a hands-on project from start to finish. It was satisfying to see the progression from our initial UX maps and diagrams to our final website. The initial planning activities seemed to go well, and we created a solid foundation; however, our final product could have been more polished. It was also nice to work directly with a client throughout development. Having a real-world problem to solve made it easy to focus the project scope on the client's needs and the North Star customer. It would have been nice to have more time to meet with the client. We felt like we spent most of our time trying to show the client what we had done since the last check-in, and we had very little time to have a productive conversation with the client. The open-ended nature of the project was both good and bad. It was good since we had the freedom to explore design ideas to figure out what did and did not work, and it is an insight into the design problems we may have to solve at work. It was hard to figure out what exactly we were supposed to do to achieve an acceptable grade.

Working with WordPress was frustrating. Occasionally, our website would take three minutes to load a single page. Initially, we were unsure whether the load times were long because of the server or a plugin we installed. One of the plugins got disabled, and the issue appeared to be fixed. AdobeXD was very frustrating for some members of the team to get used to. We had issues regarding team communication that started at the beginning of the project, and they got worse over time. Towards the end of the project, the team lacked cohesiveness. We sacrificed design choices such as element placement and colour for functionality when creating the WordPress website. We spent a lot of time attempting to mix and match plugins since the connectivity discussed in the documentation did not always work when we implemented them.

#### **3.2 Translating the Prototypes to WordPress**

It was challenging to translate our ideas for our high-fidelity prototype into WordPress. These issues occurred due to the plugins not always working well together despite following the documentation. All the documentation we required was spread across multiple plugins, which made implementation difficult. Most of our time was spent researching plugins that would provide the functionalities as designed in our high-fidelity prototype. Perhaps with more time, different plugins, or avoiding WordPress entirely, it may have been possible to follow our prototype more closely. Below are screenshots of the contact information screen from our high fidelity prototype and our website that show how different they ended up being:



Progress bar: About You (selected), Contact Information, Household and Income, Dietary Restrictions and Considerations, Retrieval Method, Overview and Submit, Complete

### Email Addresses

Email Address:	JohnDoe123@example.ca	X
Email Address:	JohnDoe123@example.ca	X


[+ Add](#)

### Phone Number

Primary Phone:	<input checked="" type="radio"/>	Phone Number:	13067016533	Extension:	<input type="text"/>	Phone Type:	-Please Pick One-	X
----------------	----------------------------------	---------------	-------------	------------	----------------------	-------------	-------------------	---

[+ Add](#)

*Contact Information Screen High Fidelity Prototype Screenshot*



## Contact Info

[+](#)

Phone:

Phone type:

[+](#)

*Contact Information Screen WordPress Screenshot*

### 3.3 How Lecture Concepts Affected our Project

Overall, the people-centred design topics discussed in the class were helpful for the project. Once we understood them, they were easy to implement into our designs. Using tools such as empathy mapping allowed the team to understand the customer's needs deeper than their surface-level needs. Specific design topics, such as locus of attention, aided us in creating a useful design that solves common UI/UX problems such as wandering attention. Without such topics, we would not have thought about problems



such as wandering attention or implemented a progress tracker to mitigate this issue. Having empathy for the user changed the language we used in the UI to make it more humane. After all, the people using our solution are not machines—they are people. This was primarily done by changing the wording of the next step buttons. For example, instead of saying “go to dietary consideration page”, the wording is “tell us any dietary considerations for your food hamper”. An example of this wording is shown below:

#### Household Incomes

Income Source: --- ▾



**Tell us any Dietary Considerations for your Food Hamper**

### 3.4 What Would We Do the Same or Differently in Future Projects

We would reuse many of the same design tools we used in this project. Empathy mapping, affinity diagramming, and low-fidelity prototyping were beneficial. The fast feedback cycle and involving the client in every stage of development was also helpful. The large amount of client involvement provided us with helpful feedback in the early stages of development when it was easier to make changes. Something that we would do differently is have weekly scrums. We did not have weekly scrums during this project, which made it difficult to organize ourselves. On occasion, we rushed to finish project deliverables before the due date, which could have been circumvented had we been more organized. Overall, we all need to work on being better teammates and learn how to be more effective team members. We would also try to find better technologies that allow for pair programming or allow concurrent development. Working concurrently would help divide the workload among all members equally. Ideally, we would like to avoid using WordPress again, but if we had to use it again, we would try to find better plugins to use.

### 3.6 Opportunity Summary and Design Ideas for Future Work

Overall it was a good learning opportunity in several ways. This project provided us with the opportunity to develop a piece of software from start to finish. It also allowed us to work closely with the client to reach a deep understanding of the problem. We were able to immediately apply concepts we learned in class to a tangible, real-world problem. Some of these applications include implementing a progress tracker to mitigate wandering attention and using natural mappings with the calendar and time pickers to make it easier for users to choose their date and time selections. For the future of the application, we suggest adding login functionality to allow for automatic form filling, expanding the system to allow batch ordering for support agencies, sending users automated reminders, and allowing users to set up recurring hamper bookings.

## 4.0 WordPress Theme and Plugins

### 4.1 Theme

The WordPress theme we chose was Neve. We chose Neve since it is a lightweight, clean, responsive, and aesthetically pleasing theme. The theme's responsiveness was important so that we could create a similar experience on desktop and mobile devices.

### 4.2 Plugin List

#### *Contact Form 7*

User Rating: 4/5 (1,945 ratings)

Last Updated: 2 months ago (as of April 10, 2022)

Active Installations: 5+ million

Purpose: Allows the creation and management of multiple forms. All forms are customizable with simple markup to tailor them for specific purposes. We used this as the basis of our ordering process.

#### *Contact Form 7 - Repeatable Fields*

User Rating: 4.5/5 (16 ratings)

Last Updated: 2 years ago (as of April 10, 2022)

Active Installations: 7,000+

Purpose: Allows the option to create repeatable groups of fields with Contact Form 7. We used this in our form ordering process for fields that allow multiple inputs, such as 'Identification Document' on the About You page.

#### *Contact Form 7 Multi-Step Forms*

User Rating: 4/5 (44 ratings)

Last Updated: 1 month ago (as of April 10, 2022)

Active Installations: 20,000+

Purpose: Allows the creation of multi-page forms with Contact Form 7. This plugin sends a single email with all the information collected upon submission. We used to connect all the individual forms in our ordering process. There is a pro version that allows up to 5MB of data to be submitted and the creation of

more steps; however, the pro version of this plugin is unnecessary for this project since we were able to implement all the steps we need for free. The pro version costs \$15.99 annually or \$79.99 for a lifetime subscription.

#### *Contact Form 7 Shortcode Enabler*

User Rating: 5/5 (12 ratings)

Last Updated: 4 years ago (as of April 10, 2022)

Active Installations: 20,000+

Purpose: Enables the usage of external shortcodes inside Contact Form 7 forms.

#### *Easy Appointments*

User Rating: 4.5/5 (118 ratings)

Last Updated: 1 week ago (as of April 10, 2022)

Active Installations: 30,000+

Purpose: Allows the setup, usage, and management of an appointment booking system. The plugin allows appointments for multiple locations, services, and workers. Email notifications can be sent with this system. We used this for the actual date and time selection to receive a hamper.

#### *Flamingo*

User Rating: 4/5 (109 ratings)

Last Updated: 4 months ago (as of April 10, 2022)

Active Installations: 700,000+

Purpose: Allows form data submitted through Contact Form 7 to be saved and managed through the WordPress admin screen. We used this to save bookings and user information submitted during the ordering process.

#### *Progress Bar*

User Rating: 5/5 (22 ratings)

Last Updated: 2 months ago (as of April 10, 2022)

Active Installations: 2,000+

Purpose: Allows the usage of a simple progress bar on different pages. We used this as a visual indicator on the order forms to give the user an idea of how far they are in the ordering process.