Detailed Design of Non-Instructional Intervention PlantPath Canada: A Storyboard for a Health Intervention App Sina Torkaman Momeni

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Title	PlantPath Canada	
Client	Health Canada	
Target Audience	Canadians at risk of chronic conditions like heart disease and diabetes, interested in adopting a plant-based diet.	
Type of Intervention	Non-instructional; resource-based and motivational digital intervention through a mobile app.	
Objective	 Increase the adoption and sustained use of plant-based diets among Canadians through motivation. Provide interactive and accessible tools that guide users through meal preparation and nutrition tracking. 	
About this Intervention	PlantPath Canada is designed as a direct response to the growing need for better tools that effectively support individuals in adopting and maintaining a plant-based diet. Designed with the user in mind, the app includes interactive modules such as Quick Reference Guides, Health Points & Rewards, Community Support Forums, and Success Stories. It is built with simple graphics and user-friendly interfaces, making it accessible and appealing to a wide demographic, thereby enhancing the overall user experience and facilitating a smoother transition to healthier eating habits.	
Assumptions	 Users are familiar with basic smartphone operations. Users have a preliminary understanding of plant-based diets. 	
Production Tools Used	 Design Tools: Adobe XD, Figma Programming Languages: Swift (iOS), Kotlin (Android) 	
Unique Issues	 Developing an app that is within the assigned budget. Ensuring cross-platform compatibility and maintaining user data privacy. Ensuring all dietary and health information posted in the forums are accurate and up-to-date. 	
Your Contributions	My primary contribution involved the integration of the content with engaging, user-friendly design elements to enhance learning and user experience that would not only encourage but also lead to a sustained use of the app and in turn the implementation of a plant-based diet. While I designed a rough outline of the app I will need to be collaborating closely with UI/UX designers, to ensure that the instructional materials are accessible and intuitive, incorporating interactive elements.	

Standards				
Fonts	RobotoKrona One			
Color Palette	#FFFFFF #27394A #39B54A #98EC84			
Link to Interactive Prototype of the Designed App				
https://www.figma.com/proto/9zkzBtpXwdBrRZeZavwQYF/H ome-Page?type=design&node-id=2-15&t=wnm8iN9wLGJsEEi M-1&scaling=scale-down&page-id=0%3A1&mode=design				

Storyboard:

Page 1 Description (Main) **Page 2 Description (Intro) Visual Elements Visual Elements** • Simple logo combining elements of plant-based food • Button 1 (fork and knife) and health (heart). **User Actions & Responses** • 3 buttons Swiping down/up: moves down/up the text Sponsor logo at the bottom Tapping on Button 1: Takes user to page 3 **User Actions & Responses Suggested Text** Tapping on Button 1: Takes user to the login page • A welcome message and a brief description of the four Tapping on Button 2: Takes user to the sign up page tools the app offers. (Sample text provided in the Tapping on Underlined Text Button: Takes the user to the Prototype) welcome page. Page 1 Layout Page 2 Layout through active engagement with our app. Redeem your points for exciting healthrelated rewards. Success Stories: Get **PlantPulse** inspired by the success stories of others who have made significant health strides through their diet changes **Button 1** Start Your Journey: Dive into the world of health and wellness with your Button 2 Name personalized dashboard. Set Scrollable your dietary preferences and & Logo Text health goals, and let us tailor your experience to suit your We are excited to see you grow Sponsor Button 1 and thrive with PlantPulse. Tap Here to Enter as Guest Explore, engage, and transform your health starting today! Text Button

Page 3 Description (Tools Menu) **Page 4 Description (Settings) Visual Elements Visual Elements** • Four images each representing a tool with the title of the Settings Icon on top of the page tool on it. Four stacked buttons **User Actions & Responses User Actions & Responses** Tapping on Back Button: Takes user to page 2 Tapping on Back Button: Takes user to page 3 Tapping on Images 1,2,3,4: Takes user to pages 5,9,13,17 Tapping on Buttons 1 & 2 changes accessibility settings Tapping on Buttons 4 signs user out **Suggested Text** • "Discover Your Tools" **Suggested Text** Name of the 4 tools (Provided in the Prototype) • Change Font Size / Change Color Palette / About Page 4 Layout Page 3 Layout **Discover Your Tools** Back Back **Button** Button Change Font Size Change Color Palette **Button 1 Button 2 Button 3 Images Buttons Button 4**

Page 5 Description (Tool 1 Menu) Page 6 Description (Story Submissions) **Visual Elements Visual Elements** • Photo of a person reading Stacked buttons of submitted stories Photo of a person writing Each button has a name and date of submission **User Actions & Responses User Actions & Responses** Tapping on Back Button: Takes user to page 3 Tapping on Button 1: Takes user to page 7 Tapping on Image 1: Takes user to page 6 **Suggested Text** Tapping on Image 2: Takes user to page 8 • Select a Story **Suggested Text** • Select an Action / Read Others's Stories and Get Inspired / Submit Your Story and Inspire Others Page 5 Layout Page 6 Layout Select a Story **Select an Action** Liam Tremblay March 19, 2024 Raj Patel January 11, 2024 Back Back **Button** Button Sophia Rossi December 20, 2023 **Buttons** for Ming Chen August 20, 2023 Submitted **Stories** James O'Connor August 16, 2023 and Get Inspired August 9, 2023 Olga Kuznetsova Carlos Garcia March 14, 2022 Amir Al-Hassan February 28, 2022 **Images** Esther Van der Berg February 6, 2022 Submit Your Story and Inspire Others **Buttons** April 25, 2021

Page 7 Description (Story Sample) Page 8 Description (Submitting a Story) **Visual Elements Visual Elements** • Image(s) attached to the submitted story Space for Text Input Two stacked buttons **User Actions & Responses** Tapping on Back Button: Takes user to page 6 **User Actions & Responses** Scrollable Text Tapping on Back Button: Takes user to page 5 Tapping on Back Button 1: Takes user to next screen **Suggested Text** Tapping on Back Button 2: Takes user to page 5 Submitted inspirational story (Sample provided in the **Suggested Text** Prototype) • Attach Photos / Submit Your Story Page 7 Layout Page 8 Layout Back **Back** Button **Button** Attached Photo 'Hello everyone, I'm Liam for Tremblay. I want to share with you the Story my transformative journey of overcoming heart disease by Scrollable adopting a plant-based diet. This **Button 1** journey began out of desperation, after years of battling with heart disease that seemed only minimally responsive to conventional medications. I was **Button 2** constantly fatigued, and my health was on a steady decline. That's when I decided to take a radical step towards changing my diet. Transitioning to a plant-based diet marked the beginning of a profound change in my life.

Page 9 Description (Tools 2 Menu)	Visual Elements • Images of different types of legumes User Actions & Responses • Tapping on Back Button: Takes user to page 9 • Scrollable Menu of Images • Tapping on Image 1: Takes user to page 11 Suggested Text • Select a Type
Visual Elements	
Page 9 Layout Select a Category Grains	Page 10 Layout Select A Type Back Button Black Beans
Legumes Legumes as Buttons	Kidney Beans Images as Buttons

Page 11 Description (Legume Info)	Page 12 Description (Grain Info)
Visual Elements • Text Only	Visual Elements • Text Only
 User Actions & Responses Tapping on Back Button: Takes user to page 10 Scrollable Text 	 User Actions & Responses Tapping on Back Button: Takes user to page 10.1 Scrollable Text
 Suggested Text Soak Time / Water Ratio / Cook Time Information on the selected grain (sample provided in the Prototype) 	 Suggested Text Water Ratio / Cook Time Information on the selected grain (sample provided in the Prototype)
Page 11 Layout	Page 12 Layout
Black Beans Soak Time: 2 Hours/Overnight Pulse:Water Ratio = 1 to 3 Cook Time: 48-00 Minutes (per 100 gr) Calories: 132 Carbohydrates: 23.7 gr Protein: 8.9 gr Fat: 0.5 gr Fiber: 9.7 gr Vitamin B1: 0.2 mg Vitamin B2: 0.1 mg Vitamin B2: 0.1 mg Vitamin B3: 0.5 mg Vitamin B6: 0.1 mg Folate: 149 mcg Vitamin B5: 0.3 mg Calcium: 33 mg Iron: 1.8 mg Magnesium: 60 mg Phosphorus: 120 mg Potassium: 355 mg Zinc: 1.1 mg Text	Couscous Grein:Water Ratio = 1 to 1/5 Cook Time: 5-10 Minutes (per 100 gr) Calories: 354 Protein: 12.48 gr Fat: 2.3 gr Carbohydrates: 73.48 gr Fiber: 17.3 gr Sugar: 0.8 gr Calcium: 33 mg Iron: 2.5 mg Magnesium: 79 mg Phosphorus: 264 mg Potassium: 452 mg Sodium: 12 mg Zinc: 2.77 mg Vitamin C: 0 mg Vitamin B6: 0.26 mg Vitamin E: 0.19 mg Vitamin E: 0.19 mg Vitamin K: 2.2 mcg

Page 13 Description (Tools 3 Menu) Page 14 Description (Submitted Questions) **Visual Elements Visual Elements** • Photo of forum Stacked buttons for Questions • Photo of question mark Each button has a 'like' and 'comment' icon and count **User Actions & Responses User Actions & Responses** Tapping on Back Button: Takes user to page 3 Tapping on Back Button: Takes user to page 13 Tapping on Image 1: Takes user to page 14 Tapping on Question 1: Takes user to page 15 Tapping on Image 2: Takes user to page 16 **Suggested Text Suggested Text** • Select a Question (Sample Questions provided in • Select an Action / Read & Respond to Questions Prototype) Page 13 Layout Page 14 Layout Select what you want Select a Ouestion to do in the forum. What are the best sources of plant-based Back Back How do you handle social situations like dinners out or family gatherings when you're on a strict plant-based diet? **Button** Button 9 38 Can anyone recommend good plant-based Ouestions Read & Respond alternatives for dairy products? to Questions **203 72 Buttons** as anyone noticed improvements in chronic conditions (like diabetes or hypertension) after switching to a plant-based diet? **176 53** What are some easy plant-based recipes for someone just starting out? **1**32 **4**9 **Images** Submit a Ouestion How do you deal with cravings for meat or as **Buttons**

Page 15 Description (Sample Question) Page 16 Description (Submit a Question) Visual Elements Visual Elements • Question on top Button 1 on top Stacked answers below the question Space for Text Input Button 2 at the bottom **User Actions & Responses** Tapping on Back Button: Takes user to page 14 **User Actions & Responses** Submitting Text: Adds an answer to the question (not Tapping on Back Button: Takes user to page 13 functioning on prototype) Submitting Text: Adds a question to forum (not functioning on prototype) **Suggested Text** • Sample question and answers provided in prototype **Suggested Text** • Choose the Question Category Page 15 Layout Page 16 Layout PoweredRunner42 What are the best sources of plant-based I love adding chickpeas to salads and stir-Back fries. They're versatile and packed with protein. A single cup can give you about 15 grams of protein!" Back **Button** Choose Question Category Button "Don't forget about lentils! They cook faster than most legumes and are great in soups Type here.. and stews. Plus, they're super high in **Button 1** *Tofu has been a game changer for me. It absorbs any flavor you cook it with, making it perfect for a variety of dishes. It's also high in protein and very filling." "Tempeh is a must-try! It's a fermented soy product with a nutty flavor and about 19 grams of protein per 100 grams. Great in vegan chili!" Input Text "Quinoa is a complete protein, meaning it contains all nine essential amino acids. It's perfect as a base for bowls or as a side Please check the forum before **Button 2**

Page 17 Description (Tools 4 Menu) **Page 18 Description (Point History) Visual Elements Visual Elements** • Photo of a stars representing points Big Star Photo of shopping cart representing purchase Total score listed below the star Stacked buttons of points history **User Actions & Responses** Tapping on Back Button: Takes user to page 3 **User Actions & Responses** Tapping on Image 1: Takes user to page 18 Tapping on Back Button: Takes user to page 17 Tapping on Image 2: Takes user to page 20 Tapping on Star: Takes user to page 18 **Suggested Text Suggested Text** • You Have ? Health Points • Select Option / View Points History / Spend Your Points Page 17 Layout Page 18 Layout Select an Option You Have Back Back **Button** Button View Your Points History 37 Health Points Button 5 Points November 11, 2023 1 Point October 12, 2023 **Images** Spend Your Points 3 Points October 3, 2023 **Buttons**

2 Points

June 29, 2023

Page 19 Description (Leaderboard) Page 20 Description (Reward Purchase) **Visual Elements Visual Elements** • Stacked leaderboard scores Image of a gym Image of fruits & vegetables **User Actions & Responses** • Tapping on Back Button: Takes user to page 19 **User Actions & Responses** Scrollable list of scores Tapping on Back Button: Takes user to page 117 Scrollable menu of images **Suggested Text** • Name of users with their total points **Suggested Text** • Offers that can be purchased with points (sample provided in the prototype) Page 20 Layout Page 19 Layout Leaderboards Liam Tremblay 87 Points 72 Points Back Back **Button Button** Sophia Rossi 65 Points 49 Points Ming Chen Get 30% off from a 6-month gym membership Images James O'Connor 48 Points **Buttons** Olga Kuznetsova 36 Points 18 Points 13 Points Esther Van der Berg Get a 50% discount when buying fresh fruits or vegetables from Maxi to up to \$35. (30 Points)

Design Statement

This design project focuses on promoting a plant-based lifestyle among Canadians at risk of chronic conditions such as heart disease and diabetes. The PlantPath Canada app, developed in collaboration with Health Canada, serves as a digital intervention tool to facilitate the adoption and sustained engagement with plant-based eating habits through interactive and user-friendly digital resources.

Objectives & Audience

The primary goal is to increase the adoption and consistent practice of plant-based diets among the target audience. This will be achieved by providing users with engaging tools like Quick Reference Guides, Health Points & Rewards, Community Support Forums, and Success Stories, all of which are integrated into a comprehensive app designed to make transitioning to healthier eating habits both straightforward and enjoyable. The app targets Canadians, particularly those at risk for chronic health conditions, who are interested in exploring and maintaining a plant-based diet.

Design Principles

The design adheres to principles of clarity and consistency, accessibility, and motivational reinforcement as well as engagement, ensuring that the app is easy to navigate and appealing to a broad demographic. This approach supports seamless interaction with the app's features and promotes long-term adherence to a plant-based lifestyle.

• Clarity & Consistency

The user interface of the PlantPath Canada app is designed with simplicity at its core to ensure that users of all tech-savviness levels can navigate and utilize the app effectively. This principle extends to the visual design, which uses clean lines, straightforward layouts, and intuitive controls that eliminate any potential confusion or overwhelm for new users. (Lidwell, Holden, & Butler, 2003) The visual and functional consistency across different sections of the app ensures a fluid user experience. Consistent use of fonts, color palettes, and layout structures helps in reducing the cognitive load on users, making the app easier to use and navigate.

Accessibility

Accessibility is a cornerstone of the design, ensuring that the app is usable for everyone, including people with disabilities. This includes high-contrast color schemes for those with visual impairments, text-to-speech and font resize options for users who are blind or have low vision. (World Wide Web Consortium, 2018)

Motivational Reinforcement

The design integrates psychological principles of reinforcement through rewards and positive feedback (Ryan & Deci, 2000). Health Points & Rewards offer users tangible incentives to continue their health journey. Success stories and community forums provide social reinforcement, inspiring users by showing real-life examples of health improvement and offering peer support.

Engagement

To keep users interested and engaged, the app incorporates interactive elements such as gamified features such as points collection. These features are designed to make the experience more rewarding and fun. Engaging users in their journey helps in maintaining long-term usage, which is crucial for the success of lifestyle change initiatives. (Deterding, Dixon, Khaled, & Nacke, 2011)

References

Lidwell, W., Holden, K., & Butler, J. (2003). Universal Principles of Design. Rockport Publishers.

World Wide Web Consortium. (2018). Web Content Accessibility Guidelines (WCAG) 2.1. Retrieved from https://www.w3.org/TR/WCAG21/

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