

Kiwi Smartphone Service, Inc.

Team Two – Christopher Courts, Bashir Dashir, Benjamin Fiore

Home Page Domain: <https://www.kiwi-store.com>

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I. Vision Statement

“For consumers who need a portable way to communicate with their family and the world online, Kiwi Smartphone Company, Inc. builds smartphones and smart devices that allow for affordable, all-day performance in all applications. Unlike other smartphone manufacturers that focus on hardware, we concentrate on seamless integration with software and operating systems, allowing for a device that conforms and performs well to your needs today and tomorrow.”

II. Introduction

A. Business Description

Kiwi Smartphone Company, Inc. is a consumer electronics company that designs, builds, and sells smartphones and other mobile devices. Kiwi is mostly known for its smartphones, with its premium Kiwi Dash Pro and budget Kiwi Dash Lite. The Dash Pro is specked with top-of-the-line specs and is marketed to compete with other flagship smartphones in the Android market, such as the Google Pixel series, the Samsung Galaxy S series, OnePlus Pro series, and more. The budget-friendly Dash Lite is not as strong in terms of performance, though it includes sufficient features and specifications to support the average daily functions of a modern smartphone (internet, social media, texting, calling, etc.). The Dash Lite series is aimed to compete with more budget lines of other Android phones – the Google Pixel A series, the Samsung Galaxy A series, etc. – as well as the base Apple iPhone.

The smartphone's provided by Kiwi use a Kiwi-specific skin/theme on top of Android OS, called KiwiOS. KiwiOS is designed to optimize Android for enhanced performance while balancing battery life, all with the priority of keeping our phones fast and responsive years after they are released. KiwiOS is designed to be less-reliant on device memory and storage, which allows for older devices to continue to receive the latest updates and security patches.

B. The Project – All Things Kiwi, All the Time

The development of a new inventory system will allow for users to view and access Kiwi's line smart devices more accurately and with more confidence. Using the new inventory system will allow Kiwi's warehouse team to quickly update and respond to changes in our inventory, giving customers the best access to our devices on our website, or at other authorized retail locations.

C. Agile Manifesto

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

Individuals and interactions over processes and tools, Working software over comprehensive documentation, Customer collaboration over contract negotiation, Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

D. Applying Agile

Applying the principles of the Agile Manifesto, our group will meet regularly to work on the project while assigning different tasks to different members. Similarly, we will focus on completing pieces of the project occasionally, to ensure we are taking small steps towards completing the project. To sum it up, we will carefully listen to our customers' requirements and make any necessary adjustments to the project in the areas needed.

E. Project Team Skill Breakdown

Christopher Courts: Little experience in HTML, no experience in PHP currently learning SQL, decent amount of knowledge with Java and Python

Bashir Dahir: I have some experience in HTML, but not too much. However, I have no experience in SQL and PHP, and yes I am taking Database Management (CMPT 308N). I can decently code in python and Java.

Benjamin Fiore: Limited exposure to HTML (website editing) – no formal experience; no experience or exposure to PHP, SQL; currently working with SQL in Database Management (CMPT 308N)

III. Requirements

A. Stakeholders

Stakeholders require to have a frequently updated website, the programming information of the website, no login requirement for customers, encrypted user passwords and a disclaimer on the website.

B. Users

Users want to see inventory, add items to cart, view order status and view locations. In addition, users would like to have access to customer support and refund policy. Moreover, users are interested to see order confirmation, change log, price, payment option and finally to be able search in the website.

15	Employee	Have access to supply information	I can know when to restock
16	Employee	View status of orders	I can know when restock will happen
17	Employee	Cancel orders	I can keep consistent inventory levels
18	Employee	Access database	To add or remove items
19	Stakeholder	I want to see programming info (project document)	We can have other teams support & maintain
20	Stakeholder	I don't want customers to have to login	It is easier for them
21	Stakeholder	I want user passwords encrypted	We do not get hacked
22	Stakeholder	I want a disclaimer on the website	We satisfy our legal requirements
23	Stakeholder	See design documents	I can review and approve the application
24	Stakeholder	Passwords to be changed every 90 days	We adhere to security requirements
25	Stakeholder	A change log to be maintained and displayed	All users are kept abreast of updates
26	Employee	View schedule	Know when to work
27	Employee	View payroll	Know how much I am getting paid
28	Employee	Search / sort inventory	Find items
29	Stakeholder	Support new website protocols	To keep website secure
30	Admin	Log in	Access website database
31	Admin	Add / remove user	I keep the user info up to date
32	Admin	View and access database	Monitor and edit database information
33	Admin	Edit user ID / password	Users can reset username and passwords
34	Admin	Identify between admin and regular employees	I can distinguish between different roles
35	User	View product/product selection	I can view the product's features and reviews
36	User	Checkout	I can purchase product(s) from the website

IV. Design

A. Feature List Matrix

<u>Feature Number</u>	<u>Description</u>	<u>Priority -</u> <i>High = H,</i> <i>Medium = M,</i> <i>Low = L</i>	<u>Matching User Story/Stories</u>
1	<u>Display employee login page</u> Page for employees to enter login credentials to access dashboard	H	13, 34, 20, 21
2	<u>Display forgot password page</u> Page for employees to choose text/email password recovery/reset Page for employees to enter new password	H	13, 20
3	<u>Send email notification to reset password (after 90 days)</u> Page to notify employees to check email for reset link	H	13, 24
4	<u>Send text notification to reset password (after 90 days)</u> Page to notify employees to check text/phone number for reset link	M	13, 24
5	<u>Edit user ID/password</u> <i>ADMIN ONLY</i> – Allow admin to edit user information	H	33
6	<u>Manage users</u> <i>ADMIN ONLY</i> – Allow admin to active/deactivate user(s)	H	31

7	<u>Enable password encryption</u> <i>ADMIN ONLY</i> – Ensure that all passwords have encryption option, available to be viewed and/or edited	H	21
8	<u>Show development log</u> Page to show feature updates, bug patches to the website	H	19, 23
9	<u>Ensure website compatibility</u> Ensure that website is following latest mainstream web protocols (i.e., UDP, HTML5, http, etc.)	H	29
10	<u>Display employee dashboard</u> Allow employees to view supply order(s), and cancel them if necessary	H	14, 15, 16, 17
11	<u>Display employee menu</u> Allow employees to view subpages/dashboards available to them (i.e., schedule, payroll, supplies, etc.)	M	18
12	<u>Display order dashboard</u> Allow employees to view/manage latest orders		14
13	<u>Display database login</u> <i>ADMIN ONLY</i> – Page for admin to login into database	H	18, 30
14	<u>Display database dashboard</u> <i>ADMIN ONLY</i> – Page to view latest database information, link to other subpages of database	H	32

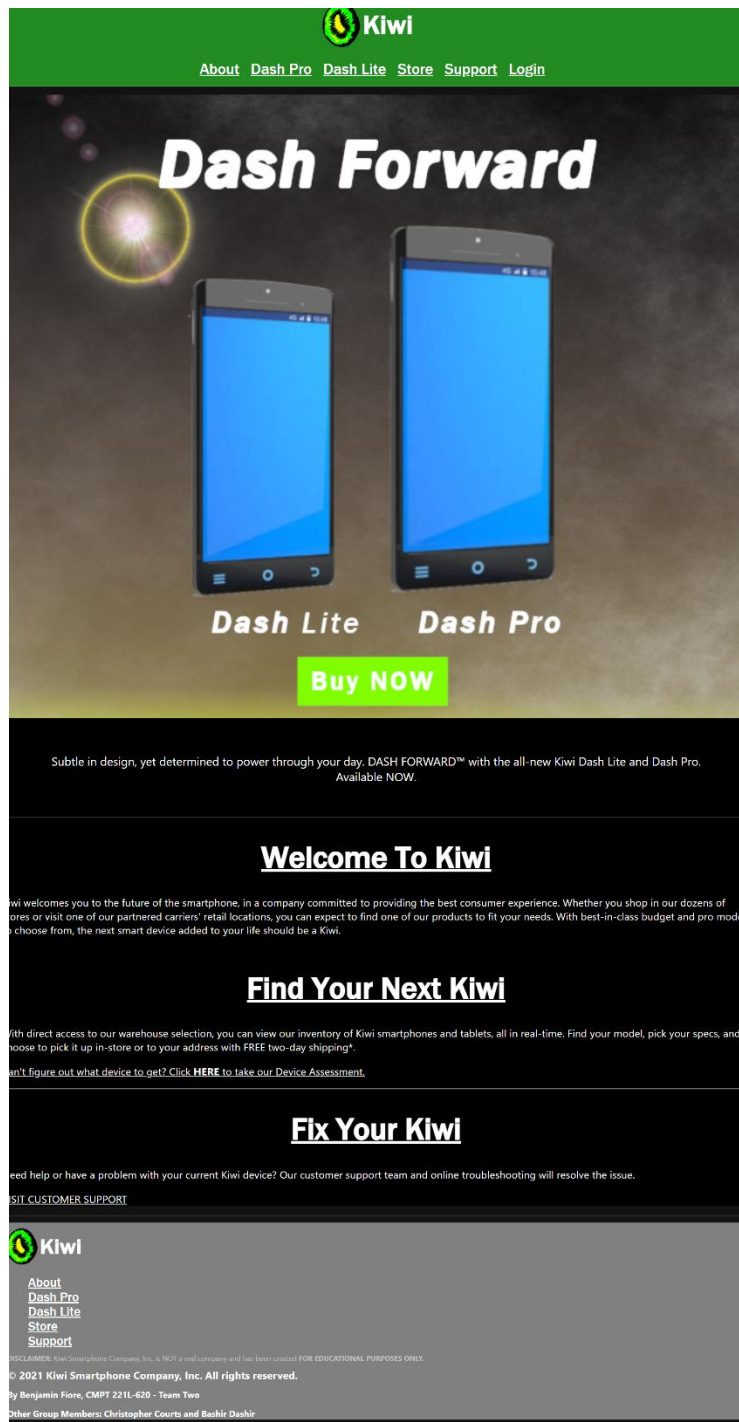
15	<u>Display payroll dashboard</u> Allow employees to view pay information	M	27
16	<u>Display schedule dashboard</u> Allow employees to view available schedule(s)	M	26
17	<u>Display inventory results</u> Allow employees to view inventory search results	H	28
18	<u>Show website disclaimer</u> Allow users to view the website disclaimer	H	22
19	<u>Show website pages menu</u> Allow users to display the website pages menu on the homepage of the website	H	1
20	<u>Display contact form</u> Allow users to be able to view and fill in the contact form (i.e., First name, last name, and email)	L	3
21	<u>Display email link</u> Allow users to view our email and click on the link	L	3
22	<u>Display change log popup</u> Allow users to receive notifications about updates	L	25
23	<u>Display product dashboard</u> Allow users to view the product inventory	H	1, 6, 11, 12, 9

24	<u>Display search results page</u> Allow users to search for specific products and/or supplies	M	10, 28
25	<u>Display product listing/sort page</u> Allow users to view list of products and sort them	M	28
26	<u>Display About Us page</u> Allow users to view short descriptions of the company and its products	L	7
27	<u>Display news ticker(s) (on homepage)</u> Allow users to view the company's hot sales and other news	M	7
28	<u>Display refund policy page</u> Tell users the refund policy of the company	M	4
29	<u>Display privacy statement page</u> Tells users the privacy statement for the website	H	4, 22, 25
30	<u>Display locations sort page</u> Allows users to sort store locations to see where they are	M	2
31	<u>Display product ad page (for each product)</u> Displays an advertisement for each product	M	1, 6, 11, 9
32	<u>Display checkout side tab</u> Shows users what they are buying if they checkout	L	12

33	<u>Display checkout page</u> Allows users to buy the products they want	H	12
34	<u>Allow for payment integration (PayPal, credit/debit)</u> Allows user to add forms of payment	H	12
35	<u>Display billing address form (checkout)</u> Allows users to add billing address for their order	H	35
36	<u>Display shipping address form (checkout)</u> Allows users to add the address they want their purchase to go	H	35
37	<u>Display coupon/promo form</u> Allows users to add a coupon or promo on their order	L	35
38	<u>Display order confirmation page</u> Allows users to know their purchase went through	H	5
39	<u>Display print order confirmation/receipt</u> Allows users to print the confirmation of their order	M	5
40	<u>Add product(s)</u> <i>ADMIN ONLY</i> – Add product(s) and its/their corresponding information to the database	H	1, 2, 11, 14, 15, 16, 18, 28
41	<u>Update product(s)</u> <i>ADMIN ONLY</i> – Update/change product(s) and its/their corresponding information in the database	H	1, 2, 11, 14, 15, 16, 18, 28

42	<u>Add manufacturer(s)</u> <i>ADMIN ONLY</i> – Add manufacturer(s) to the database and its/their corresponding information	H	1, 2, 14, 15, 16, 18
43	<u>Update manufacturer(s)</u> <i>ADMIN ONLY</i> – Update information about existing manufacturer(s) in the database	H	1, 2, 11, 14, 15, 16, 18

B. Home Page Concept



C. Table Definitions

Table A: Employee Table

Table Name: t2_employees

<u>Field</u>	<u>Attribute</u>	<u>Constraint(s)</u>	<u>Description</u>	<u>Info</u>
User_ID	INT	NOT NULL AUTO_INCREMENT PRIMARY KEY	Unique identifier for each user (employee or admin) of the database	
Active	ENUM('Y', 'N', 'Locked')	NOT NULL DEFAULT('Y')	Determines if the user's account is active/inactive, or has been locked for security reasons (too many incorrect passwords entered, login from unknown connection, data leak/corruption detection, etc.)	'Y' = Yes 'N' = No An account may be unlocked only by the system administrator
Role	ENUM('superadmin', 'admin', 'host', 'employee', ...)	NOT NULL DEFAULT('no role')	Displays what role the employee has to the database; determines what privilege(s) and access the employee will have to the database	
Username	VARCHAR(35)	NOT NULL	A unique string that corresponds to a specific employee's account; used for login; paired with a password and two (2) security questions	
Password	VARCHAR(35)	NOT NULL	A unique string that corresponds to a specific employee's account; used for	

			login; paired with a username and two (2) security questions; grants access to the account and its privilege(s)	
Hash_Password	CHAR(100)		The hashed version of the password set by the employee	
First_Name	VARCHAR(25)	NOT NULL	The first name of the employee associated with the account	
Last_Name	VARCHAR(35)	NOT NULL	The last name of the employee associated with the account	
Email	VARCHAR(60)	NOT NULL	The email of the employee associated with the account; may be used for account username/password recovery	
Phone	VARCHAR(25)		The mobile phone number of the employee associated with the account; may be used for account username/password recovery	Optional to implement when first creating account
Account_Locked_Change_Date	DATETIME	DEFAULT(NOW())	The date of the last instance the account's lock status has been locked/unlocked	
Username_Change_Date	DATETIME	NOT NULL DEFAULT(NOW())	The date of the last instance the account's username was changed	
Previous_Username	VARCHAR(35)		The last username used for this account	Upon username change, the

				'current' username (the one trying to be changed) is implemented in this field; after this the old username is replaced in the username field, becoming the new active username
Password_Change_Date	DATETIME	NOT NULL DEFAULT(NOW())	The date of the last instance the account's password was changed	
Previous_Password	VARCHAR(35)		The last password used for this account	Upon password change, the 'current' password (the one trying to be changed) is implemented in this field; after this the old password is replaced in the password field, becoming the new active password
Security_Question 1	ENUM('What was the name of the city where you were born?', 'What was the name of your first pet?', 'What was the color of your first car?')		The first security question; used for account username/password recovery; from a preset list of questions	Must be chosen upon account creation
Security_Question 2	ENUM('What was the name of the city where you were		The first security question; used for account	Must be chosen upon

	born?', 'What was the name of your first pet?', 'What was the color of your first car?')		username/password recovery; from a preset list of questions	account creation
Security_Answer1	TEXT		The answer to the first security question; used for account username/password recovery	Must be given upon account creation
Security_Answer2	TEXT		The answer to the first security question; used for account username/password recovery	Must be given upon account creation

*Table B: Products Table**Table Name: t2_products*

<u>Field</u>	<u>Attribute</u>	<u>Constraint(s)</u>	<u>Description</u>	<u>Info</u>
Product_ID	INT	NOT NULL AUTO_INCREMENT PRIMARY KEY	Unique identifier for each product (offered by a particular manufacturer) within the database	
Active	ENUM('Y', 'N')	NOT NULL DEFAULT ('N')	Determines if the product is active – currently being shipped and sold – or inactive – not actively being shipped and sold or been discontinued	'Y' = Yes 'N' = No
Model	CHAR(100)	NOT NULL	The model number of the product; provided by the manufacturer	
Manufacturer_ID	INT	NOT NULL	The unique identifier for a manufacturer	From <i>Table C: Manufacturers Table</i>
Min_Quantity	INT	NOT NULL	The minimum quantity to be met for a product to be sold	
Quantity	INT	NOT NULL	The current quantity of a product	
Last_Shipment_Date	DATETIME		The date of the last time this product was shipped	

Desc_Short	TEXT		The description of the product; given by the manufacturer	
Desc_Long	TEXT	NOT NULL	The 'in-depth' description and features of the product; given by the manufacturer	
Price	DOUBLE		The price of the product	

Table C: Manufacturers Table

Table Name: t2_manufacturers

Field	Attribute	Constraint(s)	Description	Info
Manufacturer_ID	INT	AUTO_INCREMENT, NOT NULL, PRIMARY KEY	Unique identifier for each manufacturer within the database	
Active	ENUM('Y', 'N')	DEFAULT ('N')	Determines if the manufacturer is active – has product(s) that are being shipped and sold – or inactive – does not have product(s) that are being shipped and sold	'Y' = Yes 'N' = No
Shipping_Address	CHAR(100)	NOT NULL	The shipping address of the manufacturer; useful for returning defective/recalled product(s)	
Billing_Address	CHAR(100)	NOT NULL	The billing address of the manufacturer; useful for sending invoices for product(s) being shipped and sold by the manufacturer	
Contact_First_Name	VARCHAR(25)		The first name of the logistics contact with the manufacturer regarding shipments of product(s)	

Contact_Last_Name	VARCHAR(35)		The first name of the logistics contact with the manufacturer regarding shipments of product(s)	
Contact_Email	VARCHAR(60)		The email for the logistics contact with the manufacturer regarding shipments of product(s)	
Contact_Phone	VARCHAR(25)		The phone number of the logistics contact with the manufacturer regarding shipments of product(s)	
Last_Shipment_Sent	DATETIME	NOT NULL	The date of the last time a shipment of product(s) was sent	
Last_Shipment_Received	DATETIME	NOT NULL	The date of the last time a shipment of product(s) was delivered	

D. Functional Diagram

Kiwi Smartphone Service Inventory Website Functional Diagram

