BC Benn's Website Update Project

By

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BUSINESS CASE

EXECUTIVE SUMMARY

BC Benn is a small privately-owned business dedicated to selling handcrafted goods. The main source of revenue is sales during local arts and crafts fairs and privately-held events. BC Benn has a website, bcbenn.com, with non-functional items, broken links, and an overall need for an improved design for a better customer experience. BC Benn's owner, Katelyn Benn, realizes the need for her company to revamp the website and promote its use during sales events. Currently, the website is managed by a small software company with the main focus on online surveys.

Unsatisfied with their services, Katelyn wants to bring the website management in-house. She thinks that after the initial investment in equipment and personnel, the company will be able to increase profits and focus on growth. To address the needs of the company, the website must satisfy the following requirements:

- Full functionality, all features must be in working order.
- Interactive so the customer can choose how their item is made.
- Updated often to keep inventory up-to-date.
- Updated user interface.
- E-mail subscription feature.
- Discount coupon with an e-mail subscription.
- Search within website feature.
- Chat feature.
- Calendar of sales events tab.

Updating and expanding BC Benn's website features will address and solve the problems the company is currently experiencing with its online platform.

PROBLEM

BC Benn strives to provide every client with a wonderful customer service experience. The current website is not an extension of the service customers get during in-person transactions at fairs or private events. The re-vamped website will provide online customers with an experience similar to in-person customers. With the improved website, the customer will be able to interact with the business by being able to order custom-made items. If they can chat with a representative, they will feel much closer to an in-person sale experience.

ANALYSIS

BC Benn's IT department is very small. Louise Mann doubles as IT Manager and accounting assistant. She is willing to take control of the website but she thinks she will need to work full time on it and will require a full-time assistant. The company will have to also hire an accounting assistant at least part-time.

Louise also thinks that some of the features Katelyn wants added, such as the chat and search, may have to be purchased separately. Katelyn wants the project to be done in six months on a budget of 120,000$.

The project manager will be Luke Kim. He's also the company's Accounting Manager but he is willing to manage the project if he gets a part-time assistant to cover the work Louise was doing. Brenda Miller, Marketing Manager, and Paul Link, Marketing Associate will function as testers. Paul Link participates in many sale events and he has firsthand experience with customers. Louise loves teaching so she volunteered to be the user trainer.

The project will be completed using HTML5, JavaScript, and PHP. The website will be hosted by Free Hostia which offers free hosting accounts and dedicated servers.

FINANCES

Factoring in Louise and Luke's opinions and suggestions, the estimated cost of the project would be as follows:

Description	Estimated Cost	Total
Full-time IT Assistant	15$ per hour plus benefits for 12 months	36,200$
Part-time Accounting Assistant	15$ per hour for 12 months	15,600$
Bonuses for Louise and Luke	25,000$ each	50,000$
Equipment	1 Desktop PC	5,000$
Hosting Fees	85$ per month	1,020$
Software Packages	800$ Search + 1200$ Chat	2,000$
	Estimated Total:	109,820$

Table 1. The estimated cost of the project (Cole, 2022 *ACBusinessCase*).

The improved website will bring additional revenue by increasing the customer base. Currently, sales are only allowed for United States customers by letting PayPal handle the currency transactions and opening shipping worldwide, a significant number of new customers can be added which will increase revenue considerably.

Current Revenue	Projected Revenue	Project Cost	Estimated Profit
1,000,000.00$	2,000,000.00$	109,820.00$	1,890,180.00$

Table 2. Projected profit (Cole, 2022 *ACBusinessCase*).

POSSIBLE OPTIONS

BC Benn's website update and management could be outsourced. There are many companies completely dedicated to e-commerce websites that can provide robust features that would satisfy BC Benn's needs. However, Katelyn, the owner, prefers to develop and maintain the website in-house to keep up with the company's motto of having everything handcrafted. She is open to a compromise if features such as the chat and search options prove to be too much for the IT team to complete within the project's time frame and have to be obtained from software vendors.

RECOMMENDATIONS

In-house development is the best option to satisfy the owner's wishes although not the most solid or cost-efficient. Features like the chat and search, should wait and be added in the future. Free Hostia will be useful and cost-efficient until traffic starts to pick up. Then, the company should consider other options for dedicated servers. Using e-mail and the website's contact us feature while the chat is looked into will provide the communication customers need to simulate an in-person sales experience.

PROPOSED EXECUTION TIMELINE

- Business case approved: January 30, 2022
- Software vendor (Client) signed: Live Helper Chat
- Project work start date: February 1st, 2022
- First demo: **April 15, 2022 - Tentative**
- Testing by super users and IT: Brenda Miller, Marketing Manager, and Paul Link, Marketing Associate.
- Business signoff: **April 29, 2022** (after all testers have approved)
- Go-live date: **April 25, 2022**
- Training for end-users: **April 23, 2022**
- Project post-mortem: **April 29, 2022**

PROJECT GOVERNANCE

- ***Executive sponsor:*** *Dr. Travin Hill.*
- ***Business owner:*** *Ana Cole as Katelyn Benn, Owner and CEO.*
- ***Project manager:*** *Ana Cole as Luke Kim, Accounting Manager.*
- ***IT Lead:*** *Ana Cole as.*
- ***Vendor-provided developer:*** *Free Hostia.*
- ***Super-user/tester:*** *Ana Cole as Brenda Miller, Marketing Manager, and Paul Link, Marketing Associate.*
- ***Trainer:*** *Ana Cole as Louise Mann, IT Manager.*

PROJECT MISSION

BC Benn buys and sells handcrafted goods. BC Benn buys from individual sellers and small companies that can prove their goods have been crafted by hand. BC Benn sells the products online and at arts and crafts sales events. During arts and crafts sales events, new connections are established with customers and with artists. BC Benn gives all artists credit for their work. Customers are given the best service possible.

According to this, the team came up with the following as the final project mission statement:

To connect artists and buyers with the best customer service possible.

CHARTER

PROJECT OBJECTIVE

Matching the in-person and online shopping experience is the top priority of the organization. Updating BC Benn's website will provide the customers with a personalized experience comparable to in-person sales. The update will align the result website with the strategic priorities of the organization by providing the following features:

- All links and features will be fully functional.
- The customer will be able to choose how their item is made.
- Up-to-date inventory.
- Smoother user interface.
- E-mail subscription option with discount coupon.
- Search within website feature.
- Chat feature.
- Calendar of sales events tab.

The new features will make BC Benn's website robust and streamlined. Profits will increase by providing customers with improved service and by including international shipping options. The updated website will bridge the gap between online and in-person shopping experiences.

ASSUMPTIONS

- Free Hostia will be able to deal with the increased traffic after deployment.
- PayPal fee stays at 1%.
- Inventory will continue to be synchronized manually.
- The discount coupon application will be handled by PayPal.

PROJECT SCOPE

This project will update BC Benn's current website and will add four new features: an e-mail subscription with a discount coupon option, a search option, a chatbot, and a calendar of sales events. This project will build on top of the existing code and will add new code as needed. Updating the current color scheme will follow the company's color palette. Broken links and malfunctioning areas will be fixed. The coding languages to be used in this project will be limited to HTML5, JavaScript, PHP, and SQL.

PROJECT MILESTONES

Milestones	Deliverables	Date
User interface design update	New color scheme and overall new look.	02/12/2022
Email subscription and coupon	New section on About Us where customer can add their email to the subscription letter and get a discount coupon code	02/26/2022
Calendar of sales events	Calendar added to a new tab	03/12/2022
Search within website	The search feature will be fully functional	04/02/2022
Chatbot	Chat capability	04/23/2022

Table 3. Project milestones (Cole, 2022 *ACProject Charter*).

IMPACT STATEMENT

Potential Impact	Systems/Units Impacted
Increased online traffic may prompt the need for a new Free Hostia plan.	Current plan: Chocolate
Inventory management will be more demanding with increased sales.	Warehouse and logistics departments.

Table 4. Impact statement (Cole, 2022 *ACProject Charter*).

ROLES AND RESPONSIBILITIES

SDRole	Name	Email/Phone
Sponsor	Katelyn Benn, Company Owner	acole4225@student.gwinnetttech.edu
Project Manager	Luke Kim, Accounting Manager	acole4225@student.gwinnetttech.edu
Team Member	Louise Mann, IT Manager	acole4225@student.gwinnetttech.edu
Testers	Brenda Miller, Marketing Manager Paul Link, Marketing Associate	acole4225@student.gwinnetttech.edu
Subject Matter Expert	Joan Casteel, SQL Expert	acole4225@student.gwinnetttech.edu

Table 5. Roles and responsibilities (Cole, 2022 *ACProject Charter*).

RESOURCES

Resource	Constraints
Project Budget: $109,820.00	Bonuses for Louise and Luke will be paid upon successful project completion.
Personnel: Luke Kim, Accounting and Project Manager Louise Mann, IT Manager Brenda Miller, Marketing Manager Paul Link, Marketing Associate	A full-time IT assistant and a part-time accounting assistant will be needed.
Equipment: Desktop computer	The cost must not be above 5,000$.
Hosting: Free Hostia	Hosting fees above 85$ per month will have to be approved by BC Benn's owner.
Software: Vendor packages	Total vendor software dollar amount above 2,000$ will have to be approved by BC Benn's owner.
PayPal	PayPal fees above 2% will trigger a search for a new online payment administrator.

Table 6. Project resources (Cole, 2022 *ACProject Charter*).

PROJECT RISKS

Risk	Mitigation Strategy
BC Benn's updated website may not bring in the expected revenue increase.	Investment in marketing.
Inventory flow will increase once sales open to international customers and may overwhelm current operations.	Hire a full-time accounting assistant and add warehouse and logistics personnel as needed.

Table 7. Project risks (Cole, 2022 *ACProject Charter*).

SUCCESS MEASUREMENTS

The project will be considered a success if the improved website brings increased customer use measured as a 50% increase in sales and a 25% increase in online traffic and if it is completed in six months or under.

SIGNATURES

Customer:		
Name	**Signature**	**Date**
Dr. Travin Hill	*Travin Hill, PHD*	02/04/20222
Project Sponsor:		
Name	**Signature**	**Date**
Ana Cole as Katelyn Benn	*Katelyn Benn*	02/03/2022
Project Manager:		
Name	**Signature**	**Date**
Ana Cole as Luke Kim	*Luke Kim*	02/03/2022

Table 8. Signatures (Cole, 2022 *ACProject Charter*).

FINAL PROJECT SCOPE

PROJECT OBJECTIVE

To update BC Benn's website and incorporate new features to provide the best customer service.

PROJECT DELIVERABLES

DELIVERABLE NO.	DESCRIPTION
1. Color scheme change	The website's color scheme will be changed to blue, white, teal, and peach.
2. E-mail subscription with coupon	When the customer agrees to subscribe to the newsletter, a pop-up window shows up with the coupon code they can use when checking out.
3. Calendar of sales events	A new tab/button will be added to link to the calendar of sales events page.
4. Search within website	The search box will be in working order. Search results will appear on a new page with links to related items.
5. Chatbot	A pop-up chatbot prompt will appear.

Table 9. Project Deliverables (Cole, 2022 *AC Week5ProjectScopeDoc*).

LIST OF PROJECT TASKS

TASK NO.	DESCRIPTION	D NO.
1. Find codes for the color scheme	New color codes need to be added to the CSS file. Find codes for blue, white, teal, and peach.	1
2. Change color scheme	Try the new color scheme. Show stakeholders and make a decision.	1
3. Add e-mail subscription option to FAQ/Contact page	Add subscribe button and text box below the comments.	2
4. Add pop-up coupon window	If the customer subscribes to the newsletter a pop-up window shows up with the discount coupon code.	2
5. Add e-mail address to database	The e-mail provided by the customer will be added to the database.	
6. Add button or tab to link to the calendar of events page	Add the button or tab to the main menu with a link to the new page with the calendar of sales events.	3
7. Create the calendar of sales events page	A new page will be created to show the calendar of sales events. It will be linked to the main menu item calendar of events. Only the current month will be shown.	3
8. The search box on the home page will be functional	The textbox will work and grab data to compare with search words in the database.	4

9. Search results page	The results of the search will be shown on a new page. If nothing is found a message stating there is no match will show on the new page.	4
10. Integrate chatbot software	The vendor chatbot will be integrated with the site.	5

Table 10. List of project tasks (Cole, 2022 *AC Week5ProjectScopeDoc*).

OUT OF SCOPE

- This project will not start coding the website from scratch.
- There will be no recording of chat content.
- The search feature will not provide previous search information.
- Inventory is not kept by the organization's website, it is handled by PayPal. The company will match PayPal's inventory with the actual inventory at hand.

ASSUMPTIONS

- Free Hostia will be able to deal with the increased traffic after deployment.
- PayPal fee stays at 1%.
- Inventory will continue to be synchronized manually.
- The discount coupon application will be handled by PayPal.

PROJECT CONSTRAINTS

PROJECT START DATE	02/12/2022
LAUNCH / GO-LIVE DATE	The website remains operational throughout the project. New features are added and updated when completed.
PROJECT END DATE	08/12/2022
MILESTONES	02/12/2022 User interface design update. 02/26/2022 Email subscription and coupon goes live. 03/12/2022 Calendar of sales events is functional. 04/02/2022 Search feature is functional 04/23/2022 Chatbot is integrated.
BUDGET CONSTRAINTS	The project's budget is $109,820.00. Computer desktop must not be above 5,000$ Hosting fees above 85$ per month need owner's review. Vendor software amount must not exceed 2000$. PayPal fees above 2% require owner's review.

QUALITY CONSTRAINTS	There will be no recording of chat content. The search feature will not provide previous search information. Inventory is not kept by the organization's website, it is handled by PayPal. The company will match PayPal's inventory with the actual inventory at hand.
EQUIPMENT / PERSONNEL CONSTRAINTS	Bonuses for Louise and Luke will be paid upon successful project completion. A full-time IT assistant and a part-time accounting assistant will be needed. Warehouse and logistics departments may need added personnel.
REGULATORY CONSTRAINTS	BC Benn's website is up to date with all policies and regulations.

Table 11. Project constraints (Cole, 2022 *AC Week5ProjectScopeDoc*).

UPDATED ESTIMATES

Estimated number of hours required to complete the project.	480

Table 12. Number of hours required to complete the project (Cole, 2022 *AC Week5ProjectScopeDoc*).

APPROVALS

STAKEHOLDER	ROLE	DATE SUBMITTED FOR APPROVAL	DATE APPROVAL RECEIVED
Katelyn Benn, Company Owner	Sponsor	02/12/2022	02/15/2022
Luke Kim, Accounting Manager	Project Manager	02/12/2022	02/15/2022
Louise Mann, IT Manager	Team Member	02/12/2022	02/15/2022
Brenda Miller, Marketing Manager Paul Link, Marketing Associate	Testers	02/12/2022	02/15/2022
Joan Casteel, SQL Expert	Subject Matter Expert	02/12/2022	02/15/2022

Table 13. Approvals (Cole, 2022 *AC Week5ProjectScopeDoc*).

STATUS REPORTS

REPORT 1

Project Name: BC Benn's Website Update **Team Member Name:** Ana Cole **Date: 02/12/2022** **Reporting Period:** Week 5 02/12/2022
Work completed this reporting period: BC Benn's website color scheme has been updated.
Work to complete next reporting period: E-mail subscription and coupon.
What's going well and why: The project is going well in its early stages. Changing the website's color scheme was easy.
What's not going well and why: No major hurdles have been encountered as of 02/12/2022.
Suggestions/Issues: We suggest keeping yellow in the color scheme for contrast.
Project changes No changes to report.

Table 14. Status report number one (Cole, 2022 *AC Status Report V1*).

Website's new color scheme:
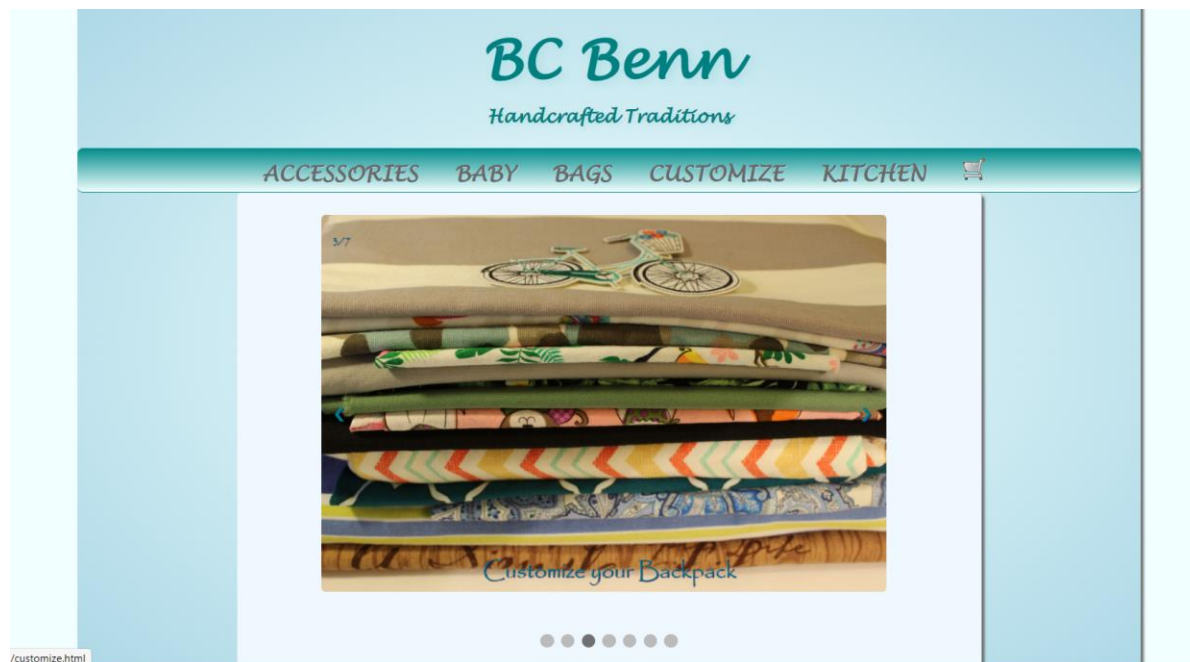
Figure 1. BC Benn's home page (Cole, 2022 *AC Status Report V1*).

REPORT 2

Project Name: BC Benn's Website Update **Team Member Name:** Ana Cole **Date: 02/19/2022** **Reporting Period:** Week 6 02/19/2022
Work completed this reporting period: BC Benn's FAQ/Contact area has been modified to include a subscribe button to an email list. Previous content has been removed and solidified with the subscription option. The customer can still contact the company by email.
Work to complete next reporting period: The PHP code to connect to the database and the JavaScript code for the pop-up window with the coupon code.
What's going well and why: The subscribe-to-email area has been decluttered and the design is now focused on the customer providing their information to benefit from the coupon.
What's not going well and why: The team is rusty in its PHP and SQL skills and database management.
Suggestions/Issues: We suggest increasing the scheduled workdays to complete this task by one more day.
Project changes: The comments section and checklist have been deleted to simplify the design and focus customers on subscribing to obtain a coupon.

Table 15. Status report number two (Cole, 2022 *AC Status Report V2*).

Website before changes:

Figure 2. Contact BC Benn before subscribe with coupon feature (Cole, 2022 *AC Status Report V2*).

Website after changes:

Figure 3. Subscribe to obtain the coupon feature (Cole, 2022 *AC Status Report V2*).
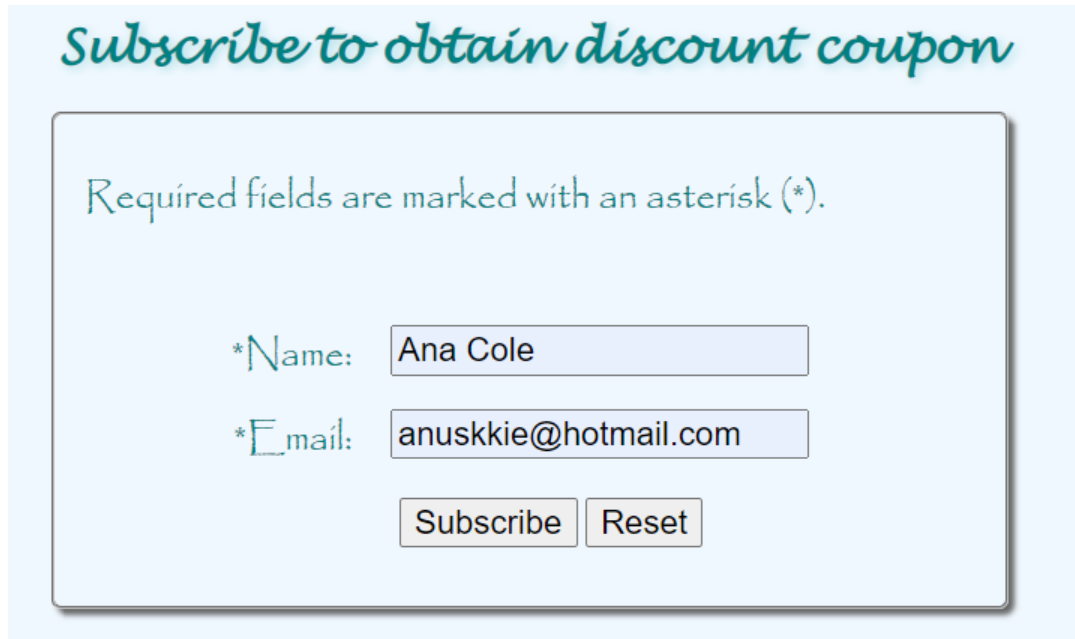
REPORT 3

Project Name: BC Benn's Website Update **Team Member Name:** Ana Cole **Date: 02/26/2022** **Reporting Period:** Week 7 02/26/2022
Work completed this reporting period: BC Benn's FAQ/Contact page has a functional subscribe to email button. The customer's information is sent to the database and recorded for use on mailing company offers and newsletters.
Work to complete next reporting period: The pop-up window with the coupon code and the link to the calendar of events.
What's going well and why: The connection to the database was difficult to make work but it has been a tremendous success and morale booster.
What's not going well and why: The coupon window is currently running behind.
Suggestions/Issues: We suggest keeping the schedule the same since the team will be able to catch up this week. The confirmation page for the addition of the data to the database will not show in the future.
Project changes: No changes to report this week.

Table 16. Status report number three (Cole, 2022 *AC Status Report V3*).

Website's progress
When the customer enters their name and email they are recorded on the database.

Figure 4. Subscribe to obtain a discount coupon (Cole, 2022 *AC Status Report V3*).

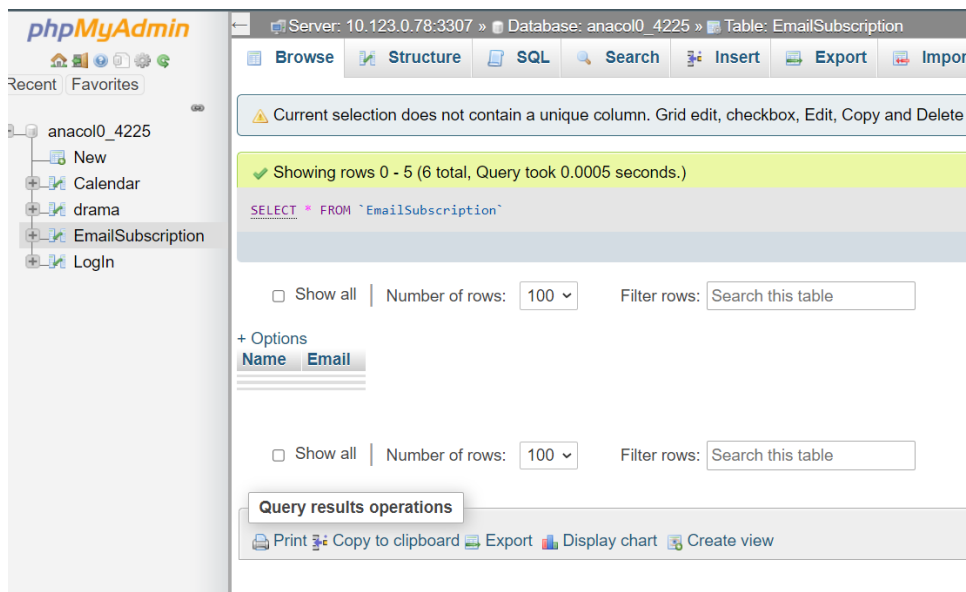Before hitting subscribe the database is empty.

Figure 5. Database table EmailSubscription (Cole, 2022 *AC Status Report V3*).

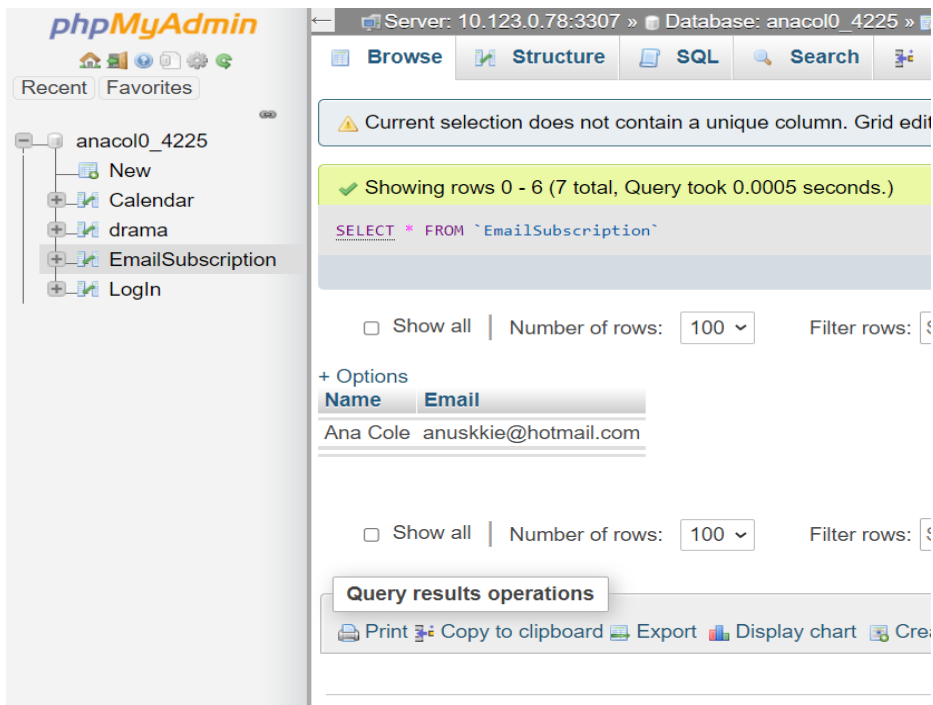The database now contains the email entered

Figure 6. Database EmailSubscription with email address added (Cole, 2022 *AC Status Report V3*).

REPORT 4

Project Name: BC Benn's Website Update **Team Member Name:** Ana Cole **Date: 03/04/2022** **Reporting Period:** Week 8 02/27/2022 - 03/05/2022
Work completed this reporting period: BC Benn's FAQ/Contact page has a functional subscribe to email button. When the customer enters their name and email and hits subscribe a pop-up window shows up with a coupon code. The website now has a link to the calendar of events in the main menu.
Work to complete next reporting period: Add the calendar of events page. Populate the calendar for the current month.
What's going well and why: The project is going well because it is back on track despite the delays on some of the tasks.
What's not going well and why: Currently, no problems to report.
Suggestions/Issues: The team will need information from the Marketing department to populate the calendar of events.
Project changes: No changes to report this week.

Table 17. Status report number four (Cole, 2022 *AC Status Report V4*).

Website's main menu before:

Figure 7. BC Benn's main menu before changes (Cole, 2022 *AC Status Report V4*).

Website's main menu after adding EVENTS:

Figure 8. BC Benn's main menu after adding the event link (Cole, 2022 *AC Status Report V4*).
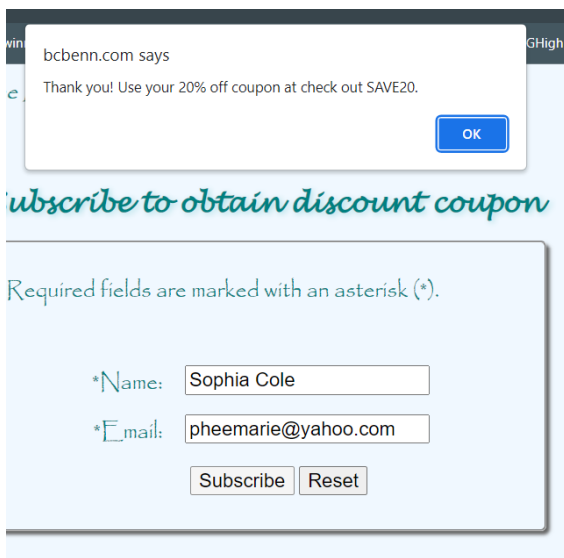
Pop up coupon window.

Figure 9. BC Benn's pop up window with coupon code (Cole, 2022 *AC Status Report V4*).

REPORT 5

Project Name: BC Benn's Website Update **Team Member Name:** Ana Cole

Date: 03/19/2022 **Reporting Period:** Week 10 03/13/2022 - 03/19/2022
Work completed this reporting period: BC Benn's Events page is fully operational with events' venues included in the calendar. The search option captures text from the textbox on the main page using an HTML form. The SQL command to search the database is in working order. The search results page has been created and is fully functional. The search results are linked to the website. Each link returned is live and working.
Work to complete next reporting period: The PHP statements to show the set of data found in the database needs to be modified to show "No results found" when no data is found. Make search functional on all the pages that have the option.
What's going well and why: The project is going well because it is ahead of time in most of the tasks and changes to the website are in proper working order.
What's not going well and why: The PHP statements that fetch the results from the database need to be refined to show the message "No results found" when nothing matches the value entered in the textbox. The team is having difficulty finding the statements to use if nothing is fetched from the database.
Suggestions/Issues: The team needs to dig deeper into PHP to find a solution to the search textbox statements not showing "No results found" when the search is unsuccessful. A modified inventory-based table to be used just for searches is advisable to put together to feed the search engine.
Project changes: Although the PHP statements need refinement the SQL command works. Since the search option completion date is 04/02/2022, the team is confident it will be completed without changes to the schedule.

Table 18. Status report number five (Cole, 2022 *AC Status Report V5*).

Website's Events page:

Figure 10. BC Benn's Events page (Cole, 2022 *AC Status Report V5*).

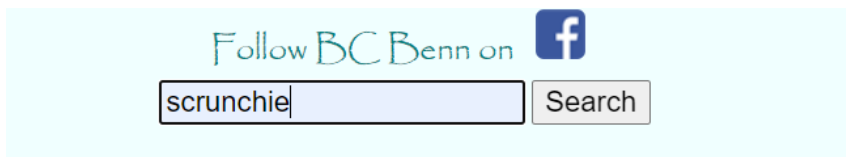When searching within the site:

Figure 11. BC Benn's search textbox and button (Cole, 2022 *AC Status Report V5*).

A results page returns the data found with live links:

Figure 12. BC Benn's search results page (Cole, 2022 *AC Status Report V5*).

The database is currently populated as follows:

Figure 13. Database table Search (Cole, 2022 *AC Status Report V5*).

PROJECT PLANS

REPORT 1

PROJECT NAME	BC Benn's Website Update		PROJECT MANAGER	AC as Luke Kim
PROJECT DELIVERABLE	Updated website with new color scheme and the following new features: E-mail subscription with coupon, calendar of sales events, search within the website, and chatbot.			
SCOPE STATEMENT	This project will change the color codes of all the site's pages. It will add an e-mail subscription option to the FAQ/Contact page. It will add a pop-up window with a coupon code. It will add the customer's e-mail to the database. It will add a button or tab to link the calendar of events page to the main page. It will make the search box on the main page functional. It will add a search results page. It will integrate a chatbot.			
START DATE	01/10/2022	END DATE	04/29/2022	OVERALL PROGRESS	30%

RISK	TASK NAME	ASSIGNED TO	START	END	DURATION	STATUS	NOTES
	Develop business case, project scope definition and scope statement.	Ana Cole	01/10/2022	01/29/2022	18	Completed	
	Work breakdown structure.	Ana Cole	01/31/2022	02/02/2022	3	Completed	
	Change CSS color codes and obtain approval.	Ana Cole	02/05/2022	02/12/2022	7	Completed	
	Insert new textbox on About Us	Ana Cole	02/14/2022	02/16/2022	3	Completed	
	Insert subscribe button	Ana Cole	02/17/2022	02/19/2022	3	Completed	
Y	Code PHP and SQL to connect to database	Ana Cole	02/21/2022	02/23/2022	3	In progress	The team may need more time to code this.
	Code pop-up window with coupon code	Ana Cole	02/24/2022	02/26/2022	3	In progress	
	Add button or tab to link to the calendar of events page	Ana Cole	02/28/2022	02/28/2002	1	Not started	
	Create the calendar of sales events page	Ana Cole	03/01/2022	03/12/2022	11	Not started	
	Capture text from search within website textbox and compare with database	Ana Cole	03/14/2022	03/16/2022	3	Not started	
	Write SQL commands for search	Ana Cole	03/17/2022	03/22/2022	5	Not started	
	Create a search results page	Ana Cole	03/23/2022	03/28/2022	5	Not started	
	Create results links to the website	Ana Cole	03/29/2022	04/02/2022	5	Not started	
Y	Integrate chatbot software	Ana Cole	04/04/2022	04/16/2022	12	Not started	Integration may be delayed depending on the vendor.
	User testing	Ana Cole	04/18/2022	04/23/2022	6	Not started	
	Lessons learned, archive documents, closing approval, and presentation	Ana Cole	04/25/2022	04/29/2022	5	Not started	

Table 19. Project plan number one (Cole, 2022 *AC Project Plan Document V1*).

REPORT 2

PROJECT NAME	BC Benn's Website Update		PROJECT MANAGER	AC as Luke Kim
PROJECT DELIVERABLE	Updated website with new color scheme and the following new features: E-mail subscription with coupon, calendar of sales events, search within the website, and chatbot.			
SCOPE STATEMENT	This project will change the color codes of all the site's pages. It will add an e-mail subscription option to the FAQ/Contact page. It will add a pop-up window with a coupon code. It will add the customer's e-mail to the database. It will add a button or tab to link the calendar of events page to the main page. It will make the search box on the main page functional. It will add a search results page. It will integrate a chatbot.			
START DATE	01/10/2022	END DATE	04/29/2022	OVERALL PROGRESS	38%

RISK	TASK NAME	ASSIGNED TO	START	END	DURATION	STATUS	NOTES
	Develop business case, project scope definition and scope statement	Ana Cole	01/10/2022	01/29/2022	18	Completed	
	Work breakdown structure	Ana Cole	01/31/2022	02/02/2022	3	Completed	
	Change CSS color codes and obtain approval	Ana Cole	02/05/2022	02/12/2022	7	Completed	
	Insert new textbox on About Us	Ana Cole	02/14/2022	02/16/2022	3	Completed	
	Insert subscribe button	Ana Cole	02/17/2022	02/19/2022	3	Completed	
Y	Code PHP and SQL to connect to database	Ana Cole	02/21/2022	02/23/2022	3	Completed	This task was completed on 02/26/2022. It was one week behind.
Y	Code pop-up window with coupon code	Ana Cole	02/24/2022	02/26/2022	3	In progress	This task is running behind but the schedule should not be changed because it will be completed by 02/28/2022
	Add button or tab to link to the calendar of events page	Ana Cole	02/28/2022	02/28/2002	1	In Progress	This task will be completed on time together with the coupon pop up window.
	Create the calendar of sales events page	Ana Cole	03/01/2022	03/12/2022	11	Not Started	
	Capture text from search within website textbox and compare with database	Ana Cole	03/14/2022	03/16/2022	3	Not Started	
	Write SQL commands for search	Ana Cole	03/17/2022	03/22/2022	5	Not Started	
	Create a search results page	Ana Cole	03/23/2022	03/28/2022	5	Not Started	
	Create results links to the website	Ana Cole	03/29/2022	04/02/2022	5	Not Started	
Y	Integrate chatbot software	Ana Cole	04/04/2022	04/16/2022	12	Not Started	Integration may be delayed depending on the vendor.
	User testing	Ana Cole	04/18/2022	04/23/2022	6	Not Started	
	Lessons learned, archive documents, closing approval, and presentation	Ana Cole	04/25/2022	04/29/2022	5	Not Started	

Table 20. Project plan number two (Cole, 2022 *AC Project Plan Document V2*).

REPORT 3

PROJECT NAME	BC Benn's Website Update			PROJECT MANAGER		AC as Luke Kim	
PROJECT DELIVERABLE	Updated website with new color scheme and the following new features: E-mail subscription with coupon, calendar of sales events, search within the website, and chatbot.						
SCOPE STATEMENT	This project will change the color codes of all the site's pages. It will add an e-mail subscription option to the FAQ/Contact page. It will add a pop-up window with a coupon code. It will add the customer's e-mail to the database. It will add a button or tab to link the calendar of events page to the main page. It will make the search box on the main page functional. It will add a search results page. It will integrate a chatbot.						
START DATE	01/10/2022	END DATE	04/29/2022	OVERALL PROGRESS		50%	

RISK	TASK NAME	ASSIGNED TO	START	END	DURATION	%	STATUS	NOTES
	Develop business case, project scope definition and scope statement	Ana Cole	01/10/2022	01/29/2022	18	100	Completed	
	Work breakdown structure	Ana Cole	01/31/2022	02/02/2022	3	100	Completed	
	Change CSS color codes and obtain approval	Ana Cole	02/05/2022	02/12/2022	7	100	Completed	
	Insert new textbox on About Us	Ana Cole	02/14/2022	02/16/2022	3	100	Completed	
	Insert subscribe button	Ana Cole	02/17/2022	02/19/2022	3	100	Completed	
	Code PHP and SQL to connect to database	Ana Cole	02/21/2022	02/23/2022	3	100	Completed	This task was completed on 02/26/2022. It was one week behind.
	Code pop-up window with coupon code	Ana Cole	02/24/2022	02/26/2022	3	100	Completed	This task was completed on 03/04/2022. It was one week behind.
	Add button or tab to link to the calendar of events page	Ana Cole	02/28/2022	02/28/2002	1	100	Completed	
	Create the calendar of sales events page	Ana Cole	03/01/2022	03/12/2022	11	5	Initiating	This task was delayed by a team member's illness but it will be finished on time.
	Capture text from search within website textbox and compare with database	Ana Cole	03/14/2022	03/16/2022	3	2	Initiating	
	Write SQL commands for search	Ana Cole	03/17/2022	03/22/2022	5	0	Not Started	
	Create a search results page	Ana Cole	03/23/2022	03/28/2022	5	0	Not Started	
	Create results links to the website	Ana Cole	03/29/2022	04/02/2022	5	0	Not Started	
Y	Integrate chatbot software	Ana Cole	04/04/2022	04/16/2022	12	0	Not Started	Integration may be delayed depending on the vendor.
	User testing	Ana Cole	04/18/2022	04/23/2022	6	0	Not Started	
	Lessons learned, archive documents, closing approval, and presentation	Ana Cole	04/25/2022	04/29/2022	5	0	Not Started	

Table 21. Project plan number three (Cole, 2022 *AC Project Plan Document V3*).

REPORT 4

PROJECT NAME	BC Benn's Website Update		PROJECT MANAGER	AC as Luke Kim
PROJECT DELIVERABLE	Updated website with new color scheme and the following new features: E-mail subscription with coupon, calendar of sales events, search within the website, and chatbot.			
SCOPE STATEMENT	This project will change the color codes of all the site's pages. It will add an e-mail subscription option to the FAQ/Contact page. It will add a pop-up window with a coupon code. It will add the customer's e-mail to the database. It will add a button or tab to link the calendar of events page to the main page. It will make the search box on the main page functional. It will add a search results page. It will integrate a chatbot.			
START DATE	01/10/2022	END DATE	04/29/2022	OVERALL PROGRESS	75%

RISK	TASK NAME	ASSIGNED TO	START	END	DURATION	%	STATUS	NOTES
	Develop business case, project scope definition and scope statement	Ana Cole	01/10/2022	01/29/2022	18	100	Completed	
	Work breakdown structure	Ana Cole	01/31/2022	02/02/2022	3	100	Completed	
	Change CSS color codes and obtain approval	Ana Cole	02/05/2022	02/12/2022	7	100	Completed	
	Insert new textbox on About Us	Ana Cole	02/14/2022	02/16/2022	3	100	Completed	
	Insert subscribe button	Ana Cole	02/17/2022	02/19/2022	3	100	Completed	
	Code PHP and SQL to connect to database	Ana Cole	02/21/2022	02/23/2022	3	100	Completed	This task was completed on 02/26/2022. It was one week behind.
	Code pop-up window with coupon code	Ana Cole	02/24/2022	02/26/2022	3	100	Completed	This task was completed on 03/04/2022. It was one week behind.
	Add button or tab to link to the calendar of events page	Ana Cole	02/28/2022	02/28/2002	1	100	Completed	
	Create the calendar of sales events page	Ana Cole	03/01/2022	03/12/2022	11	100	Completed	This task was completed on 03/12/2022.
	Capture text from search within website textbox and compare with database	Ana Cole	03/14/2022	03/16/2022	3	100	Completed	This task was completed on 03/16/2022.
Y	Write SQL commands for search	Ana Cole	03/17/2022	03/22/2022	5	75	In Progress	This task is partially accomplished. The SQL command to search the database is in working order but the PHP statements need to be modified to reflect, "No results found" when nothing matches the value entered by the customer.
	Create a search results page	Ana Cole	03/23/2022	03/28/2022	5	100	Completed	This task has been completed ahead of time on 03/18/2022.
	Create results links to the website	Ana Cole	03/29/2022	04/02/2022	5	100	Completed	This task has been completed ahead of time on 03/18/2022
Y	Integrate chatbot software	Ana Cole	04/04/2022	04/16/2022	12	10	Initiating	Integration may be delayed depending on the vendor. Vendor search has been started as of 03/16/2022
	User testing	Ana Cole	04/18/2022	04/23/2022	6	50	In Progress	The changes are being tested by the marketing department as they are made.
	Lessons learned, archive documents, closing approval, and presentation	Ana Cole	04/25/2022	04/29/2022	5	5	Initiating	The project presentation has been started.

Table 22. Project plan number four (Cole, 2022 *AC Project Plan Document V4*).

REPORT 5

PROJECT NAME	BC Benn's Website Update		PROJECT MANAGER	AC as Luke Kim
PROJECT DELIVERABLE	Updated website with new color scheme and the following new features: E-mail subscription with coupon, calendar of sales events, search within the website, and chatbot.			
SCOPE STATEMENT	This project will change the color codes of all the site's pages. It will add an e-mail subscription option to the FAQ/Contact page. It will add a pop-up window with a coupon code. It will add the customer's e-mail to the database. It will add a button or tab to link the calendar of events page to the main page. It will make the search box on the main page functional. It will add a search results page. It will integrate a chatbot.			
START DATE	01/10/2022	END DATE	04/29/2022	OVERALL PROGRESS	100%

RISK	TASK NAME	ASSIGNED TO	START	END	DURATION	%	STATUS	NOTES
	Develop business case, project scope definition and scope statement	Ana Cole	01/10/2022	01/29/2022	18	100	Completed	
	Work breakdown structure	Ana Cole	01/31/2022	02/02/2022	3	100	Completed	
	Change CSS color codes and obtain approval	Ana Cole	02/05/2022	02/12/2022	7	100	Completed	
	Insert new textbox on About Us	Ana Cole	02/14/2022	02/16/2022	3	100	Completed	
	Insert subscribe button	Ana Cole	02/17/2022	02/19/2022	3	100	Completed	
	Code PHP and SQL to connect to database	Ana Cole	02/21/2022	02/23/2022	3	100	Completed	This task was completed on 02/26/2022. It was one week behind.
	Code pop-up window with coupon code	Ana Cole	02/24/2022	02/26/2022	3	100	Completed	This task was completed on 03/04/2022. It was one week behind.
	Add button or tab to link to the calendar of events page	Ana Cole	02/28/2022	02/28/2002	1	100	Completed	
	Create the calendar of sales events page	Ana Cole	03/01/2022	03/12/2022	11	100	Completed	This task was completed on 03/12/2022.
	Capture text from search within website textbox and compare with database	Ana Cole	03/14/2022	03/16/2022	3	100	Completed	This task was completed on 03/16/2022.
	Write SQL commands for search	Ana Cole	03/17/2022	03/22/2022	5	100	Completed	This task was completed late on 04/15/2022.
	Create a search results page	Ana Cole	03/23/2022	03/28/2022	5	100	Completed	This task has been completed ahead of time on 03/18/2022.
	Create results links to the website	Ana Cole	03/29/2022	04/02/2022	5	100	Completed	This task has been completed ahead of time on 03/18/2022
	Integrate chatbot software	Ana Cole	04/04/2022	04/16/2022	12	100	Completed	This task was completed on time. This task has been completed ahead of time on 03/18/2022
	User testing	Ana Cole	04/18/2022	04/23/2022	6	100	Completed	All features have been tested ahead of time.
	Lessons learned, archive documents, closing approval, and presentation	Ana Cole	04/25/2022	04/29/2022	5	100	Completed	All documents have been submitted

Table 23. Project plan number five (Cole, 2022 *AC Project Plan Document V5*).

USE CASE ANALYSIS

ID:	**003**
Title:	Subscribe
Description:	The customer will subscribe to the company's newsletter when they click on the subscribe button and obtain a discount coupon to use at check out.
Primary Actor:	BC Benn's customers
Preconditions:	The name and email fields contain user input
Post-conditions:	A pop-up window shows on the screen with the coupon code information the customer can use at check out.
Use Case Diagram	See below
Main Success Scenario:	Action 1: Customer enters a name Action 2: Customer enters an email Action 3: Customer clicks on the Subscribe button Action 4: A Pop-up window with a coupon code shows up Action 5: Customer clicks ok to close pop-up window
Extensions:	Exceptions/Errors #1: If the customer doesn't enter a name a window pops up asking them to enter a name. Exceptions/Errors #2: If the customer doesn't enter an email address a window pops up asking them to enter an email.
Frequency of Use:	50% of all website visitors
Status:	Completed
Owner:	Ana Cole as Louise Mann
Priority:	High

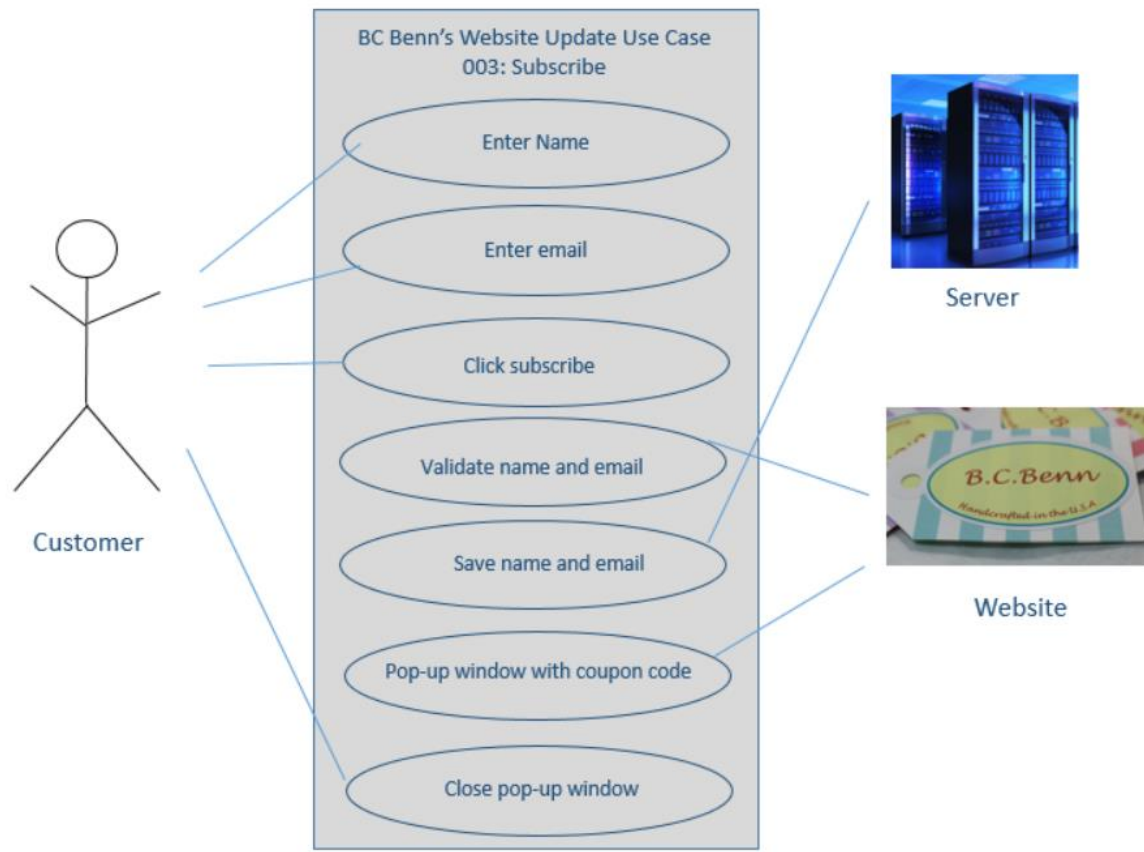Table 24. Subscribe use case analysis (Cole, 2022 *ACWeek8UseCaseAnalysis*).

Figure 14. Use case analysis graphical representation (Cole, 2022 *ACWeek8UseCaseAnalysis*).

USER INTERFACE DESIGN

CALENDAR OF EVENTS PAGE

- The user will see the calendar in the Events page.
- The customer cannot add or change dates, it is only informational.
- To enter this user interface the customer selects Events in the main menu.
- To exit this user interface the customer must select an item from the main menu or click on the back arrow in the browser.

Figure 15. Calendar of events design (Cole, 2022 *AC Capstone Project Presentation*).

SEARCH FEATURE

- Located on BC Benn's main page.
- The user enters what they are looking for in the search box.
- The user clicks on the search button and a search results' page appear on a new tab.
- To exit this user interface the customer must select an item from the main menu or click on the back arrow in the browser.
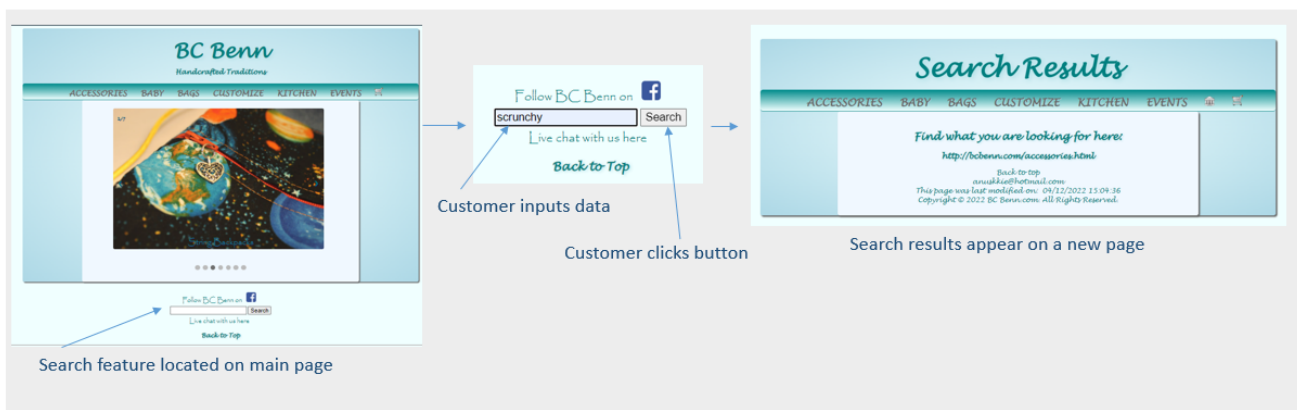

Figure 16. Search feature design and flow (Cole, 2022 *AC Capstone Project Presentation*).

SUBSCRIBE AND OBTAIN A COUPON FEATURE

Figure 17. Subscribe design and flow (Cole, 2022 *AC Capstone Project Presentation*).
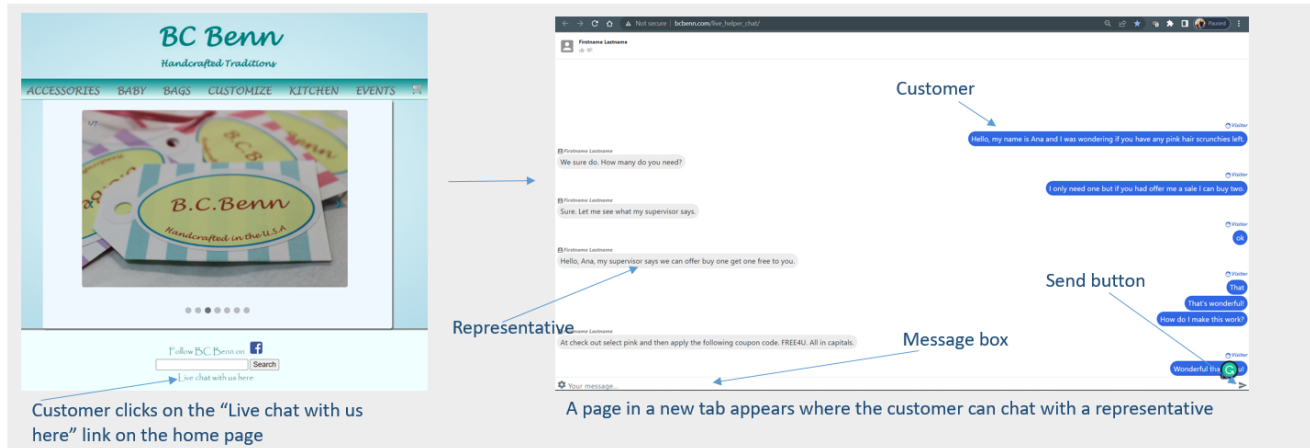
CHATBOT FEATURE

Figure 18. Chatbot design and flow (Cole, 2022 *AC Capstone Project Presentation*).

TEST PLAN DOCUMENT

PROJECT NAME	*BC Benn's Website Update*	AUTHOR OF THIS TEST PLAN	*Ana Cole as Louise Mann, IT Manager*
TESTING GOALS	BC Benn's website update will enhance existing features, add new ones, and include new content. This update is critical to increasing online sales. All the enhanced existing features will be tested for proper function. New features will be tested for proper function and integration with the rest of the site. All input collected from the user will be validated. All outputs will be tested for accuracy. Proper data management will be tested. Content will be tested for adequacy. Testing will be performed as features are added or modified. In addition, there will be six consecutive days of user testing from 04/18/2022 to 04/23/2022 after which if all features pass all associated test cases it will be considered finished.		

TESTING START DATE	03/25/2022	**TESTING END DATE**	04/23/2022	**OVERALL PROJECT PROGRESS**	100%

Table 25. Test plan summary (Cole, 2022 *AC Functional Test Plan*).

SCOPE

FEATURE ID	NAME/DESCRIPTION
1	Subscribe and obtain a coupon.
2	Events page and calendar
3	Search site feature
4	Chatbot integration

Table 26. Scope of the testing (Cole, 2022 *AC Functional Test Plan*).

NOT INCLUDED IN THIS PROJECT'S SCOPE

Requirement ID	NAME/DESCRIPTION	Reason for Exclusion
1	Color scheme change	The color scheme will be decided by the owner and the Marketing department

Table 27. Items not included in the project's scope (Cole, 2022 *AC Functional Test Plan*).

FUNCTIONAL TEST CASES

Test Case Field	Details
Test Case ID: Test Case Name	1: Subscribe button data addition.
Purpose	Tests that the email and name entered by the customer are added to the database.
Initiation Criteria	The user enters the FQA/Contact section on the main page
Execution Steps	1. Enter name. 2. Enter email. 3. Click enter button. 4. Validate data. 5. Add data to the database.
Expected Results	The data entered by the customer is added to the database.

Table 28. Test case 1: Subscribe button data addition (Cole, 2022 *AC Functional Test Plan*).

Test Case Field	Details
Test Case ID: Test Case Name	2: Reset button in subscribe feature.
Purpose	Tests that the reset button clears the data in text boxes.
Initiation Criteria	Text boxes contain data
Execution Steps	1. Enter data in both boxes. 2. Press Reset button
Expected Results	The data is cleared from the text boxes

Table 29. Test case 2: Reset button in subscribe feature (Cole, 2022 *AC Functional Test Plan*).

Test Case Field	Details
Test Case ID: Test Case Name	3: Subscribe data validation
Purpose	Validate that the textboxes in subscribe area contain data after clicking on submit button.
Initiation Criteria	Data is absent on one or both of the textboxes.
Execution Steps	1. Leave name textbox empty or 2. Leave email textbox empty or 3. Leave both textboxes empty 4. Click submit
Expected Results	If either or both name and email textboxes is left empty an error message window pops up prompting to enter data.

Table 30. Test case 3: Subscribe data validation (Cole, 2022 *AC Functional Test Plan*).

Test Case Field	Details
Test Case ID: Test Case Name	4: Coupon window
Purpose	To test that a window with a coupon code pops up after successful addition to the database.
Initiation Criteria	Customer clicks submit to subscribe.
Execution Steps	1. Enter name. 2. Enter email. 3. Validate data. 4. Click subscribe.
Expected Results	A window with a coupon code will pop up after clicking on the subscribe button.

Table 31. Test case 4: Coupon window (Cole, 2022 *AC Functional Test Plan*).

Test Case Field	Details
Test Case ID: Test Case Name	5: Event page links
Purpose	To test that the links to the new event page work.
Initiation Criteria	The new link appears in all the pages' main menus.
Execution Steps	1. Click the Events link.
Expected Results	The Events page opens up in a new tab in the browser.

Table 32. Test case 5: Event page links (Cole, 2022 *AC Functional Test Plan*).

Test Case Field	Details
Test Case ID: Test Case Name	6: Search feature
Purpose	To test that the search feature returns values on a new page after clicking enter.
Initiation Criteria	The customer clicks the search button.
Execution Steps	1. Enter data. 2. Click the search button.
Expected Results	A new page opens up a new tab in the browser with the search results.

Table 33. Test case 6: Search feature (Cole, 2022 *AC Functional Test Plan*).

Test Case Field	Details
Test Case ID: Test Case Name	7: Chatbot
Purpose	To test that the chatbot works
Initiation Criteria	A link to the chatbot is available.
Execution Steps	1. Click on the chat link. 2. Write data. 3. Click enter. 4. Respond to data. 5. Click enter.
Expected Results	A conversation takes place between the customer and BC Benn.

Table 34. Test case 7: Chatbot (Cole, 2022 *AC Functional Test Plan*).

TEST PLAN APPROVAL

The undersigned acknowledge they have reviewed BC Benn's **Test Plan** document and agree with the approach it presents. Any changes to this Requirements Definition will be coordinated with and approved by the undersigned or their designated representatives.

Signature: Louise Mann   Date: 03/25/2022

Print Name: Ana Cole as Louise Mann

Title: IT Manager

Role: Technical Steward

Signature: Luke Kim   Date: 03/25/2022

Print Name: Ana Cole as Luke Kim

Title: Marketing Director

Role: Project Manager

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