



GETTYSBURG BOOKSTORE

Team 26

The Design Phase Report

The bookstore at Gettysburg Museum in Pennsylvania has processes that are being re-engineered to provide a seamless shopping experience to their customers.

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Client and industry background

Our Client is the Gettysburg National Military Park Bookstore which is run by the Event Network Inc. of San Diego. Our primary point of contact is Chuck Hallabough who is the manager of the bookstore.

The private bookstore collaborates with the National Park to give tours of the Gettysburg battlefield. Nearly 2 million people visit the battlefields yearly and nearly half end up taking a self-guided tour. The bookstore sells several versions of self-guided tours which use CDs and sells about 50,000 self-guided tours yearly. This is the first attempt to create a smartphone tour in conjunction with a self-guided tour book.

Executive summary

The current system for selecting books is human intensive. The process involves significant human input and change will take some reinforcement. From a high-level the process change is small and most of the changes happen at the granular level. Simply put, when a customer inquires about a tour book, rather than be educated by a salesperson, the customer will be directed to a kiosk and be matched with a book based on their preferences.

Our recommendation for managing organizational change emulates the Lewin model. Unfreeze, move, refreeze. The unfreeze stage is that salespeople will need to stop immediately going into the education process. The “move” stage will be that salespeople will need to redirect customers to the book selection kiosks. Freeze will be primarily in the hands of bookstore managers who will reinforce this new “move” behavior.

Project scope

Our scope lays out what we will be able to accomplish for the Gettysburg Bookstore over the course of the semester. In order to best serve our client, we will create a project road-map which lays out our goals and how we will accomplish them.

We will identify pain points within their existing processes and make change recommendations to improve customer experience. We aim to institute processes that educate the bookstore patrons better before they make a purchase. We will then help the client identify the best ways to gather feedback.

We will also inform the client of concluding the project just before the implementation phase. We will not be able to invest in making changes to the hardware of the national military park or change the content of the existing books.

Project objectives

The Gettysburg bookstore desires to improve processes that affect customer satisfaction.

In order to do so, we have identified some areas where customers face issues while purchasing tour material. Customers have a hard time deciding which books to purchase given an entire spectrum of value proposition. This requires extensive product education by sales people which wastes resources. Our project will propose to change the way the purchase process pans out.

We also want to enable the sales team to gather feedback on the quality of material, purchasing process, ease of finding an attraction, and ease of in-app navigation. These insights will be readable from a non-technical perspective since they can aggregate these findings into simple reports.

Problems/opportunities/directives

Problem 1 - Sales people may misinform customers about the features of each book

The bookstore currently has several guided tour books (bundled with apps) and CDs. We applied the observational technique from our class slides to understand how a salesperson pitches the value proposition of each book to customers. We recorded that the salesperson offered verbal explanations and was sometimes misinformed about the value offerings of each book resulting in a complicated decision-making process for the customer. For example- *Experience Gettysburg* comes with a GPS-enabled app, but, the salesperson did not describe the GPS feature.

Problem 2 - App requires multiple interfaces

Only one of the books offered an app with GPS functionality; we would like to use this app as a baseline for our project as we feel we can build on its relatively richer set of features as compared to the other offerings at the bookstore. This baseline can be used by the bookstore at a later stage in this project to mandate a minimum set of standards for all the other apps. The app itself performed no navigation but would require the user to switch between itself and Google/Apple maps frequently for navigation and accessing Battlefield related information. To make matters more complex, customers would also have to switch to YouTube to view Battlefield related videos. Also, the app has no template tours (such as a 2-hour express tour or a 4-hour exhaustive tour).

Opportunities

Bookstore employees are unable to give metrics on customer satisfaction and/or what factors led to frustration. This is an opportunity to build a feedback mechanism and while also streamlining the purchasing process for the bookstore.

A process supported by technology that allows patrons to report pain points and submit constructive feedback would help the bookstore measure consumer satisfaction associated with specific changes

introduced in the purchasing process- whether it is as simple as the store layout or the quality of content on the app.

Currently, feedback is submitted to the corporate office which in turn routes the information to the company manager, who aggregates the information through emails and finally submits it to the bookstore operations team. This long winded and non-intuitive process can be streamlined into a much more impactful one.

Directives

No directives were passed by the government, major customer or suppliers to the bookstore that would necessitate the execution of this project. It is mainly an undertaking as a result of observing a process improvement opportunity.

Constraints

Client

As quasi-government work, this project will be constrained by federal government regulations. National parks have a variety of regulations ranging from accessibility to interpretation. As a technology project it will also be constrained by policies from the Google and iTunes app stores, which have requirements in order to make an application available for download.

Our project will also be further constrained by time in the sense that any reprints of the book will not be available immediately and we will have to make both long-term and short-term recommendations.

These books have existing content and any new changes or content must fit within the flow of existing content. Finally, despite being approved by the government agencies, we are not a priority of theirs and should expect minimal if any support from the parks.

Team

The team lacks design expertise and therefore is in no position to help the client with rebranding/redesigning their books.

Problems Solved by New Processes

Problem 1

We have re-engineered the purchase processes and have documented them in the forthcoming sections. Essentially, customers will interact with an iPad in-store to state their preferences for features they want in the app and the book. The iPad app will “Quiz” them about their preferences and aggregate their responses. Based on customer responses, the system will recommend a book that they may purchase. This obviates the need to talk to salespeople. However, customers who are not tech-savvy may consult salespeople.

Problem 2

We spoke to the client and advised them on how multiple interfaces used in the app were terrible design. Based on our in-person recommendations, they asked their developers to fix the issue without the need for a re-engineered process. We have not included this as a separate process in our report.

Opportunity 1

We have re-engineered the feedback process to capture responses in a centralized location. The client may aggregate their responses and perform data mining on them in the future to view trends. Previously, there was no system in place to collect feedback except for email. Now, there is a centralized database that holds feedback from customers in a more formal manner.

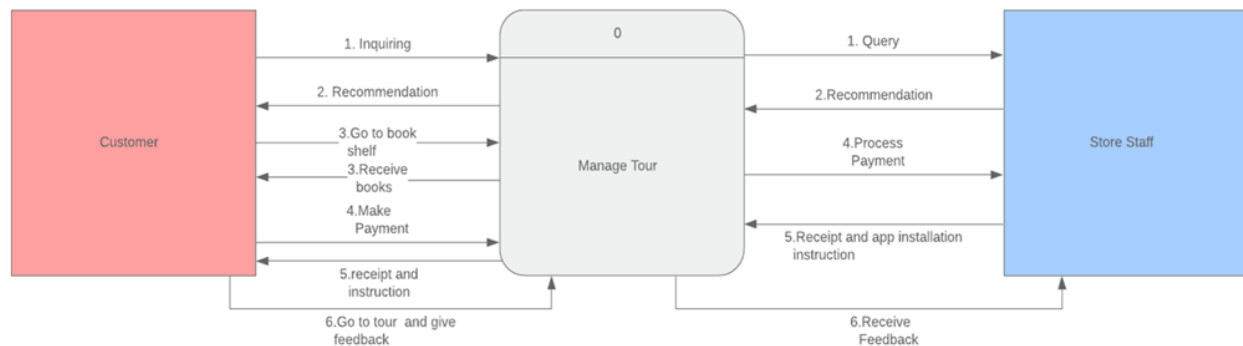
Existing system model: Approved System Analysis Report

Narrative

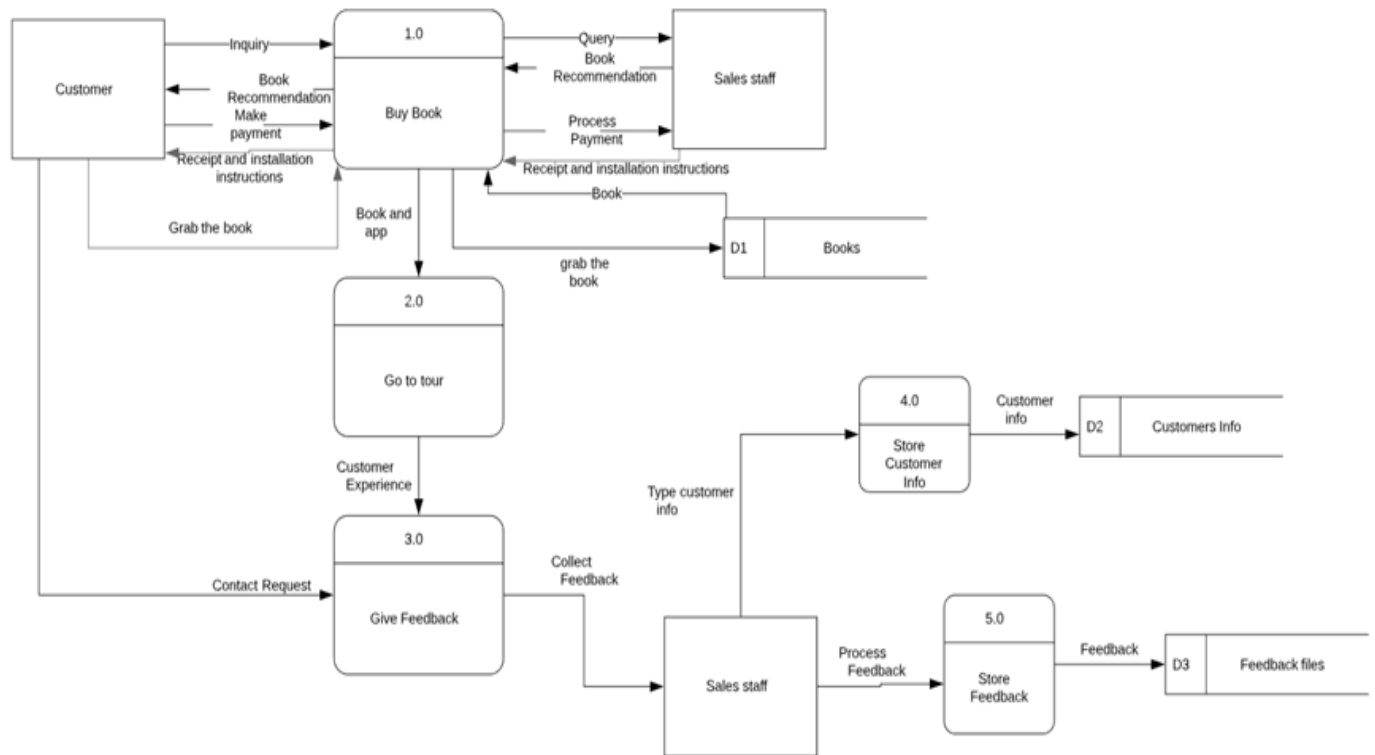
A customer enters the Gettysburg national military park bookstore and inquires for a tour. They are approached by a store staff member and ask them for help finding the proper tour book. The store staff member gives them a recommendation. The customer selects from the book shelf and makes a payment. After they have made the payment, they get a receipt and instructions on how to use the book. They then download the app that goes with the book. The customer then goes on the tour and experiences the tour of the Gettysburg Battlefield. The customer interacts with a GPS-enabled application for directions through the battlefield. They watch videos on another application. The customer also refers to a book for more content.

The customer then embarks on an informal process to give feedback or not. They look up the email address from the receipt and send any feedback they have from their experience at the battlefield to the bookstore email. The sales staff proceed to store feedback informally within a folder.

Current Context Level Diagram

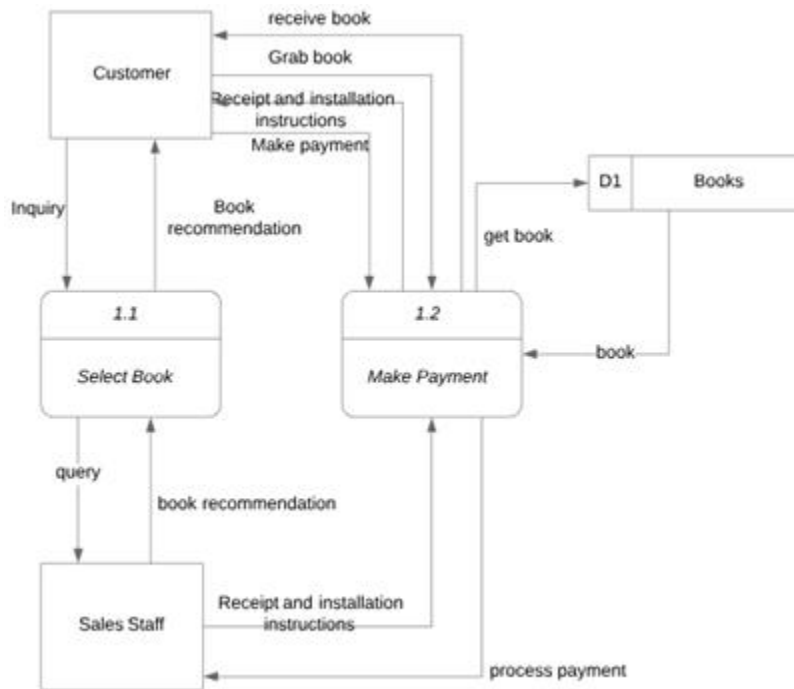


Current Level 0 Diagram

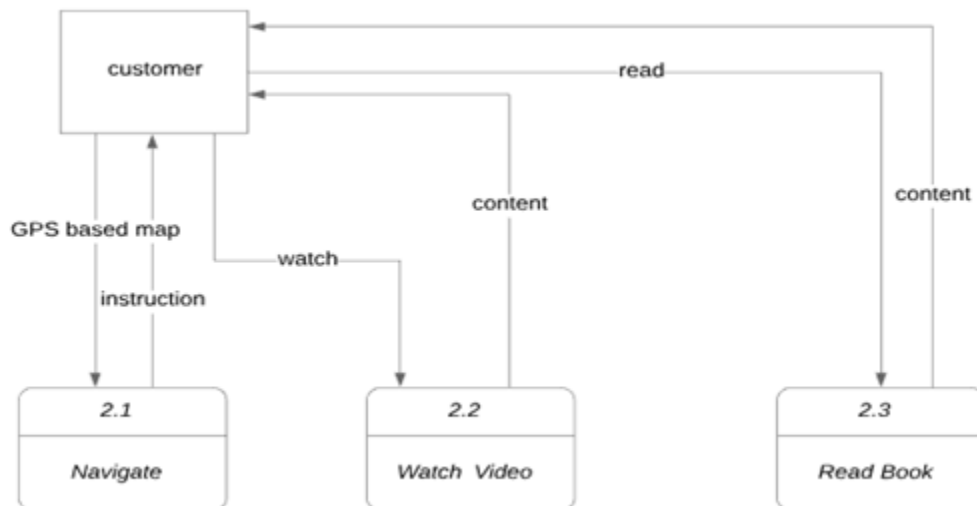


Current Level 1 Diagrams

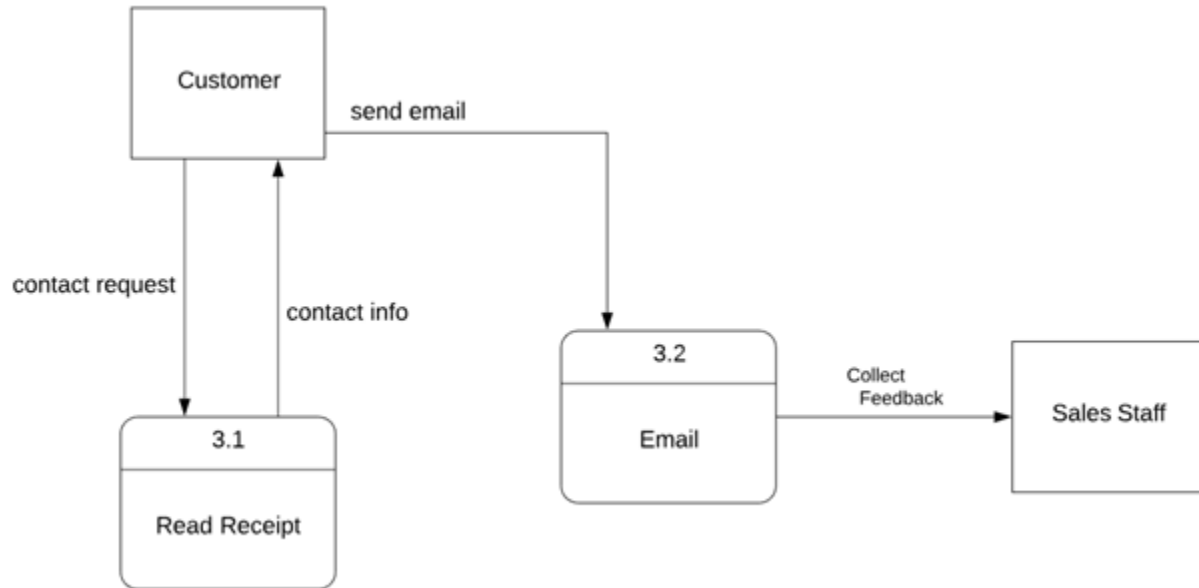
Process 1.0



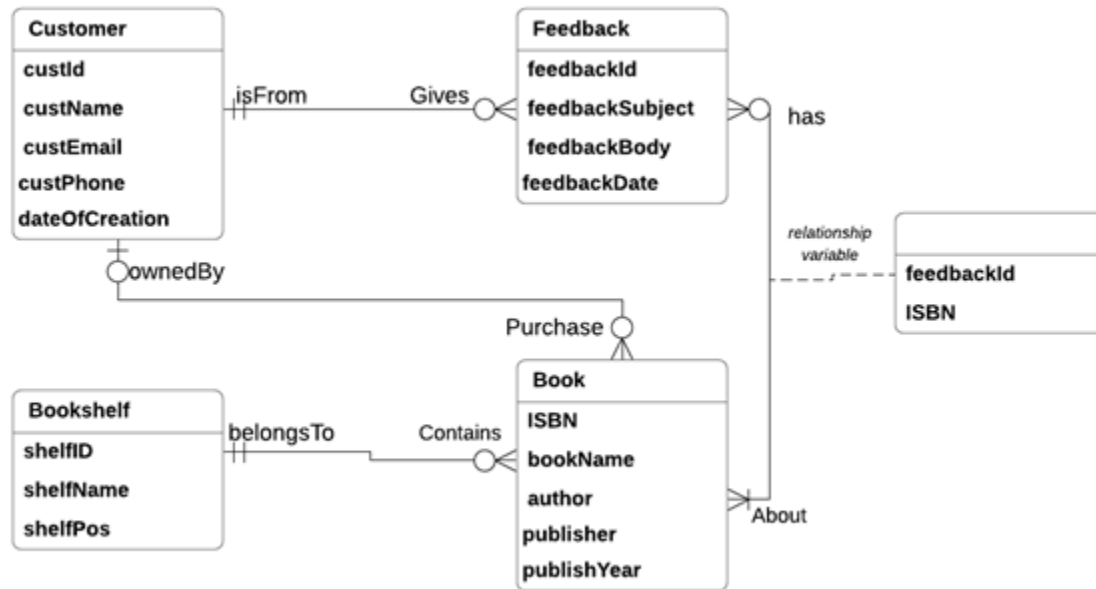
Process 2.0



Process 3.0

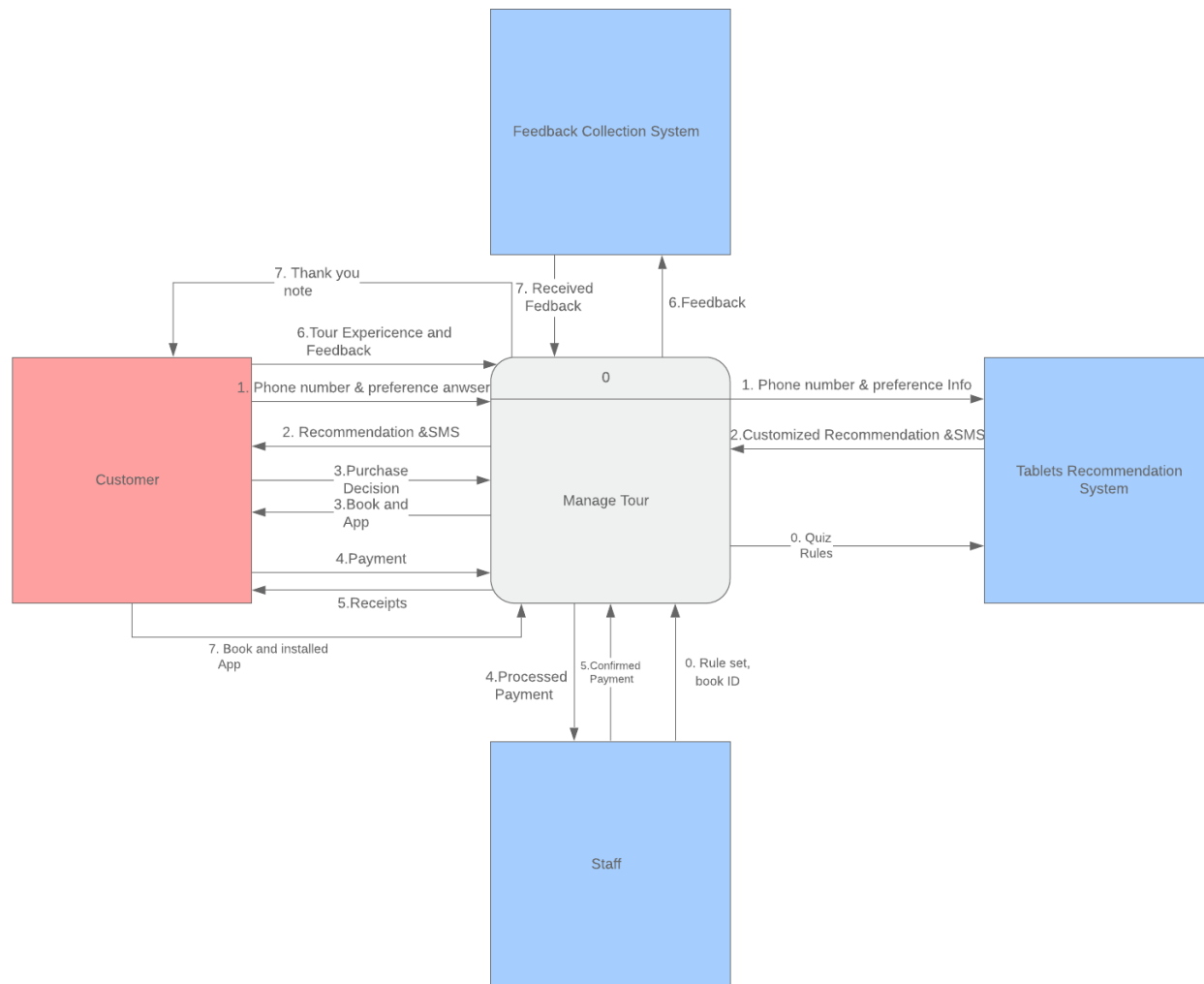


Current Entity Relationship Diagram

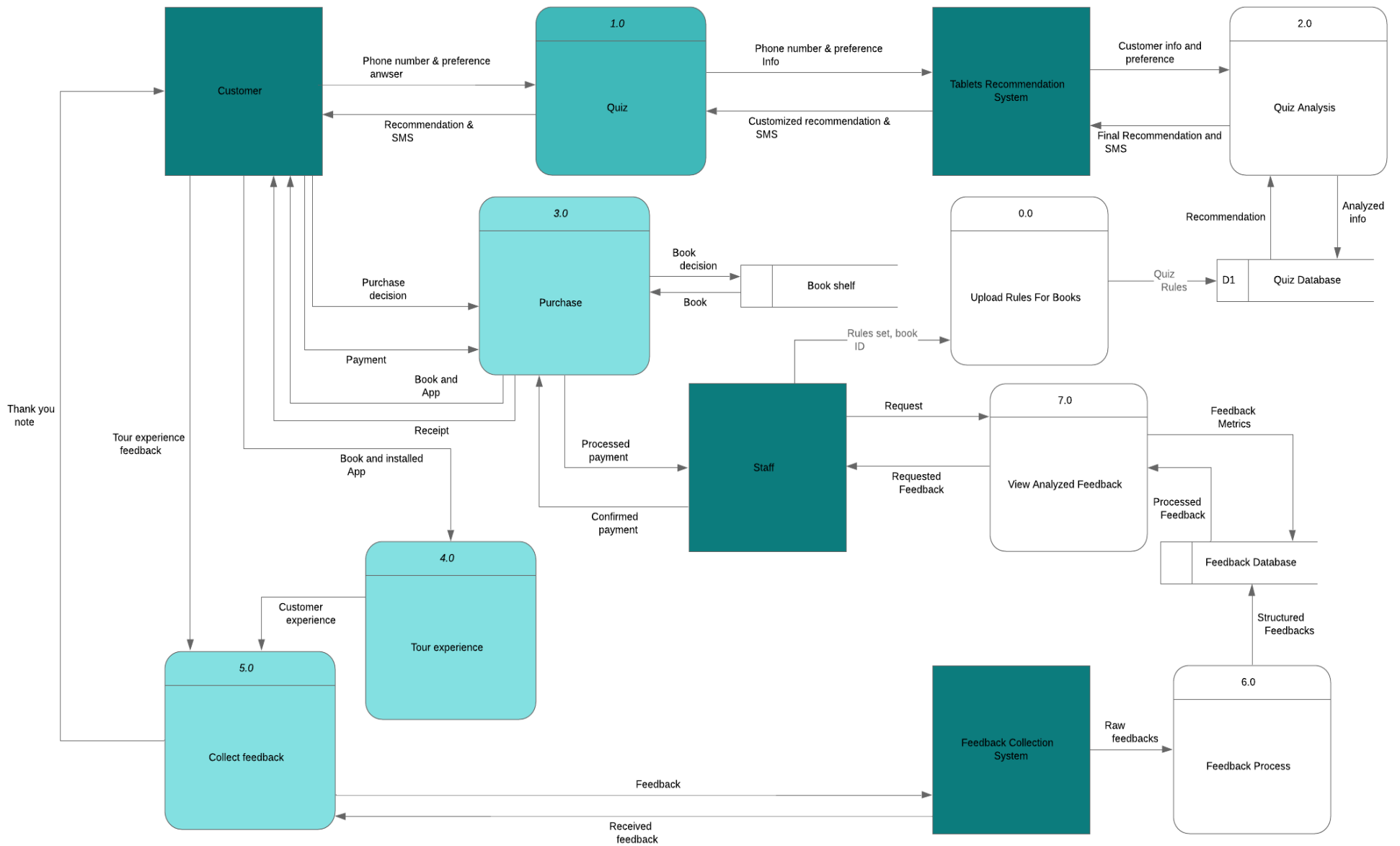


Proposed: System Models

Context Level Diagram



Level 0 diagram (Logical)

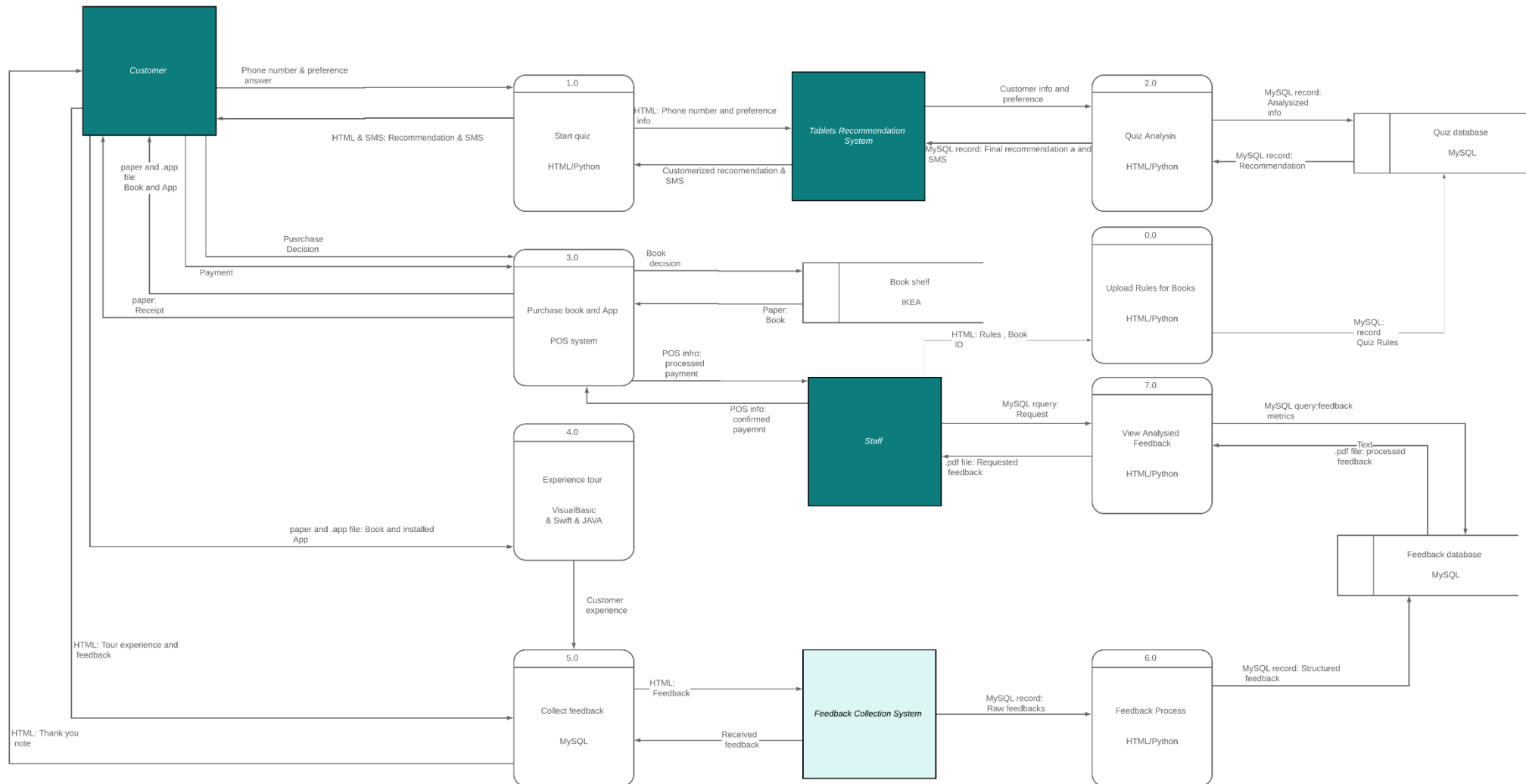


Narrative:

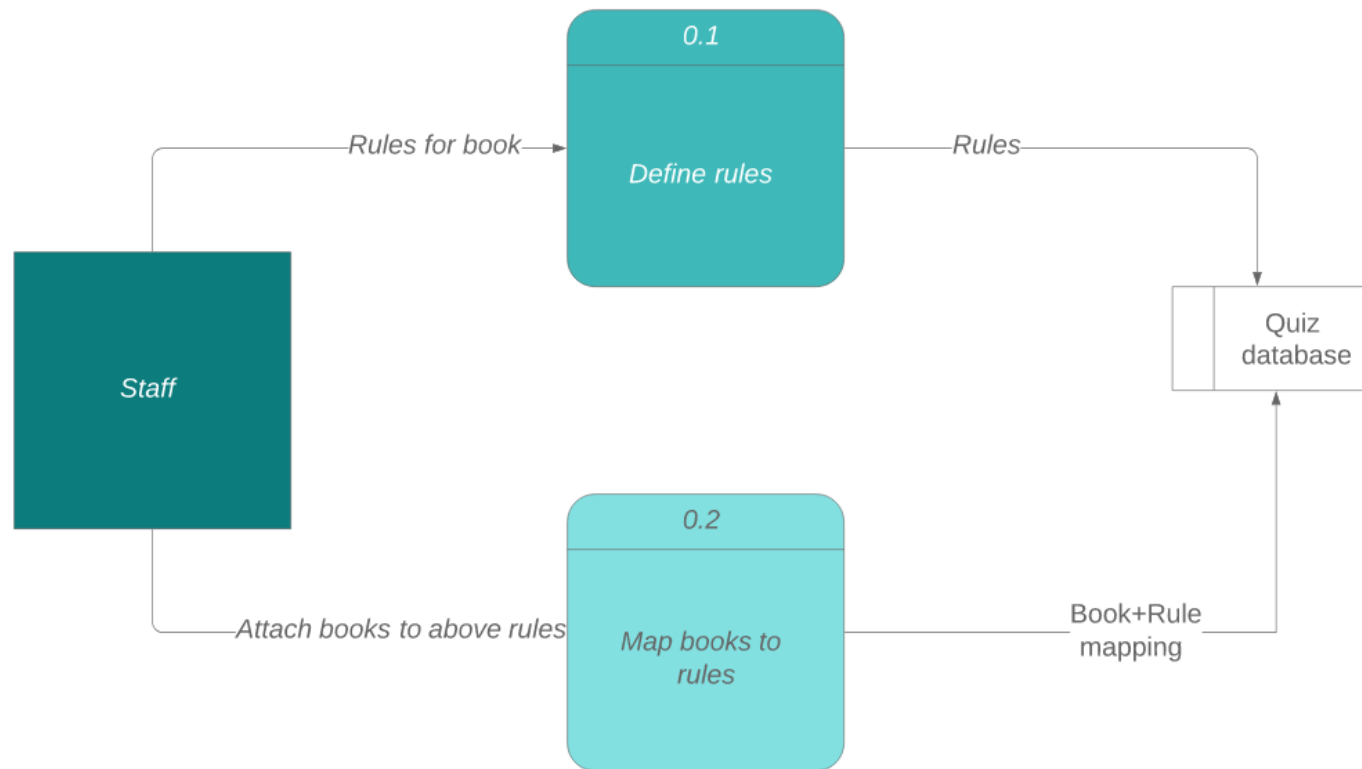
Our new processes will allow staff to create questionnaires/quizzes on a desktop machine to query customers about the features they want in a Gettysburg book and app. They may attach book IDs as tags to potential responses to allow the algorithm to recommend books. Customers can take these quizzes on an in-store iPad. Based on their responses, the system will return a book recommendation for the customer.

1. Start at process 0.0- Staff creates a “Quiz” (essentially a questionnaire!) made of rules using a web application. These rules can be attached to books that are sold at the store. Example: “Would you like Bluetooth in your app?” can have 2 responses- “yes” or “no”. Book IDs can be attached to these responses and stored in the database.
2. Subsequently, as part of process 1.0, customers take the “Quiz” on an in-store iPad and specify preferences of what they want in the book and app. Customer will also input their personal and contact information to receive feedback and recommendation links (just so they do not forget).
3. Process 2.0 evaluates these responses and recommends a book to the customer. Recommendation links are sent to the customer.
4. Subsequently at process 3.0, customers purchase the book and go to the tour (process 4.0). Feedback links are sent by the system 2 hours after the purchase was done.
5. As part of process 5.0, feedback is collected, processed (process 6.0) and stored in our database.
6. Staff can subsequently view all collected data as part of process 7.0.

Level 0 diagram (physical)



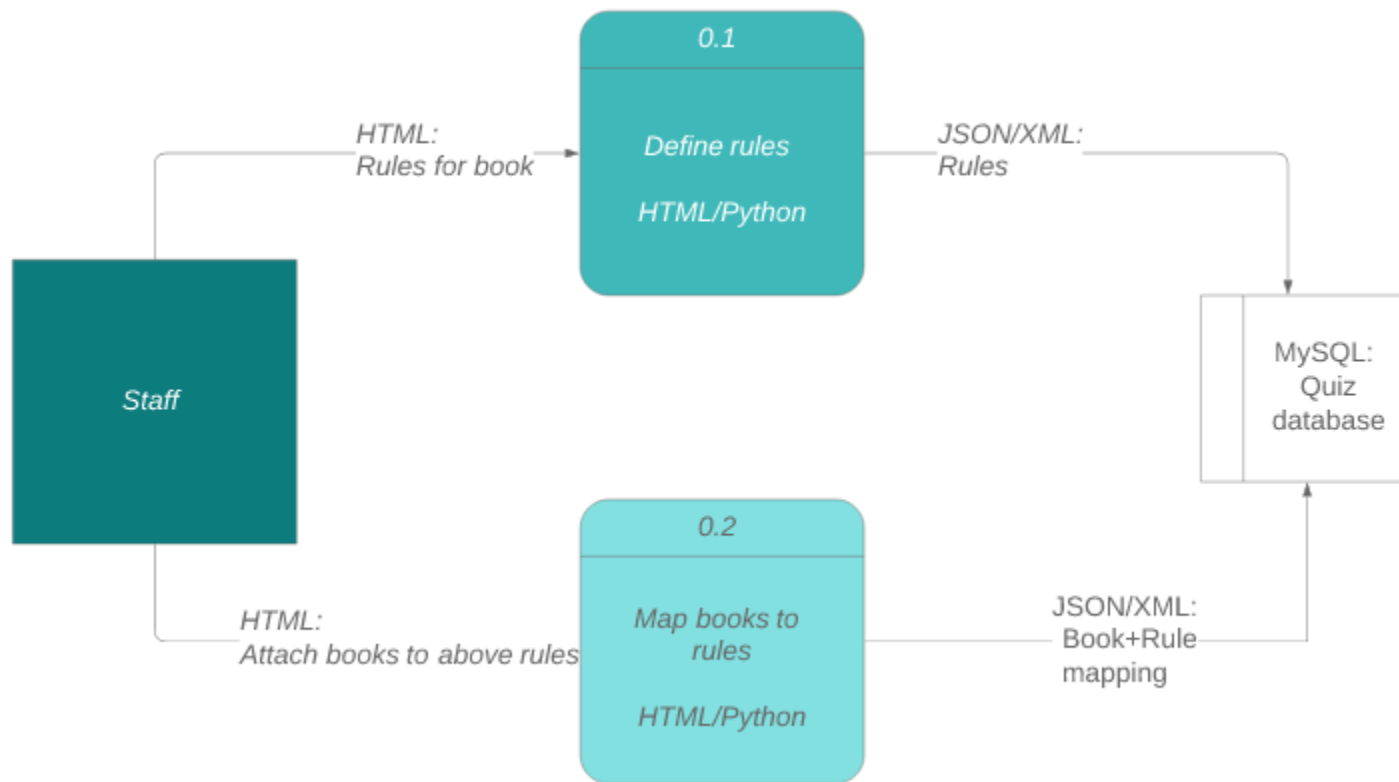
Level 1 Process 0.0 (Logical)



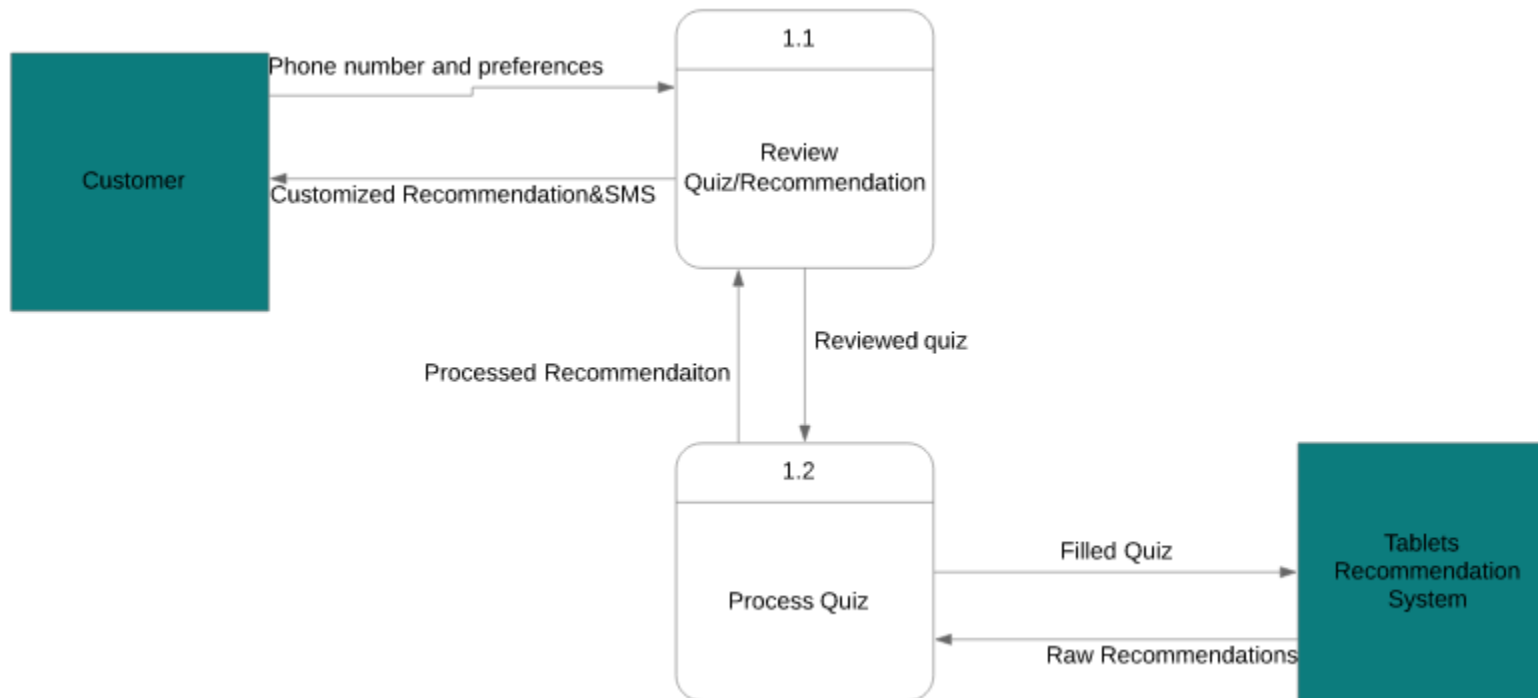
Staff creates “quizzes” or questionnaires so that customers can interact with an app and state their preferences as part of the former. When their preferences are recorded the system shall return a book recommendation.

To enable that, in this process, staff will create the “quiz” and map books to quiz responses.

Level 1 Process 0.0 (Physical)

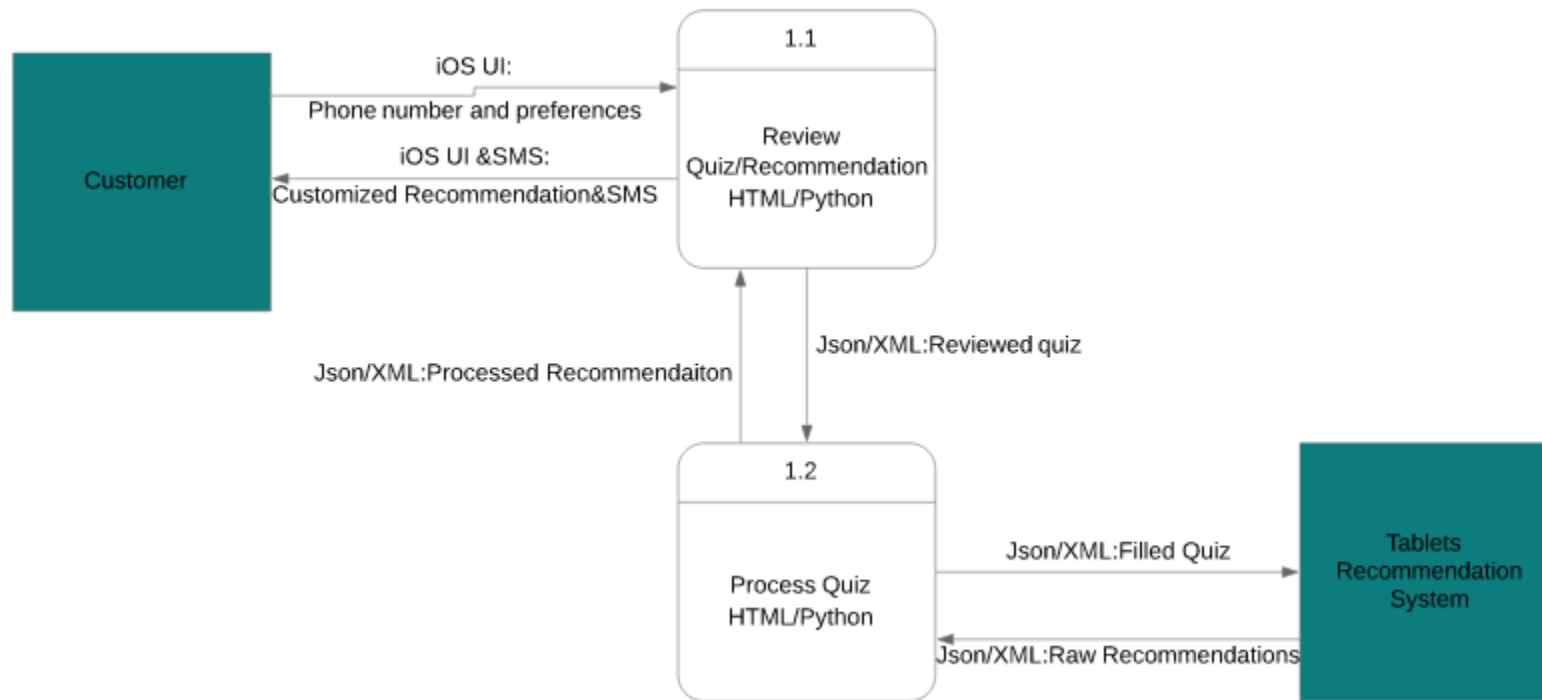


Level 1 Process 1.0 (Logical)

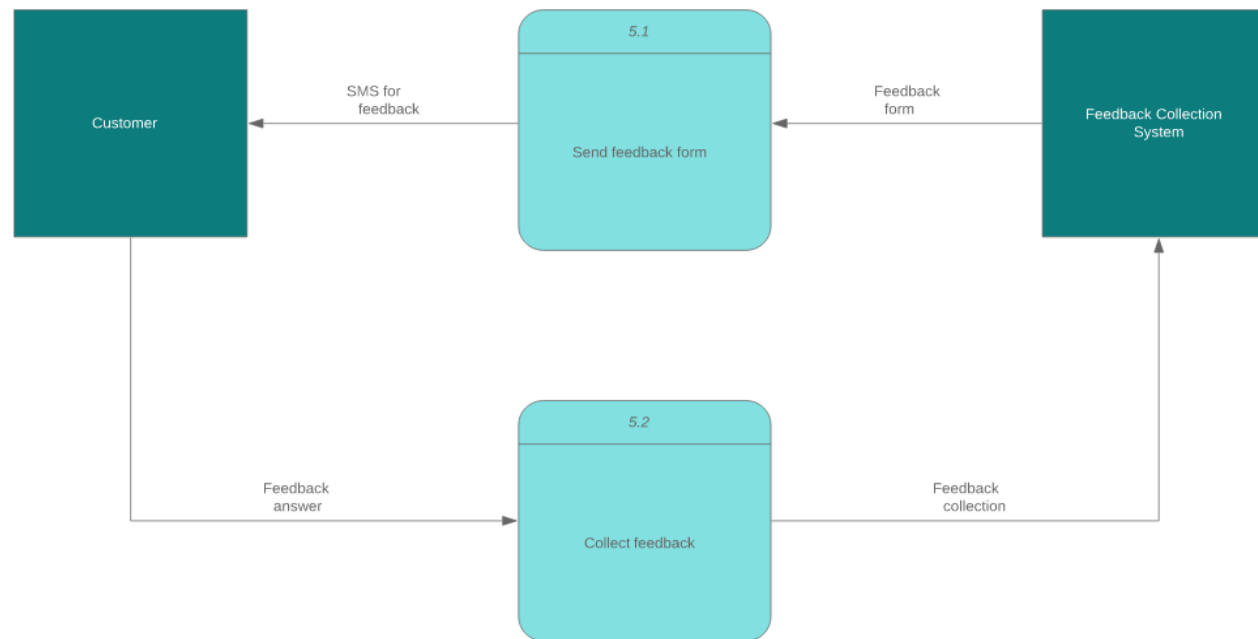


The customer enters the bookstore and gets the available tablet. The customer takes the quiz on the tablet and input the phone number. The input from the quiz will processed to Tablets Recommendation System and the system will generate recommendations based on the answer from the quiz. Finally, the recommendation will be sent to customer as a text message (SMS).

Level 1 Process 1.0 (Physical)

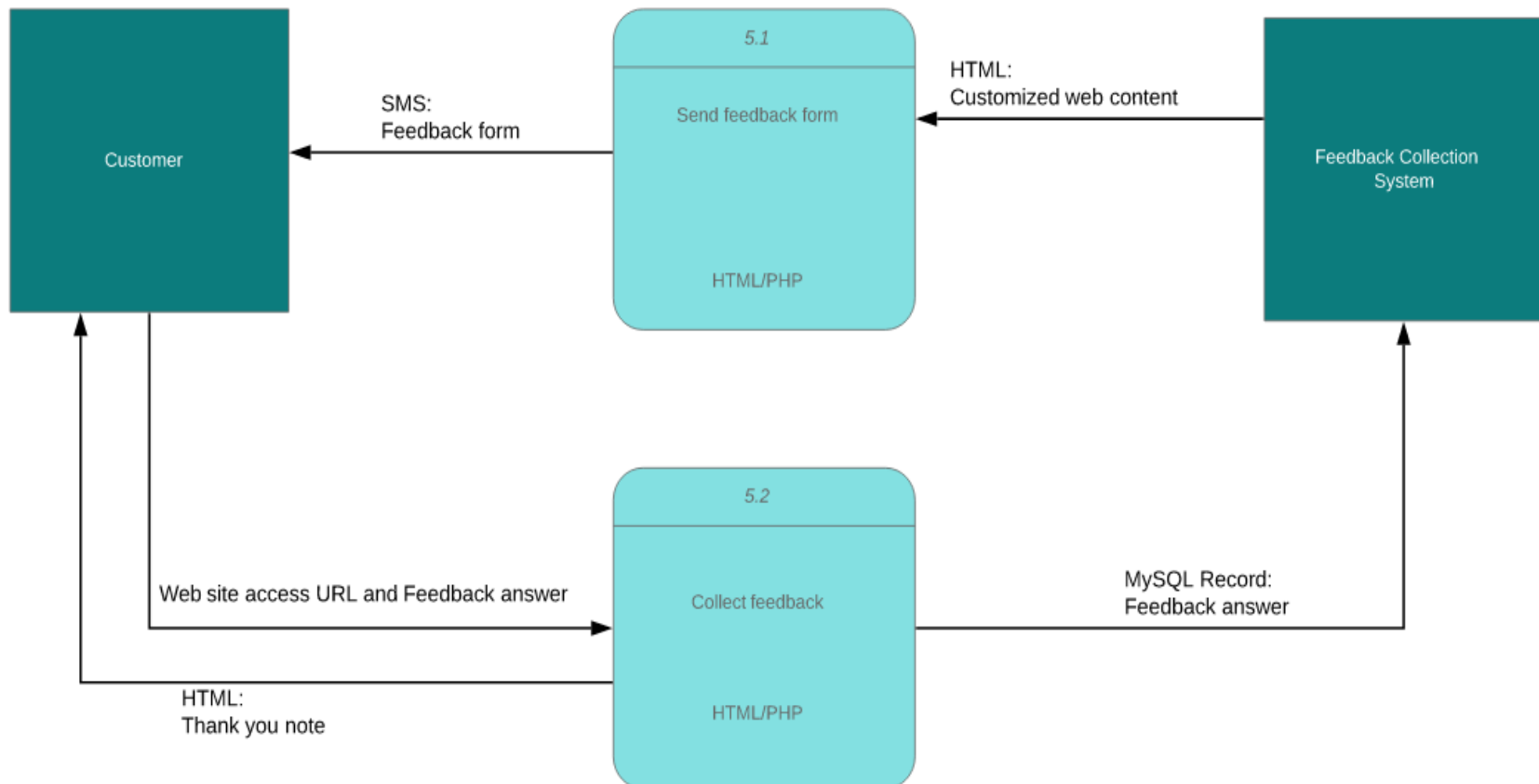


Level 1 Process 5.0 (Logical)

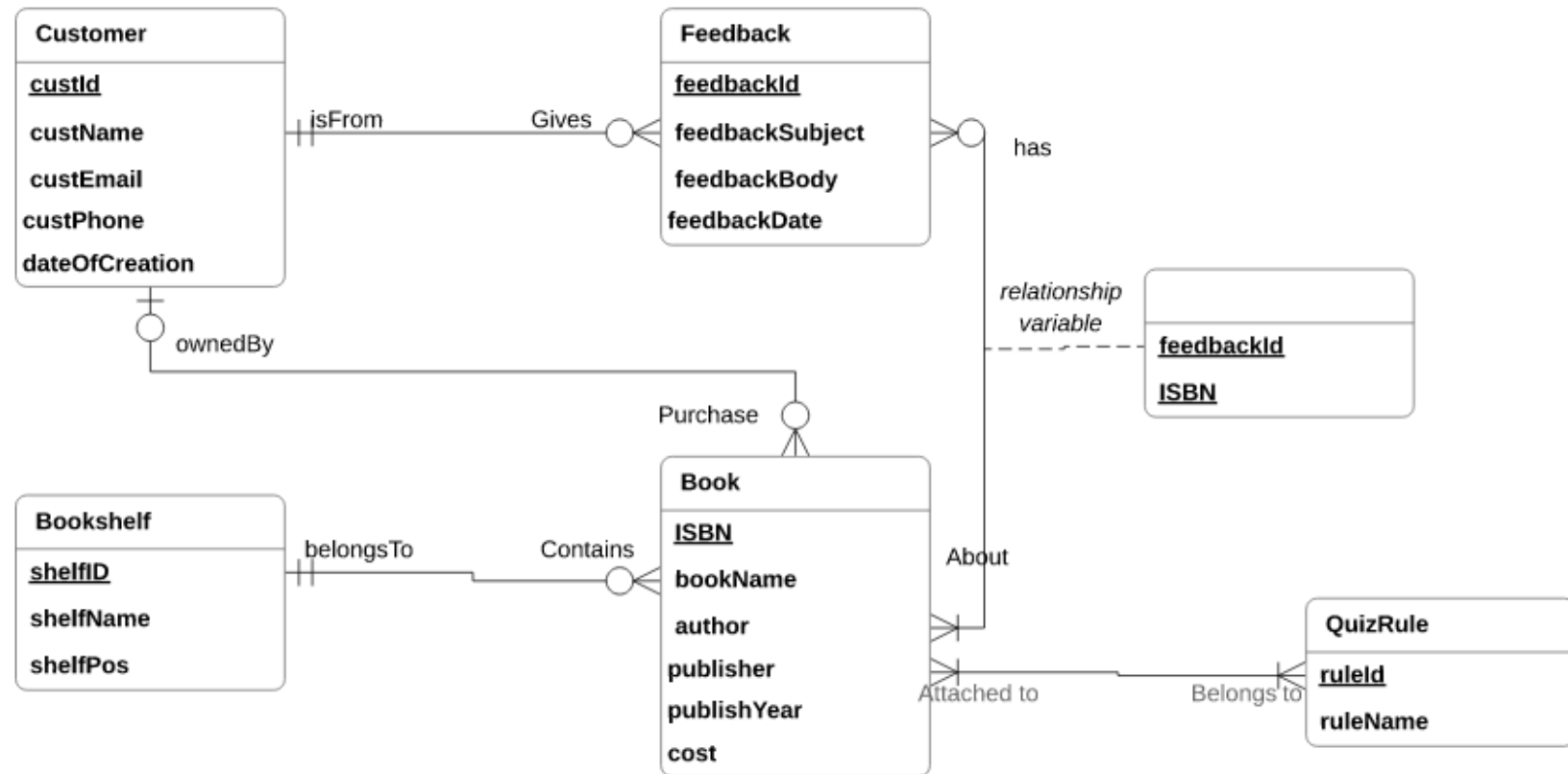


As for the feedback collection process, it will function when a customer finishes his/her tour. The feedback will be sent to the feedback collection system and stored in feedback database as a MySQL record, with a thank you note sent back to the customer as a response.

Level 1 Process 5.0 (Physical)



Entity Relationship Diagram



CRUD Matrix

	<u>Process #</u>							
	0	1	2	3	4	5	6	7
<u>Customer</u>								
custId		CRUD						
custName		CRUD						
custEmail		CRUD						
custPhone		CRUD						
dateOfCreation		CRUD						
<u>Bookshelf</u> <i>(Created by their proprietary and confidential systems)</i>								
shelfId				R				
shelfName				R				
shelfPos				R				
<u>Feedback</u>								
feedbackId							CRUD	R
feedbackSubject							CRUD	R
feedbackBody							CRUD	R
feedbackDate							CRUD	R
<u>Book</u> <i>(Created by their proprietary and confidential systems)</i>								
ISBN			R					
bookName			R					
author			R					
publisher			R					
publishYear			R					
cost			R					
<u>QuizRule</u>								
ruleId	CRUD		R					
ruleName	CRUD		R					
<u>BookFeedback</u> <i>(relationship entity)</i>								
feedbackId							CRUD	R
ISBN							CRUD	R

Candidate Solutions

Characteristics	Sub-characteristic	Candidate 1	Candidate 2	Candidate 3
Portion of System Computerized	Book Recommendations	COTS that has 2 components: customer facing, bookstore staff facing. Customer facing component asks them questions about their preferences and returns a recommendation. Staff facing component allows staff to manage questions and corresponding recommendations (essentially a rules engine)	Toyota- like robots to speak to customers about their preferences in a human-like manner and give recommendations. https://www.bloomberg.com/news/articles/2018-12-26/toyota-wants-to-put-a-robot-in-every-home-and-make-it-your-pal	No computerization. Just have leaflets outlining each book's offerings
	Feedback Management	Customers to get SMS on their phones where they can submit feedback (both textual and coded)		Take feedback leaflet and submit it on the way back from the battlefields
Benefits		Staff re-allocated to more pressing tasks such as organization of books in the store, cashier counter, and back office	Human aspect restored to the selling process and staff re-allocated to more pressing tasks	Cheaper and psychologically less challenging to certain demographics

		Higher accuracy of book recommendations as recommendation rules do not change (as opposed to staff making errors)	Moderate accuracy as speech to text conversion may be influenced by background noise. Gives decent levels of accuracy though	Low level of accuracy as staff may be involved too. Not too different from as-is processes
Servers and Workstations	Servers	1- Linux CentOS distro based Dell server to house recommendation rules	1- Linux CentOS distro based Dell server to house recommendation rules	-
	Workstations	3 customer-facing iPads 1 staff-facing desktop PC	1 robot + 1 staff-facing desktop PC	1 staff-facing desktop PC and printer to print leaflets
Software tools needed	Servers	Linux CentOS distro PostgreSQL database cartridge Apache web server APIs to extend to iPad software that fetch rules Web application for staff to upload rules SMS gateway	Linux CentOS distro PostgreSQL database cartridge Apache web server APIs to extend to iPad software that fetch rules Web application for staff to upload rules SMS gateway	-

	Workstation	Windows 10 MS Office Web browser (such as Chrome) to access the web application Printer drivers	Windows 10 MS Office Web browser (such as Chrome) to access the web application Printer drivers	Excel Photoshop Adobe dreamweaver Adobe Lightroom
	iPad	Mobile app that the customers would interact with iOS	-	-
Application Software	Servers	Python application package on a Docker Container that houses APIs	-	-
	Workstation	Custom web application to allow staff to upload rules	Custom web application to allow staff to upload rules	-
	iPad	iOS application that allows customers to get recommendations	-	-
Method of data processing		Client/Server	Client/Server	-
Output Devices and Implications		iPad touch screen SMS for feedback	Robot voice	Printed leaflet
Input Devices and Implications		iPad touch screen	Human voice	Eyes

Storage Devices and Implications	Servers	10 GB hard disk as rules and high resolution images would not be too heavy	10 GB hard disk as rules and high resolution images would not be too heavy	-
	Workstations	60 GB for all kinds of operations	60 GB for all kinds of operations	60 GB for all kinds of operations
	iPad	32 GB tablet	-	-

Financial calculations

Pay-Back Period

Payback Period					
	Year 0	Year 1	Year 2	Year 3	Total
Candidate 1 benefits		12000	12000	12000	36000
Candidate 2 benefits		3500	3500	3500	10500
Candidate 3 benefits		2000	2000	2000	6000
Candidate 1 costs	10000	10000	10000	0	30000
Candidate 2 costs	2500	2500	2500	2500	10000
Candidate 3 costs	3000	0	0	0	3000
Candidate 1 Net Benefits	-10000	2000	2000	12000	6000
Candidate 2 Net Benefits	-2500	1000	1000	1000	500
Candidate 3 Net Benefits	-3000	2000	2000	2000	3000
Candidate 1 Cumulative Net Cashflow	-10000	-8000	-6000	6000	
Candidate 2 Cumulative Net Cashflow	-2500	-1500	-500	500	
Candidate 3 Cumulative Net Cashflow	-3000	-1000	1000	3000	
Candidate 1 BEP	2.5				
Candidate 2 BEP	2.5				
Candidate 3 BEP	0.5				

Net Present Value

	NPV				
	0	1	2	3	Total
Candidate 1 benefits		12000	12000	12000	36000
Candidate 2 benefits		3500	3500	3500	10500
Candidate 3 benefits		2000	2000	2000	6000
PV C1		\$10,909.09	\$9,917.36	\$9,015.78	\$29,842.22
PV C2		\$3,181.82	\$2,892.56	\$2,629.60	\$8,703.98
PV C3		\$1,818.18	\$1,652.89	\$1,502.63	\$4,973.70
Total Cost C1	10000	10000	10000	0	30000
Total Cost C2	2200	2200	2200	2200	8800
Total Cost C3	3000	500	500	500	4500
PV Total Cost C1	\$10,000.00	\$9,090.91	\$8,264.46	\$0.00	\$27,355.37
PV Total Cost C2	\$2,200.00	\$2,000.00	\$1,818.18	\$1,652.89	\$7,671.07
PV Total Cost C3	\$3,000.00	\$454.55	\$413.22	\$375.66	\$4,243.43
NPV C1	\$2,486.85				
NPV C2	\$1,032.91				
NPV C3	\$730.28				

Feasibility Analysis Matrix

Feasibility Criteria		Wt .	Candidate 1	Candidate 2	Candidate 3
Operational feasibility	Functionality	0.3	Customers familiar with iPads. Staff is trained to use desktops. Only training required will be to upload rules for recommendations	Customers may have to talk multiple times to the robot if there is background noise. Otherwise human like experience delivered	Customers can read up the pamphlets
	Political		Much easier to implement as many vendors are available	May need to engage specialized vendors from overseas and that may cause political attrition	Not problematic
Technical feasibility	Technology	0.3	<p>Many firms specialize in such kinds of software. Not too difficult to implement.</p> <p>Typical implementation plan is 12 weeks with monthly fee for additional support.</p>	<p>Despite this being mostly COTS, some customization will be required. May turn out to be more complex.</p> <p>Any maintenance will be expensive as overseas support may be required.</p>	Need a photoshop expert to design and print

	Expertise		No in-house expertise. Need Python, HTML, Linux and iOS expertise. Best to hire a boutique-consulting firm.	Need to outsource this completely to a company like Toyota	Can hire a full time designer
Economic feasibility	Cost to develop	0.2	\$30,000 (http://howmuchtomakeana.com/estimates/results)	\$10,000 (https://www.dhgate.com/product/padbot-p3-artificial-interactive-communication/441072923.html?utm_source=pla&utm_medium=GMC&utm_campaign=padbot&utm_term=441072923&f=bm%7c441072923%7c103032%7cGMC%7c1688747504%7cpla%7cpadbot%7cUS%7c103032%7cc%7c%7c1%7c&m=1%7cff8080815ce3f402015ce78251820422%7c1688747504%7c441072923%7c&gclid=CjwKC-Ajw8LTmBRBCEiwAbhh-6OMZ8rS5VZ7DgeXbCbzcmGi0MhFspTmr7t6mV4rDQXbrLr3QCjobzRoChhkQAvD_BwE)	\$3,000
	Payback period (years)		4	3	3
	NPV		\$ 5,454.55	\$ 454.55	\$ 2,727.27
	Detailed Calculations		Pls See Financial Models		
Schedule feasibility		0.1	3 months	2 months	1 month
Legal		0.1	Need to protect phone number and email data to comply with privacy laws	May have to comply with additional privacy laws since the robot sensors may record certain interactions	NA

Rationality for Weights

Functionality and technical complexity are the most important for our client at this point in time. They require a simple solution that will boost their business for the next five years. They want to create a seamless experience for their customers with minimal intervention from salespeople.

Since this is not a very sensitive project in terms of confidentiality or compliance, legal aspects are not too important. They are not bleeding for a new system and hence we do not assign a very high score for schedule feasibility.


Lastly, economic feasibility holds medium weight. The bookstore has high earnings and therefore has spare cashflow to invest in technological solutions. However, they would still want enough cashflow to invest in other undertakings.

Input and output design


Process 0.0 Input- Staff may create “Quiz” (which is just a questionnaire to know customer preferences)

Input 2- staff questionnaire creation

Q: Is Bluetooth connectivity important for your experience?

 Book 1

+ Add book

 Book 2

+ Add book

✓


Really important

—


Not sure

+ Add choice

Q: Do you prefer a smartphone app or a CD set for your trip around the battlefield?

 Book 1

+ Add book

 Book 2

+ Add book

📱

Smartphone app

🎧

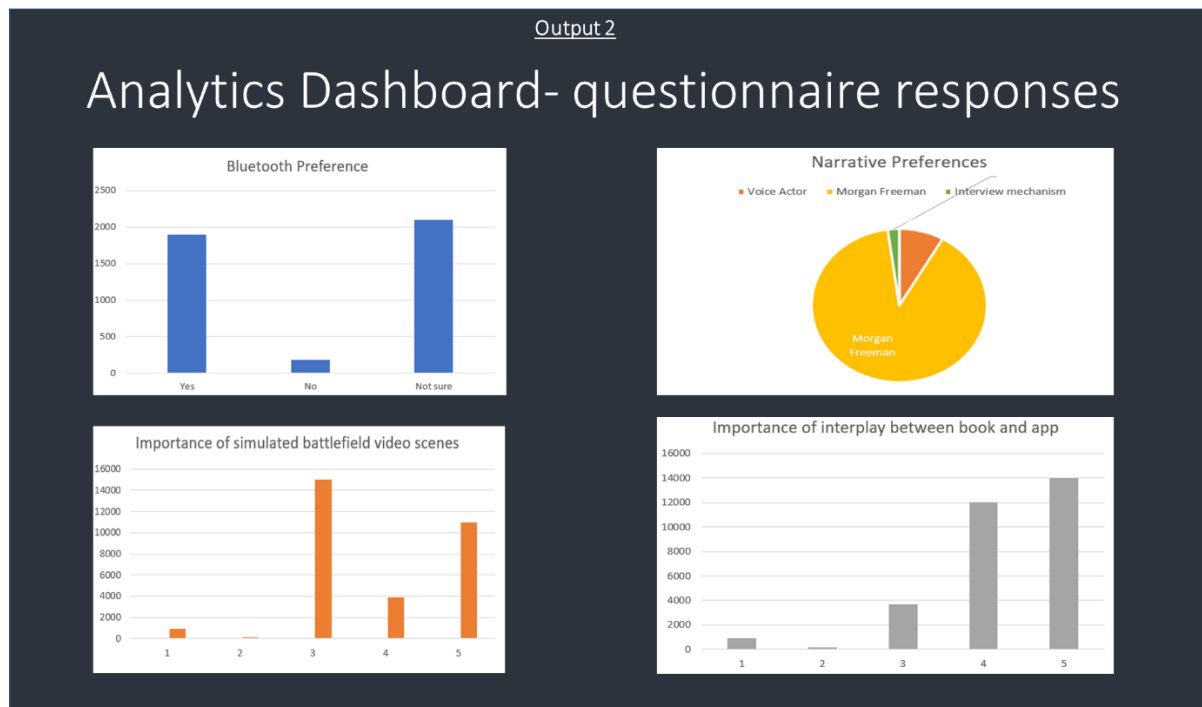
CD Set (have CD player in my car)

+ Add choice

+ Add question

Submit

Process 0.0 Output- Ideally, there will be a “Success message” upon submission. However, we wanted to go above and beyond the success message. Hence, we want the staff to see “Quiz” response patterns. That just shows what customers prefer.



Process 1.0 Input- Customers take the “Quiz” on the iPad and see the below screen

Input 1

Q: Is Bluetooth connectivity important for your experience?

☒ Really important

☐ Not sure

☐ Not important

Q: Which one of the following is important for the narrative?

☒ Theatrical Voice

☐ Morgan Freeman

☐ Research study

Q: Do you prefer a smartphone app or a CD set for your trip around the battlefield?

☒ Smartphone app

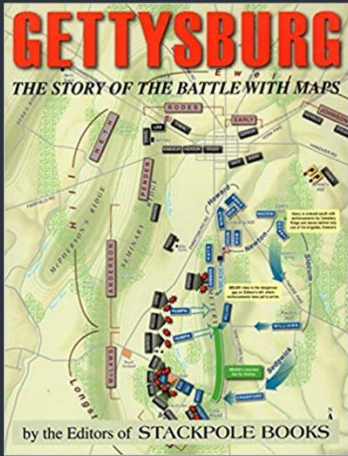
☐ CD Set (have CD player in my car)

[Submit](#)

Process 1.0 Output- Customers receive a recommendation on the iPad and see the below screen

Output 1

Recommendation

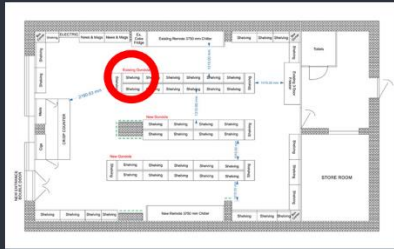


Book: Gettysburg -The Story of the Battle With Maps

ISBN: 209384230984205203820394823094283409

Cost: \$29.99

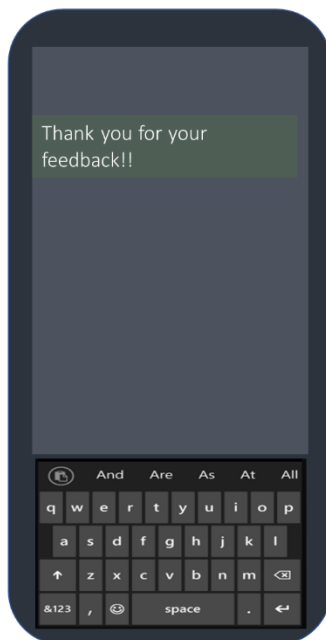
Location: refer to below map



Process 5.0 Input- Customers receive SMS on their phones. They may respond using in SMS controls or go to the website URL embedded within the SMS.



Process 5.0 Output- Customers receive SMS on their phones. They may respond using in SMS controls or go to the website URL embedded within the SMS.



Process 5.0 Input- Customers may opt to provide feedback using the URL embedded inside the SMS.

The image shows a mobile app interface for providing feedback. The title is "Feedback website". There are three questions, each with a 5-point rating scale (1-5) and a text input field for free text.

Feedback website

How would you rate the bookstore's role in ensuring a good battlefield experience?
1- Poor, 5- Excellent

1 2 3 4 5

How would you rate the helpfulness of the staff at the bookstore?
1- Poor, 5- Excellent

1 2 3 4 5

Did you face any difficulties navigating through the bookstore? Please answer in free text.

And Are As At All
q w e r t y u i o p
a s d f g h j k l
↑ z x c v b n m < >
&123 , ; ' " ~ . < >

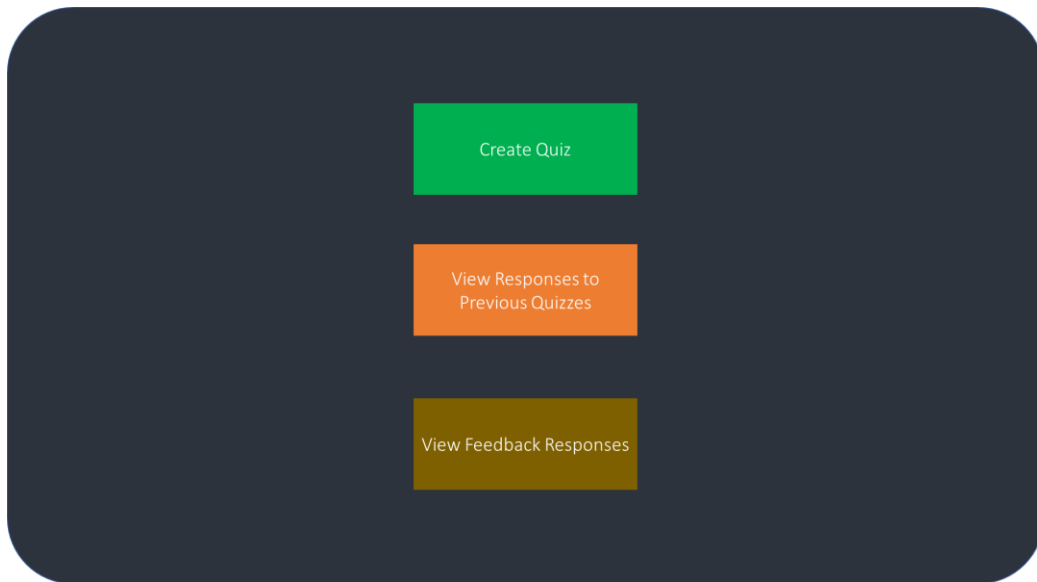
Process 5.0 Output- Customers get a success message following feedback submission.

The image shows a mobile app interface displaying a success message. The message is "Thank you for your feedback!!".

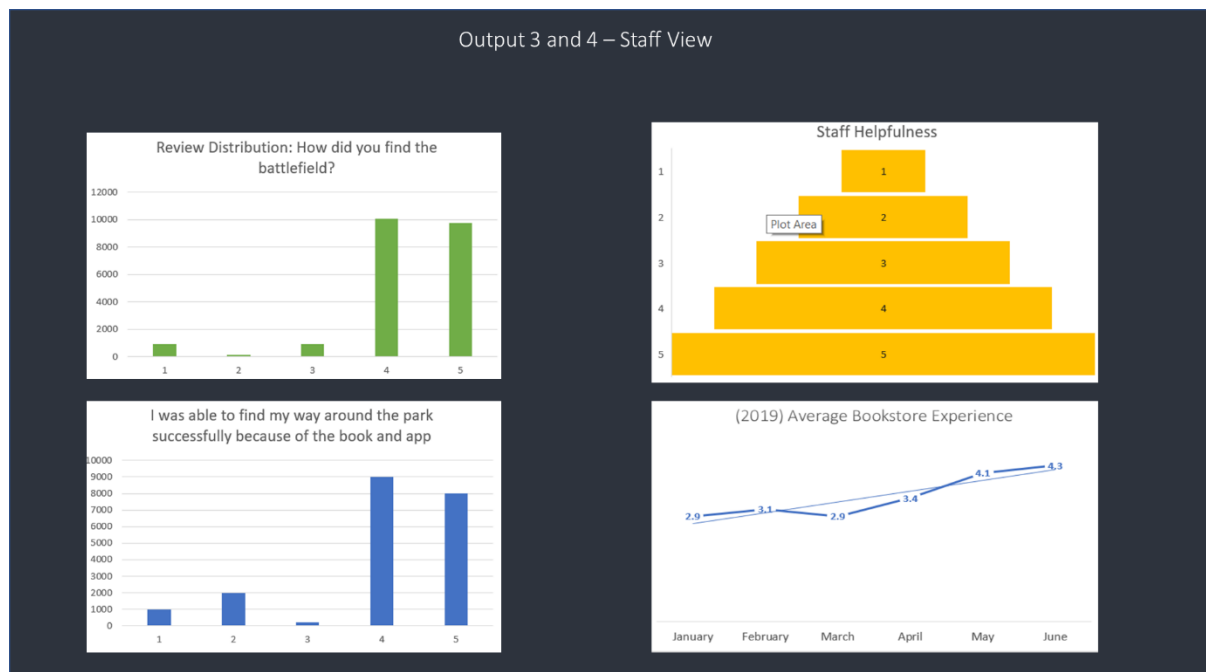
Thank you for your feedback!!

And Are As At All
q w e r t y u i o p
a s d f g h j k l
↑ z x c v b n m < >
&123 , ; ' " ~ . < >

Process 7.0 Input Staff may choose to *View Responses to Previous Quizzes*



Process 7.0 Output Staff may choose to *View Feedback Responses*. This shows them statistics on feedback.

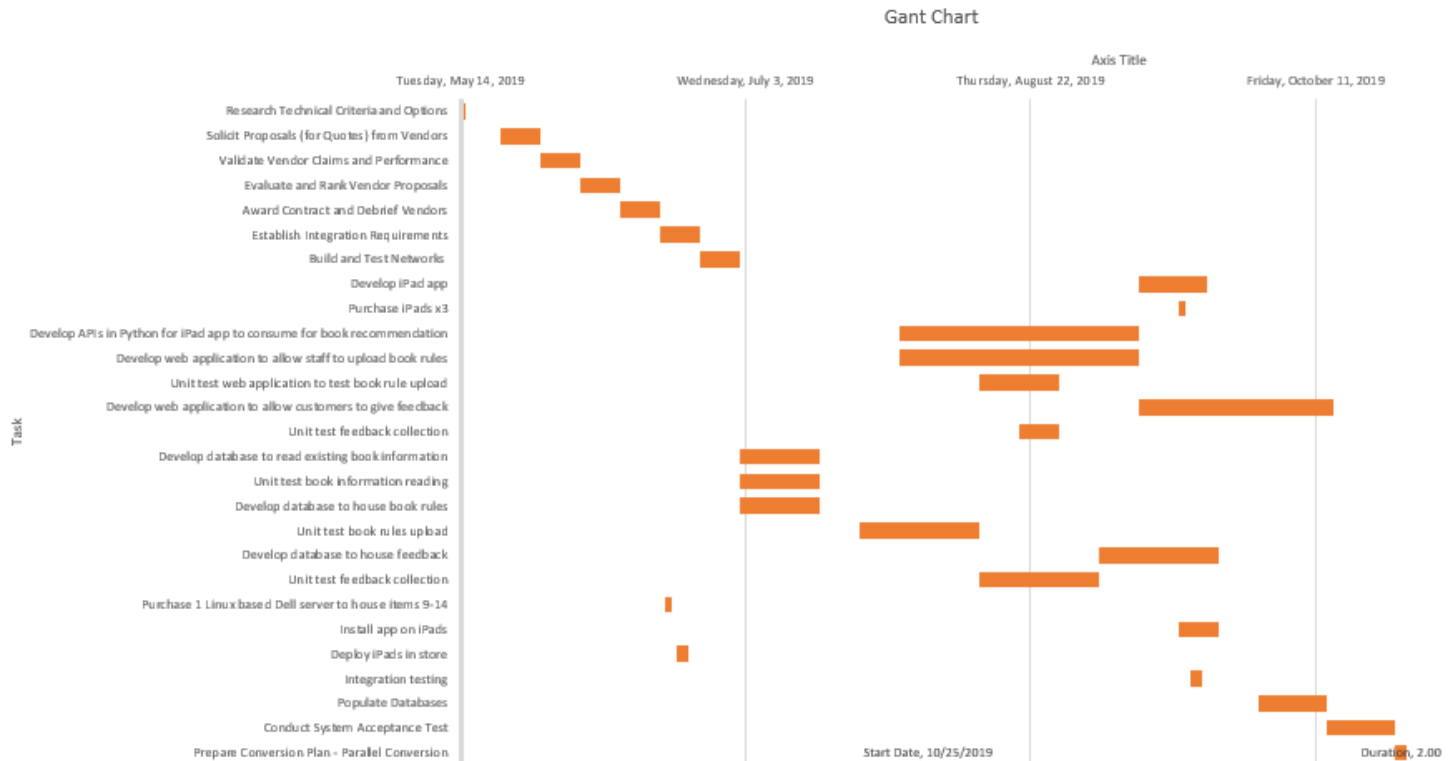


The Implementation Plan

Schedule

Sr No	Phase		Task Owner	Duration	Start Date
1	Procurement	Research Technical Criteria and Options	PM from Books Store	1.00	5/14/2019
2		Solicit Proposals (for Quotes) from Vendors	PM from Books Store	7.00	5/21/2019
3		Validate Vendor Claims and Performance	PM from Books Store	7.00	5/28/2019
4		Evaluate and Rank Vendor Proposals	PM from Books Store	7.00	6/4/2019
5		Award Contract and Debrief Vendors	PM from Books Store	7.00	6/11/2019
6		Establish Integration Requirements	PM from Books Store	7.00	6/18/2019
7	Construction	Build and Test Networks	Network Designer / Engineer	7.00	6/25/2019
8		Develop iPad app	Applications Programming Team	12.00	9/10/2019
9		Purchase iPads x3	Bookstore	1.00	9/17/2019
10		Develop APIs in Python for iPad app to consume for book recommendation	Applications Programming Team	42.00	7/30/2019
11		Develop web application to allow staff to upload book rules	Applications Programming Team	42.00	7/30/2019
12		Unit test web application to test book rule upload	Applications Programming Team	14.00	8/13/2019
13		Develop web application to allow customers to give feedback	Applications Programming Team	34.00	9/10/2019
14		Unit test feedback collection	Applications Programming Team	7.00	8/20/2019
15		Develop database to read existing book information	Applications Programming Team	14.00	7/2/2019
16		Unit test book information reading	Applications Programming Team	14.00	7/2/2019

17		Develop database to house book rules	Applications Programming Team	14.00	7/2/2019
18		Unit test book rules upload	Applications Programming Team	21.00	7/23/2019
19		Develop database to house feedback	Applications Programming Team	21.00	9/3/2019
20		Unit test feedback collection	Applications Programming Team	21.00	8/13/2019
21		Purchase 1 Linux based Dell server to house items 9-14	PM from Books Store	1.00	6/19/2019
22		Install app on iPads	PM from Books Store	7.00	9/17/2019
23		Deploy iPads in store	PM from Books Store	2.00	6/21/2019
24		Integration testing	PM from Books Store	2.00	9/19/2019
26	Delivery	Populate Databases	Application Programmers	12.00	10/1/2019
27		Conduct System Acceptance Test	Application Programmers	12.00	10/13/2019
28		Prepare Conversion Plan - Parallel Conversion	Application Programmers	2.00	10/25/2019



This implementation plan will evaluate that the business, technical and people issues for the new processes are addressed. This plan will also specify the activities that will be performed by the salespeople and management team during the implementation.

Conversion Style

The implementation of the X systems could be made in a parallel style because doing so is low in risk and installing the kiosks does not increase human costs of operating the book store. As the kiosks are introduced sales people will continue to field customer requests for information regarding books. It will be up to the judgment of the salesperson to evaluate if the potential customer is a good candidate for the book selection kiosk. The book store employees will accompany clients to the kiosk to ensure that the potential customer has a good experience. After a period of 2 months sales people will stop accompanying guests to the kiosks.

Conversion Locations

The new kiosk should be implemented in a pilot style. A single kiosk with 3 tablets will be installed. If the pilot program is a success the bookstore can easily replicate the kiosks to install the proper number of additional kiosks. The pilot selection is most important to manage costs as the risk factor concerning number of tablets is negligible.

Conversion Module

A whole system conversion as the splitting the implementation does not provide any technical, financial, or human capital advantages..

Evaluating the Strategy Choices

Risk

This implementation strategy is not a particularly risky from a technical perspective. The risk mostly in vendor selection, as the software is not particularly elaborate. The selection of a phased, piloted, whole system integration in this. There is some risk in disrupting the salespersons normal schedule for troubleshooting although this could potentially be mitigated by time-savings from no longer having to do customer education.

Cost

This implementation is designed to be financially cautious. The system could end up being unused by customers or produce unsatisfactory recommendations to customers. The selection of a parallel implementation and two month pilot mitigates this risk.

Time

Selecting a whole system conversion is the quickest route to completion and physical installation should not take more than a day. Physical implementation will not be completed until the software goes live so all the time risk comes from the vendor's ability to stay on schedule. The bookstore does not lose money without the system implemented.

Business Contingency Plan

The contingency plan is very straightforward. If for some reason the system does not function, bookstore employees will resume the existing customer sales education. If the analytics and back end systems break, managers will operate without the information, as they had been in the past.

Revising Management Policies

Management will informally create the new SOP of directing customers to the kiosks, guiding customers through the process if necessary, and be redirected. Management will compare tourbook sales data to measure if the bookstore sales have maintained standard growth (normalized by total book store revenue). Management will likely be able to allocate resources differently if the system proves that it lessens the need for staff during the sales process.

Assessing Costs and Benefits

See Financial Feasibility above

Motivating Adoption

The strategy for motivating adoption should be *informational*, with the goal of convincing the salesperson and management that selection kiosks can be more efficient. This strategy works when the cost–benefit set of the target adopters has more benefits than costs. In other words, there really are clear reasons for the potential adopters to welcome the change.

Lessons Learned

Planning
<ul style="list-style-type: none">• Threw around wild ideas even before requirements were gathered<ul style="list-style-type: none">◦ Wait for requirements before brainstorming ideas◦ Get the project approval before thinking about solutions
Requirements
<ul style="list-style-type: none">• Interviews should be “insulated”<ul style="list-style-type: none">◦ Each staff member to be interviewed individually
Contact
<ul style="list-style-type: none">• Client would take long to respond to emails<ul style="list-style-type: none">◦ More frequent visits to client (however, distance is a factor too!)• Should have only one person emailing the client
Design
<ul style="list-style-type: none">• Universal UI design to cater to seniors and the visually impaired as the park sees a wide spectrum of patrons