Technology Consulting in the Community

Spring 2013

ASSET Inc.

Jing Yang

Final Consulting Report

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ASSET
Executive Summary

Student Consultant, Jing Yang
Community Partner, Rebecca Shapiro

I. About the Organization

Established in 1994, ASSET STEM Education is an education improvement nonprofit that focuses on STEM education (Science, Technology, Engineering and Math). It inspires educators to think innovatively through professional developments; it supports the teaching by offering hands-on classroom materials; it also provides consulting services to schools, universities and organizations.

The mission statement of Asset is:

> *To advance teaching and learning to engage, inspire and empower all students.*

ASSET's services benefit educators from more than 100 school districts, private and charter schools across Pennsylvania. As it is going to leverage into other states, more educators would be able to take advantages of these services.

Rebecca Shapiro is the community partner of this project. She is the Director of Business Applications of ASSET, and is responsible for the management of business systems. Jing Yang is the student consultant, and she is a graduate student in Master of Information System Management.

II. Improve user experience on ASSET online services

ASSET released a web application ten months ago, and it allows teachers to register courses online and to purchase materials support. The web application is well adopted by half of their customer group while the others find it to be not intuitive. Finding the web application not easy to use, customers choose to call in ASSET and acquire helps from ASSET staff. It affects staff's normal working processes and reduces productivity. On the other hand, other customers just give up utilizing the online services. In this case, ASSET is losing customers because of the design of web application.

Therefore, the goal of this project is to improve the user interface of web application so that it is easy for customers to guide themselves through. Then customers will more likely to use the online services as user experience is improved.

III. Outcomes

Based on ASSET's business requirements and competitor analysis, student consultant reviewed the current online services process and redesigned it. Wireframes are used to illustrate design ideas.

Main outcomes of this project are:

- Requirement list, documented the expectations and requirements from ASSET directors and key staffs

- Competitor analysis, analyzed competitor's online services process

- Wireframes, illustrated the new online services processes designed in this project

As the improvement recommendations of web services implemented, customers will find it more intuitive and more willing to use the online services. In this case, ASSET's mission to help teacher is better served.

IV. Recommendations

The future of ASSET is to make their services available to a larger graphical area, so that they can inspire more teachers by the courses and then indirectly provide better education to children in the US. As ASSET is going to offer more courses and serve more education sector employees, it requires more human resources to do the extra works. However, by utilizing the power of technology, ASSET's expansion could be better supported and both ASSET staffs and customers would benefit from it.

Customer Relationship Management (CRM) software should be adopted to better manages customers' information. In this case, customers' information could be easily inquired and managed. And it also allows ASSET to generate reports and analyze the customers' behaviors.

In addition, utilize live chat to response to customers' questions online quickly. It offers instant response to customers' concerns. And it is more cost effective providing customer services online.

Community Partner

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I. About the Organization

Organization

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ASSET's services benefit educators from more than 100 school districts, private and charter schools across Pennsylvania. As it is going to leverage into other states, more educators would be able to take advantages of these services.

ASSET currently has around 50 full time employees, and is leading by executive director Cynthia Pulkowski and other five directors. They are all passionate for improving the state of teaching and learning.

ASSET is using ERP system provided by xTuple. And the web application provided by xTuple and Jenzabar are used for teachers to register courses and acquire materials support. The web application was released ten months ago, and users encounter some difficulties in utilizing the new tool. Therefore, the goal of this project is to improve the user interface of web application so that it is easy for customers to guide themselves through. Then customers will more likely to use the online services as user experience is improved.

Facilities

ASSET has a nice working space in Southside area of Pittsburgh. The whole space can be divided to three parts. One is offices and cubes for staff, one is a warehouse with all the necessary materials, and the other one is training area on second floor. It is pretty spacious for the current size of organization. Visitors need to have security access to enter the front door. Staffs are equipped with computers, printers and copiers.

The website implementation outsources to other company. ASSET staffs generate requirements and test the delivery from outsource company, and then integrate the whole web applications. People on technology team sit close to each other, which makes the communication very easy and convenient.

Programs

There are three lines of services providing by ASSET:

1. Professional Development: a diversified series of programs and courses that help educators to perfect their teaching methods in STEM subject. It includes courses, Institutes and customized services.

2. Material Support: provide science equipment and materials to classrooms. This gives teachers the hands-on materials they need to teach science in a way that is both engaging and purposeful. Lease materials should be returned to ASSET and refurbished for later use, consumable materials do not need to be returned. Also, refill kits of consumable materials can be purchased separately.

3. Online Learning: also provide professional development courses and discussions, but this is online, which makes the programs more accessible.

Staff

Around 50 full time employees work at ASSET, and they are leading by Executive Director Cynthia Pulkowski. I worked closely with Rebecca Shapiro, who is the Director of Business Applications of ASSET. And also I acquired information from her team members a lot, Christian Micah and Sheldon Murphy. Christian is responsible for testing implementation results from outsourcing company and identify any possible gaps and update the website. Sheldon is working on user interface design on materials support side.

Technical Environment

ASSET is using xTuple as their ERP system vendor, and the servers are hosted onsite. There is a small data center onsite too. All ASSET staffs have access to computers and networks. The website is hosted by outside vendors. Jenzabar system is used for Professional Development course registration. It is a company with more than 40 years history. In addition, xTuple system is used as materials support portal. It manages accounting, purchasing, material order management, inventory control, warehouse management and financial management. For example, the material orders placed by users would go to material order management, so that staff can review, approve and fulfill the orders.

Technical Management

Rebecca Shapiro and her team manage business applications technology. They are responsible for generating requirements for third-party company, and testing the delivery after implementation. Christian, Business Application Coordinator, manages users' account information, and he is also the go-to person when someone has problems on the online services. The interface between Jenzabar and Xtuple is managed by Rebecca and team too.

Internal technology is mainly management by Robert Smiley and his team. They are responsible for the network infrastructure, phone system and security system.

Utilizing technology is of high awareness in ASSET: software, hardware and data are all under control.

Technology Planning

Technology planning is ongoing within the organization. Rebecca and her team are responsible on website planning and Robert and his team mainly focus on internal technology planning. In addition, ASSET is going to expand their service area into other states, for example Ohio and West Virginia, so they are planning on implement more robust and flexible system to fulfill the business needs. The website updates for now should fulfill the needs for next 6 months, 12 months and 18 months.

Internal and External Communication

Internally, ERP system plays a huge role for communication. Also, information is shared by emails. Microsoft Outlook is utilized to mange emails. For external communication, ASSET has an informative website that is updated regularly. Customers can call in or email to ASSET to inquire more information. There is also an online request function, where customers can fill out online request forms and get the responses.

Information Management

Stakeholder's information is management by ERP system electronically. Customers' information is very important to ASSET. They are acquired by marketing department first, and then past to technology department to manually type into the system, so there is repetition of works. Purchasing information is generated online and then managed electronically. Currently, Christian manages the database, and various reports about customers are generated periodically.

Another issue is that after user signing up for an account of Professional Development, ASSET staff sets up the material account manually later, which is very inconvenient for users.

Business Systems

ASSET is using a unique prepaid system for customers to purchase service online. School districts prepay a certain amount of money before the beginning of a school year. And ASSET would invoice them and notify same amount of money available for them online. Then teachers could register courses online. Only after the course is been taken, the amount of money for this course goes to ASSET revenue. Financial reports are generated once a month, therefore, within the one-month period, ASSET has no idea how much money left in the account, and negative balance could happen sometimes.

II. Improve user experiences on ASSET online services

Motivation

After prepaying the membership fees, Support On Site (SOS) could register for professional development courses online. SOS is a liaison between ASSET and school district, he or she could be a principal or teacher. And the role of SOS is to purchase a course online and then distribute the tickets to teachers so that they could confirm the registration and then attend the course. ASSET is working with more than 100 school districts, which means 4000 teachers are using this online services. The web application was released ten months ago, and some of the teachers can go through the services very easily, others may find it difficult.

The courses information online is not well organized for now. Teachers cannot find the course they are looking for through just a few clicks. And the schedule of courses is not clearly listed on the website. Therefore, a clearer classification hierarchy should be adopted and fit the courses into corresponding category.

SOSs are able to order materials online for students learning in class. The ordering process is finished online too. School districts usually only have to place order once a year before the beginning of the school year. However, the current material ordering online services are layered, users have to go through of a lot links to finish the placement. Some of them would just pick up the phone and ask ASSET staff to place the order for them. It is a huge waste of human resources, as staffs could do more meaningful jobs rather than finishing something that the website could have done.

As ASSET is going to leverage into Ohio and West Virginia, its customer base would increase. At that time, staffs would be not available to place the order on the phone. If 100% of the customers could use the web services instead of calling, then 30% of the workload would be decreased for customer facing staffs.

The online learning portal is not included in the redesigning work. It is because a) ASSET is going to stop using the current vendor; b) blackboard online learning has pretty standard functions and design.

Outcomes

1. Understand current web application business process and future expectations

In order to get the fresh information from different perspective, a series of interview meetings were held at ASSET:

- with ASSET's Executive Director: to identify the high level requirements of web applications achieving its mission.

- with the Director of Resource Development to clarify the process of new member registration, and possible future process.

- with the Director of Finance: to understand the process of generating invoice and expected functions from the web application.

- with the Director of MSC: to understand the process of material request fulfillment, and identify the possible online requests that may be needed.

- with the Manager of Customer Care: to explore current feedbacks from users and current problems.

- with the Director of Professional Development: to clarify the course categories and expectations on web application.

- with the Business Application Coordinator: to update with the current improvements on the web application.

- with the Online Learning Coordinator: to understand the current problems with online learning portal.

Those meetings were short but effective, and the concerns raised during the meeting were generated and documented together as an Interview Notes. Based on the Interview Notes, requirements are extracted and summarized as a Requirements List. The list could be found in the Appendix A.

These interviews revealed the current web application status and existing problems. Also, the expectations and requirements from ASSET were clarified. The Requirements List serves as the written version of all the outcomes from interviews and articulates all the problems identified. Therefore, student consultant could generate recommendations on improving the web application later in this project based on the list of requirements. By implementing these recommendations, ASSET can better achieve its mission for providing better online services to its customers. The Requirements List can also be used as reference after the new web application is released to ensure that all the requirements are satisfied.

Through the interview process, the idea, that technology is here helping them to achieve ASSET's goal more efficiently, was reinforced. Although there are problems with the current web application, employees realize that if some improvements could be made, they could let the technology do much low value works they are doing for now. For example, manually enter the customers' information, place orders through phone, and answer inquiries, which could have been done through the web application. Therefore, employees would have more time doing the value-adding works to fulfill ASSET's mission.

2. Competitor Analysis

The web application allows users to purchase and register for courses online, and also order materials. However the current user interface is not intuitive and self-explanatory. The student consultant first carried out a competitor analysis. It compares three major competitors doing the similar business on how users are guided through the online purchasing.

Theoretically, there is no competitor organization in US who is doing the same business as ASSET. However, community partner listed three major competitors who are Fisher Science Education, Carolina Biological and Delta Education. They are doing materials selling inline, so they are doing a half of ASSET's business. Student consultant went into those three websites, and tried to place orders as a customer. Although there was no order really checked out, the complete online purchasing process of the competitors was studied except for final payment. The comparison chart could be found in Appendix B. Although the courses purchasing and material purchasing are similar, further competitor analysis could be carried out focuses on courses purchasing. The comparison chart set examples for community partner and student consultant to learn from the processes and to look for the good ones to incorporate into the consulting project.

3. Wireframes illustrating how to improve user experience with online services

Student consultant first studied into the current web application, which is consisted of two separated systems. The System Coordinator set up test accounts on these two testing web applications, so that the student consultant could log into the system and investigate. Student consultant placed orders on testing web application as customer and recorded where is difficult for a non-technical customer to follow. Based on the Requirements list and the Competitor Analysis, the student consultant redesigned the user interface and reorganized online information. And then the recommendations are illustrated by a series of wireframes and compiled in the Recommendations on Online Services. This document could be found in Appendix C.

With the implementation of the recommendations, users would then find the web application more intuitive and can find the information they need more easily. Therefore, they would be more likely to use the web application and utilize more resources provided by ASSET. At the same time, employees at ASSET can save their time by not dealing with trivial issues but working on jobs that add more value to the company.

IV. Recommendations

Vision

The future of ASSET is to make their services available to a larger graphical area, where more teachers could be inspired by the courses and then provide better teaching to children in the US. As ASSET is going to offer more courses and serve more education sector employees, it requires a lot more human resources to do the extra works. However, if ASSET could utilize the power of technology, the workload of staffs would be significantly reduced. With a better-designed web application, a lot of processes and works could be done automatically rather than manually. Therefore, the expansion could be better supported and both ASSET staffs and clients would benefit from it.

The web applications and ASSET's ERP system are working together to support users in purchasing and registering courses and ordering materials. However, there are still functions and features to be added onto the web application, so that the users could be better served.

These recommendations are forward looking of what the organization will be in the coming future. In the short term, implementing Recommendations on Online services would make the web application more intuitive to customers. In the long term, the following recommendations could further improve on the ASSET's capability to serve customers.

Goal 1: To better manage customer relationship

a. Background

One of the current problems about the web application is that Support-On-Site (SOS) needs to manually input the teachers email address in order to sent the course tickets. It is tedious for the SOS that they need to check out the contacts and type in again. And the typing could be wrong sometimes. Although a relational database is being used, there is no association between the SOS and those teachers this SOS in charge of. Customer Relationship Management (CRM) software should be adopted to better manages users' information.

CRM are wildly adopted in various industries nowadays. It is a tool managing a company's interactions with customers and potential customers. It will empower sales, marketing and customer services. Being ASSET's vendor also provides CRM solutions. Installing xTuple's CRM requires least efforts compares to a brand new vender's product.

b. Benefits and Justifications

By adopting CRM software, customers' information could be easily inquired and managed. In this case, whenever a SOS needs to send out the tickets, they can see the corresponding teacher list, and all they need to do is selecting the target teachers.

In addition, CRM will allow ASSET to generate reports and analyze the customers' behaviors. For example, ASSET will be able to generate reports on what courses are taken the most for each school district, which SOS has the most purchasing tickets, etc. We can keep track of all those data, and analyze the data to figure out the customers' behavior patterns. If ASSET can understand customers better, it will serve them better.

CRM will also help in generating revenues. For example, ASSET will be able to recommend related courses to a target the customer who has just finish one course. Because of the customized notification and good timing, this teacher is more likely to purchase the recommended course. Therefore, extra revenues are obtained.

c. Implementation Strategy

First of all, my community partner needs to set up meetings with xTuple to fully understand its CRM Solution, implementation requirements, cost, time frames, and integration steps. In addition, some other vendor's product should be studied, so that ASSET can have a comprehensive expectation of the new CRM component. If ASSET chose to use xTuple's services, customization to current CRM solution is needed to better serve ASSET's business requirements.

Then the current information in the database should be copied into the new CRM system. And the interface between CRM and current web application needs carefully testing. A backup before the whole process is necessary in case of any unexpected error happens.

Finally there should be training arranged for ASSET staffs who will use the CRM to generate reports study customers' relationships. Furthermore, the new CRM system idea should be wide spread to all staffs, and it may offer benefits to other sector of employees too.

d. Expected Output

The major output is a well-installed and configured CRM system, which can talk to the other parts of the web application, and inner ERP system. More importantly, the trained staffs that can use the technology to the maximum are another significant output. The direct benefit is that SOS does not need to manually enter teacher's contacts each time. Moreover, ASSET will be able to generate reports on customers' behaviors. The behavior data will help ASSET to segment market and provide targeted services.

e. Recourses

1. xTuple website: https://www.xtuple.com/solutions/crm.

2. xTuple: The information on the website is limited. As xTuple is our vendor alreadym it is more effective to reach to them and ask for advices on adoption of CRM. Phone number: (757) 461-3022.

3. Popular CRM software comparison: http://cmu.edu/tcinc/reports/OPD_Li.pdf

Goal 2: To provide better customer services

a. Background

At present, ASSET is using email and phone call to interact with customers and answers the questions. The idea of providing live chat to customers was first raised up by Robert Smiley, the Director of Technology of ASSET. The student consultant then look into the idea and find out it is a good tool to response to customers' questions online quickly.

b. Benefits and Justifications

Live chat is a supplementary tool to offer customer services online. It will generate quick responses to customer's concerns. One representative could deal with several customers at the same time. It is more instant interaction that customers don't need to wait for half a day for an email of solutions.

Also according to several business cases, providing customer services through online chatting is very cost effective. In 2011, ACN, a marketing company in North Carolina, claimed they lowered the customer expenses cost by 12.5% through providing live chat. (For further information, please refer to the webpage: http://www.business2community.com/strategy/b2c-businesses-connect-with-customers-through-chat-0440485)

With all the online chat history, ASSET will be able to track its customers concerns and representatives' performance. Live chat is easy to record.

c. Implementation Strategy

First of all, my community partner needs to talk to xTuple and understand what kind of attributes we need when we look for solutions. And what kind of technology could be more compatible with and easy to install onto the current system.

Second, a solution provider should be selected. The article in part (e) resources are a good reference to compare between providers.　And internally, we need to set up a team who are responsible to chat online and solve customer's problems. They need to be well trained, not only of the live chat tool, but also of ASSET's business process and common questions.

Finally the system needs testing before launch.

d. Expected Output

The expected output would be a live chat platform built into the web application. And the access point to the live chat needs properly put into the web page. In addition, a group of representatives should be ready for chatting.

e. Resources

1. This webpage compares 17 live chat solutions, and the last update date is April 23, 2013. http://socialcompare.com/en/comparison/compare-live-chat-support-software-help

About the Consultant

Jing Yang is a graduate student major in Master of Information System Management in Heinz College at Carnegie Mellon University. She will intern at BlackRock this summer and then return to Carnegie Mellon University to finish master program.

Appendix A. List of Requirements

- Current webpage looks nice, and do not need to change a lot.
- The website should guide the customers through.
- In the prepaid model, money left over in the account at the end of a school year is not refundable. However, there are still money left, and we want the customers to use that money to take more courses.
- In the course catalogue, a calendar or similar function should be provided, so that customers can see when that course is given.
- Couse should be searchable by time; the users can then see what is coming up.
- We do not accept credit card payment for now. But it is a part in the current system; we just don't have the demand to using that. As we expand our services, we may accept credit cards later.
- Teachers can register and pay for themselves for courses.
- We want to simplify the ordering process and let the customers go through the process themselves.
- We do not have much advertisement budget, so we use email a lot to promote.
- Currently, there is no over spending control. Accounts balances are generated once a month, and before that we don't know who's spending more than they have. After that, we will rebill them for the exceed amount of money.
- We want the teachers could see the balance of their school account. In this way, they can be encouraged to take more courses, rather than just left the money untouched in the account.
- We want the customers to view the order status online.
- Customers should be able to view orders for all the time, and can edit their orders before 60-days to shipping day. After the 60-day period, if they need to make modifications on the order, phone call is required.
- Currently, there are so many layers and users should click too many times to finally get to the page they want to go.
- "Online request" should be utilized better. So that 30% of the calls could be reduced. Also, by submitting request forms online, necessary information for problem solving are generated more efficiently.
- Current customer profiles are typed into the system manually; it should be done electronic later.

Appendix B. Competitor Analysis

	Fisher Science Education	Carolina Biological	Delta Education
Login/Register on home page	Yes	Yes	No
Search on home page	Yes	Yes	Yes
Main product category	Biology Chemicals Classroom Technology Elementary Science Forensics Math & Measurement Physics Safety Biotechnology Chemistry Earth & Space Science Environmental Science Lab Equipment & Lab Furniture Multimedia Post-Secondary Science	Biotechnology ELearning Resources Lab Supplies & Equipment Life Science Living Organisms Microscopes & Optics Physical & Earth Sciences Preserved Organisms STEM Curriculum Programs	Curriculum: FOSS DSM III SCIS CPO Science Specialized: Pre-K Discovery Kits Science in a Nutshell Elementary Science Curriculum Modules Classroom Resources: Life Science Earth Science Physical Science Scales & Balances Measurement Lab Supplies Science Videos & DVDs Science Literacy Teacher Resources Classroom Jeopardy Science Notebooks
Product Catalog	Left column of Programs, Services, Resources. Provide link to Browse by: product, supplier, application	Left column provides Refine Results within the big category. Upper left also provides navigation	Left column of Curriculum, Specialized, Classroom Resources. Clicking on the

		bar indicating the product hierarchy.	title will expand and show all the sub-categories. Upper left also provides navigation bar indicating the product hierarchy.
Product Display	Not very standard. First level is shown in word and link. Clink it through will show the product details and Add to Cart button. Must login to see availability	Display 12 products per page, and allow users to choose from Grid View and List View. Can show 12/24/48 products per page. Quick View Compare Show In Stock	Display 12 products per page,
After click "Add to cart"	Stays on the same page A link to My Cart shown up below Add to Cart button. It says (1) in my cart	Pop up a floating window says, "Added to cart", and shows all the items in cart. It allows users to Continue Shopping or Go to Cart.	Directly jump to the webpage of my cart. It shows all the items in the cart, and allows users to Continue Shopping or Check out. It also shows shipping fee, link to FAQ and Help.
Check out	Registered Users: login (can register as online user or business account) Guest Users: check out as guest (Shipping ->payment->review order and submit->confirmation)	Returning customer: login New Customer: -Purchasing with school fund (Lead to create a login) -Purchasing for personal use as guest (Directly lead to shipping address->shipping methods->billing & payment) -Purchasing internationally	Step 1 of 3: Billing information Step 2 of 3: Shipping information Step 3 of 3: Order confirmation After confirmation, users will be sent to PayPal to complete credit card transaction

Price	Business account has account-specific prices	School account has contract pricing and tax exemption	N/A
Support Methods	Phone Call Email Fax Mail FAQ Help Index	Phone call Live Chat Phone Fax Email	Toll-free phone call Online Help FAQ Send inquiries Contact a sales representative

APPENDIX C. Recommendations on Online Services

Home page: move the "Services Online" link to the main menu bar, and provide login access. It keeps the consistency of the webpage, makes the Services Online an equally weighted part as Our Philosophy, Our Formula, etc. The Single-Sign-On allows users to get access to all the information they need with one account. It also minimizes the layers that users have to click through to log into the system. (see Figure.1)

Figure 1. Home page

Login Page: it allows returning users to log in with their user name and password. For new customers, it shows three kinds of account type for users to choose from and then register with the standard registration process. (see Figure 2)

Figure 2. Login and registration page

New "Services Online" page: By default, it has four subtitles "Professional Development", "Materials Support", "Online Learning" and "Customer Services". After the users log into the website, "My Account" will show up after "Customer Services". The left hand side shows the hierarchy of all Professional Development (PD) services. Current hierarchy should be further expanded when users select it. A quick search by date allows users to select a date from the calendar and then all the courses on that date will show up to the right. It then follows the Featured Course, where displays new courses or hot courses. Recently View displays the item that users just viewed.

Main web content shows all the services within that hierarchy level. Each course starts with a related picture, and a brief introduction. The course title and the link of "More" should lead users to the course details page. And the picture and "Quick View" button should lead users to the quick view page. Each page will show 10 courses, and users could click on View All to see the complete course list. Therefore, a "Back to Top" button is used here.

Search button will direct user to the search result page where advance search function is also provided. (see Figure 3)

Figure 3. Online services main page

Search Page: the main part will show the search result of users input key word. User could switch from PD tab and material tab. Meanwhile, on the left hand side, advance search method is provided that users can search courses and materials by key word, location, course category, time, and number of seats to search for the courses they are looking for. (see Figure 4)

Figure 4. Search page

Quick View Page: It is a floating dialogue window, and allows users to view more details of a course without going to the course page. It lists all the available sections that a user could choose and add to cart. If there is no available seat of a section, the seats number selector and add to cart button should be disabled. The View Details link will direct to the course page. Quick View is a shortcut to those frequent users who are familiar with the courses. (see Figure 5)

Figure 5. Quick view page

PD course details page: It shows all the detailed information of the course. Since the courses and materials are highly correlated, a link to the corresponding material page is listed below the course name. Then all of the available sections are displayed after course description. Uses should be able to choose displaying only courses of specific location, start date and/or available seats. If there is no more available sears, the quantity selector and add to cart button should be disabled.
Need Help links to the main page of Customer Services. Last part of the webpage is the Review section that users could post their comment of this course, only logged in users are allowed to post. For each review, it also shows the reviewer's name and profile picture. (see Figure 6)

Figure 6. PD course details

Full schedule page: When user clicks on the full schedule link, a floating window will appear. It should be a ready-to-print page that includes all the information regarding to this specific section of this course. It would be better if the description in this page were designed specially for this section. For example, the instructor of this section or anything special about this section. (see Figure 7)

Figure 7. Full schedule page

Dialogue after user click Add to Cart: a dialogue window will pop up after user adds a course to the cart. Users can choose to Continue Shopping or View Cart. The dialogue should fade off after 15 seconds if user makes no choice. (see Figure 8)

Figure 8. After click on Add to Cart

After users log into the system, the list price will be crossed out and followed by the new member price. (see Figure 9)

Figure 9. PD after login

Material Support main page: it will show the picture of the kit and the name and maybe a little bit introductions. The left column displays the hierarchy as in PD and also shows Featured Materials and Recent Viewed items. No price is shown before users login. It calls users attention to login first to view the prices and availability on the top of the page. (see Figure 10)
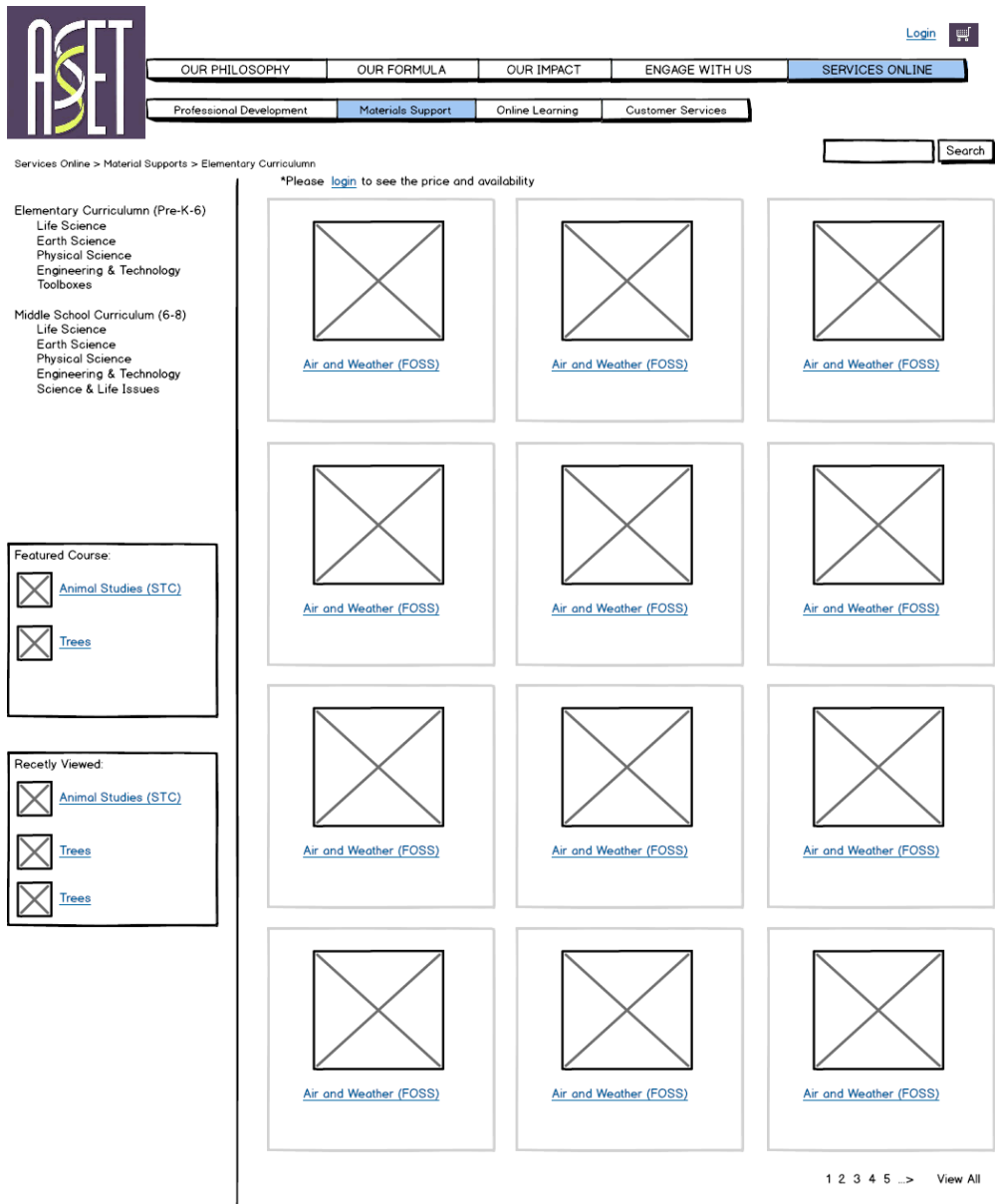
Figure 10. Materials support main page

Prompt user to login: whenever user clicks on a material before login, a dialogue will show up to let users login first. After login, it will stays on the same page. Or if user chooses to register for an account, it will lead the user to the register page as in Figure 2. (see Figure 11)

Figure 11. Prompt user to login

Member view of the materials: After a member login to the system, the member will be able to see the price and availability. However, some leasing materials are only available to VIP members because of the returning responsibility. The prices and availability of those materials is still hide from viewing. (see Figure 12)

Figure 12. Member view of the materials

VIP view of the materials: If the login user is VIP, the user could then see all the prices and availability of the materials. (see Figure 13)
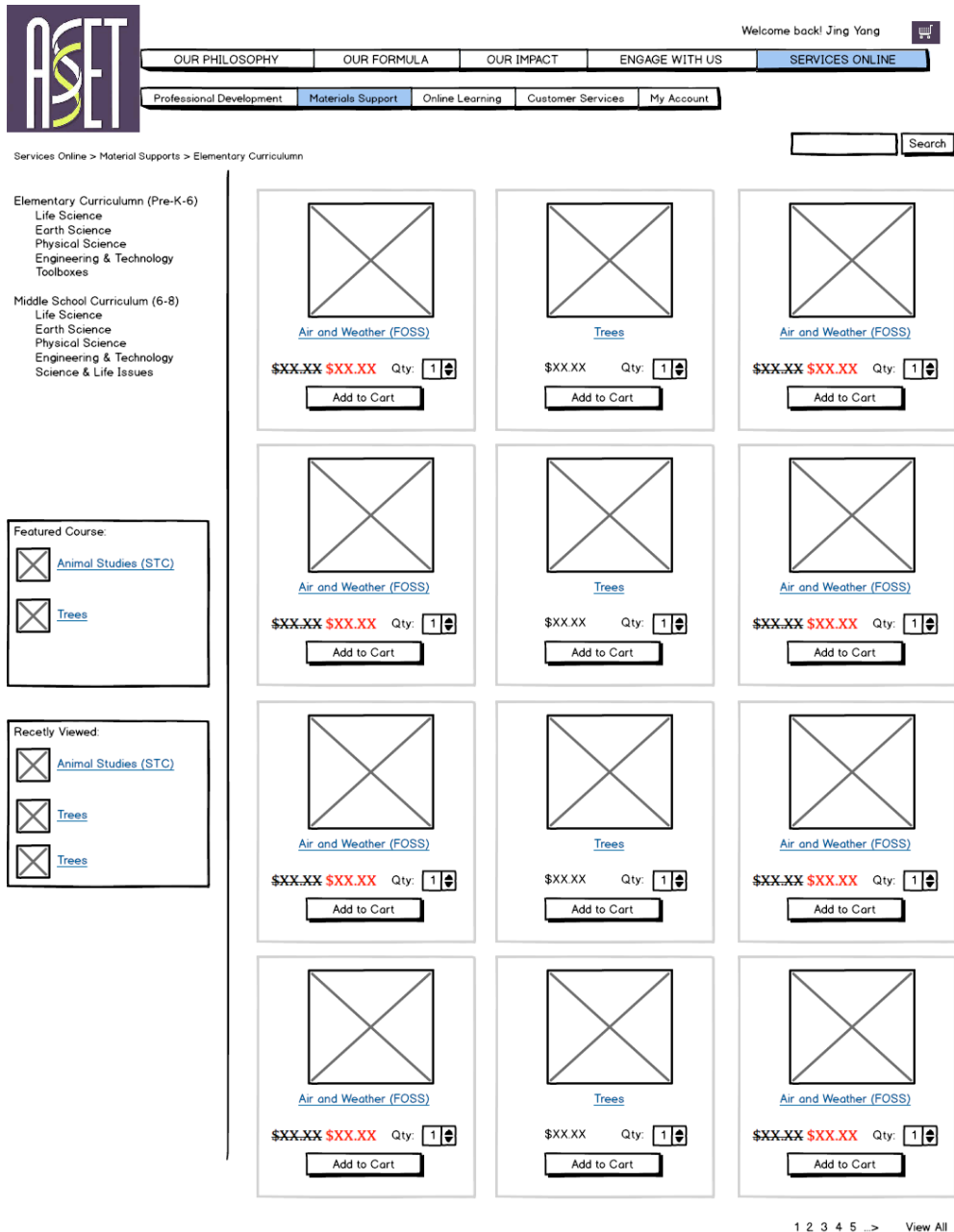
Figure 13. VIP view of the materials

Material details page: It shows all the detailed information about a material kit. The picture is larger because we can get the real picture of a kit, and it provides good impression on users. A link to related PD courses is listed just as a link to material is listed on PD page. Users could choose the quantity and add to cart. (see Figure 14)
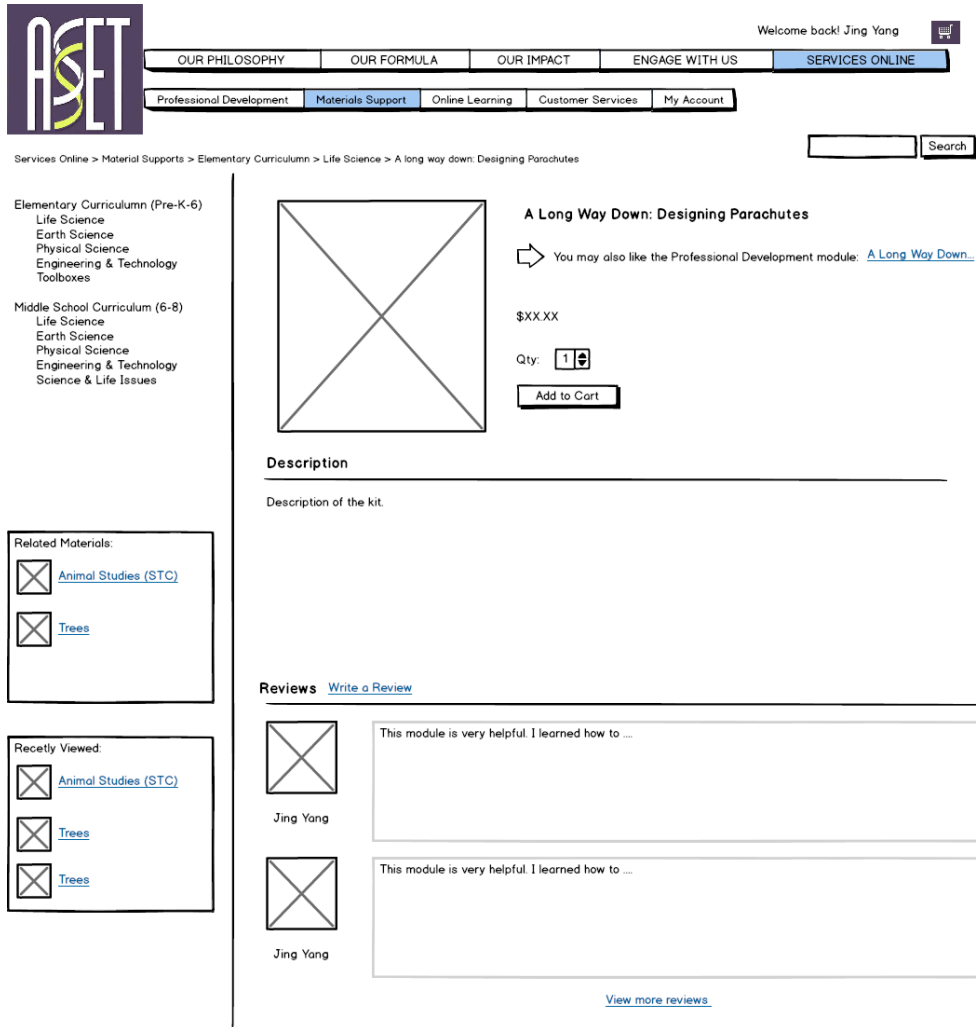
Figure 14. Material details page

My Cart Page: All the items in the cart are listed. The related materials and PD courses are displayed near each other. Users are able to change the quantity number. Also they can remove the undesired items from the cart. Users can enter a promotion code to enjoy discount, and then finally check out all the items. The payment method will be recorded in the account information when users register with ASSET. The online payment function will be enabled so that individual teachers are able to pay for themselves. (see Figure 15)
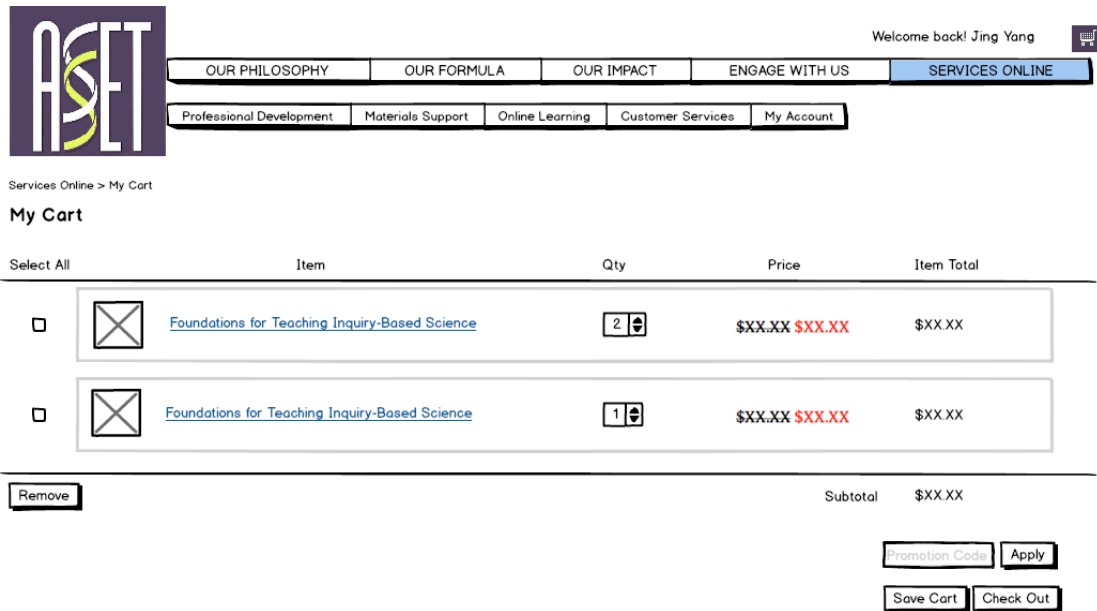
Figure 15. My cart page

Save cart page: After the user click on "Save cart", a floating window will show up. It allows user to choose to save the cart to a existing cart, or create a new cart to save. The saved carts can be found under My Account > Saved Cart, which could be user later. (see Figure 16)
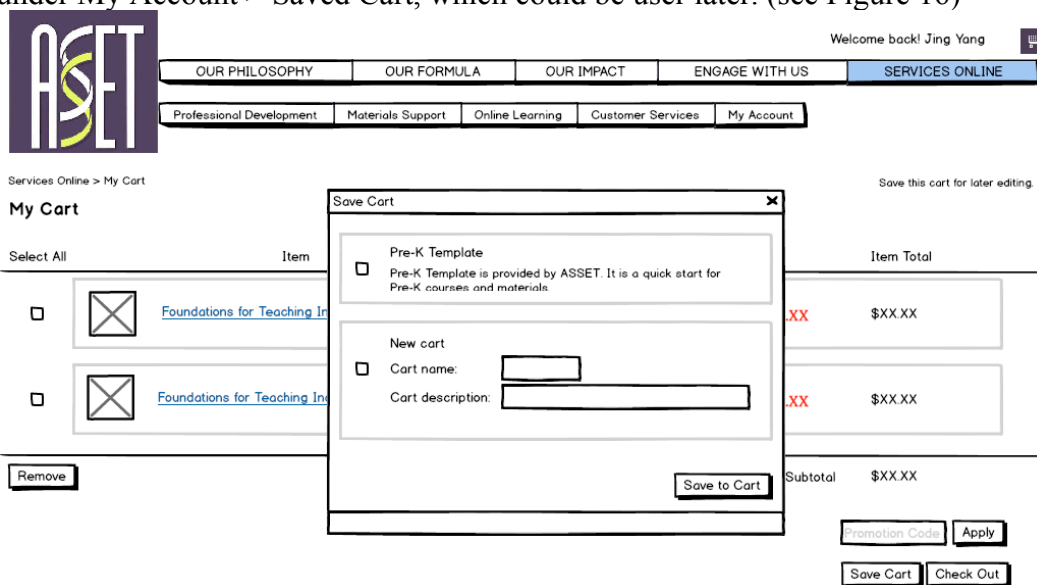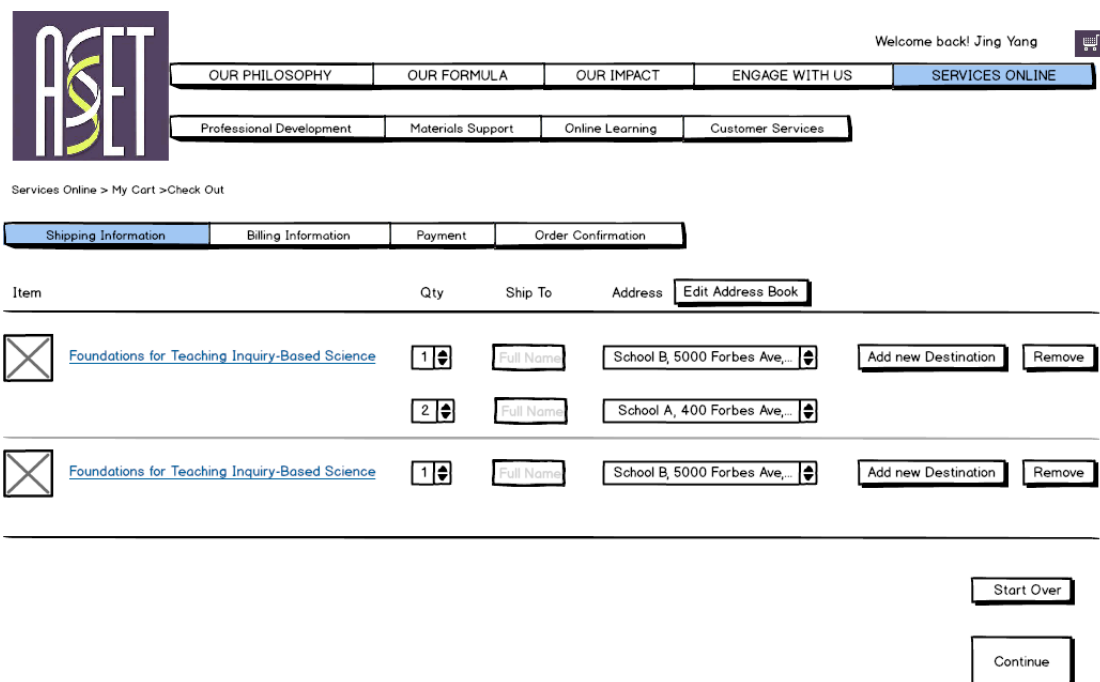
Figure 16. Save cart page

Check Out Page:
First of all, it will list the phase that this user is in. Phases include shipping information, billing information, payment and order confirmation. Shipping should allow users to send needed quantity of one type of materials to different locations. So it will access to the address book that is set by the user in My Account. (see Figure 17)

Figure 17. Shipping information

Customer Services page: it is the hub where users could find all the online support materials. The main page provides inquiry function that users could select the question to ask from the drop-down menu. It will contain the most frequent inquired questions. Then the required fields of information related to this question are displayed and asked the users to fill in. Also a file may be needed to attach with the inquiry.

Ordering, Shipping & Returns and Payment Information are information page that list all the necessary information that a user maybe interested in. Contact Us page will provide contacts and location of each ASSET offices. (see Figure 18)

Figure 18. Customer services page

FAQ page: list all of the most frequent asked questions on the top of page, and upon click it will scroll down to the specific question and its answer. A back to top click is very necessary in this page. (see Figure 19)

Figure 19. FAQ page

My Account: It directly goes to My Profile when user clicks on My Account. Current information of the user will be displayed and the user is able to click on the edit button to enter the edit mode. Users' first name and last name should not be able to change after they create the account. Users can change the profile picture. (see Figure 20)

Figure 20. My account

My Account – password: It allows user to change password. (see Figure 21)

Figure 21. My account – password

My Account – contact: It allows user to modify contact information. (see Figure 22)
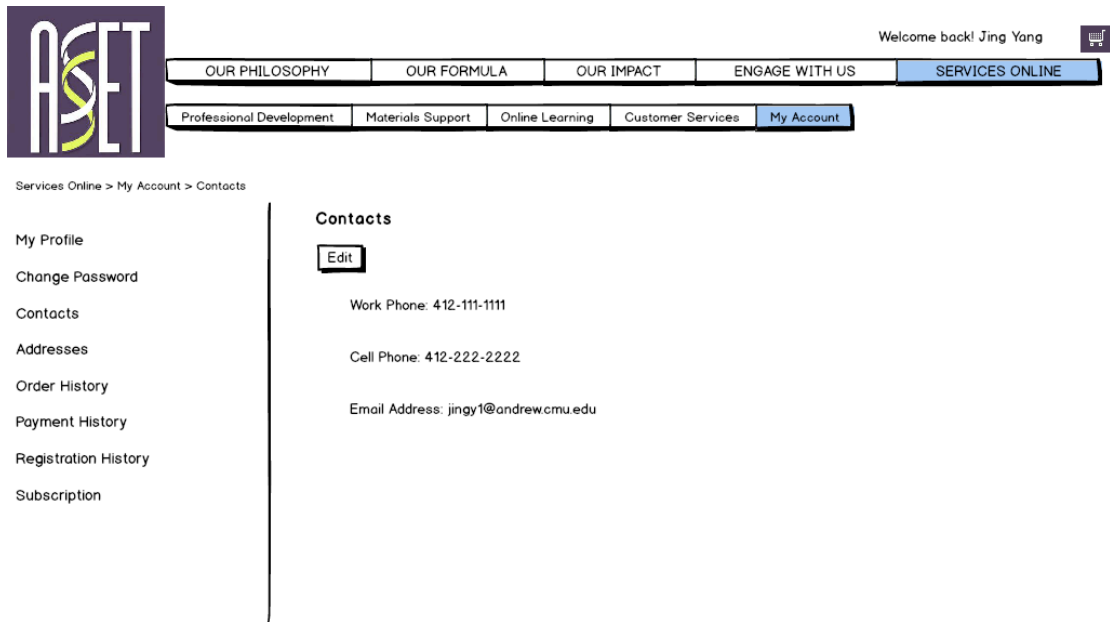
Figure 22. My account – contacts

My Account – address: It keeps record of user's addresses. User could save more than one address in the address book. And it will be convenient when users are in the check out process. They can select the address from address book rather than type it in each time. (see Figure 23)

Figure 23. My account – address

Saved Cart Page: It will display all of the saved carts by this user. User could edit the cart, or directly check out the whole cart. In this case, the saved cart is a stand-alone cart with multiple items. Furthermore, the saved cart could also act as a component of the final cart. They could be able to add the saved cart item to the current cart, and then check out follow the standard process. (see Figure 24)

Figure 24. My account – saved cart

My Account – Order History: It shows all the order history. Users are able to select to show orders of a period of time. Order details could be viewed if user clicks on the order entry. The Payment History and Registration History follow the same web design as Order History. (see Figure 25)

Figure 25. My account – order history

My Account – Order Details: Users are able to view the Order Date, Order Cost, Order status and detailed items in that order. The title of each item will link back to the items detail page. In addition, they can choose to write a review. (see Figure 26)
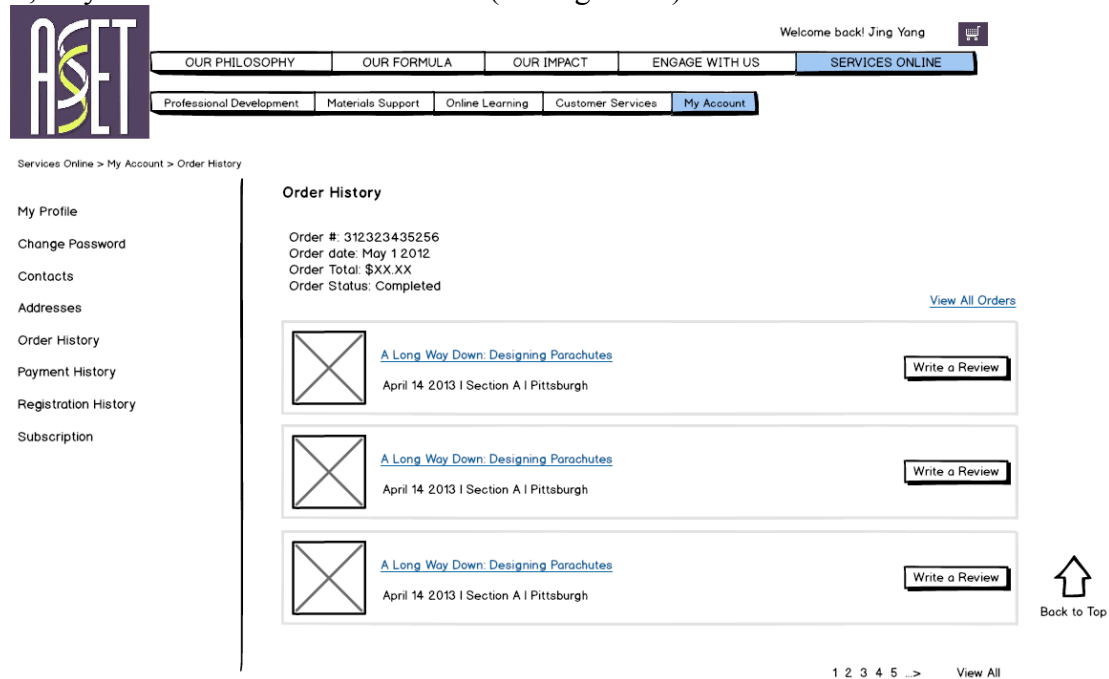

Figure 26. My account – order details

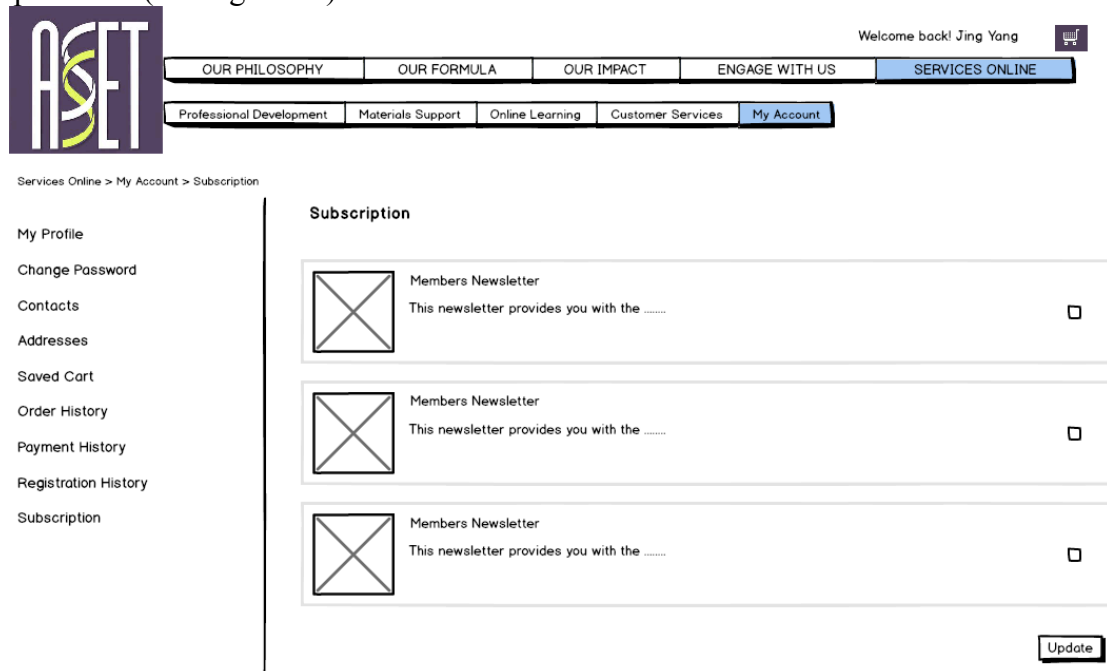Subscription Page: Users can select the publications and/or newsletters to subscript, and update the subscription list. (see Figure 27)

Figure 27. Subscription page