

# UAlbanyMarketPlace Requirement Specifications

Group Name and  
Group Member Names

September 23, 2015

# 1 Project Goals

- We want a web application where members of the university will be able to buy and/or sell products.
- We want the application to support a registered account for anyone who uses the site.
- We wish that customers and vendors will be able to track their recent activity via a user profile.
- We want consumers to have the ability to review vendors that they have purchased from.
- We want to be able to host corporate sellers.
- We want to have an administrator account to maintain the application

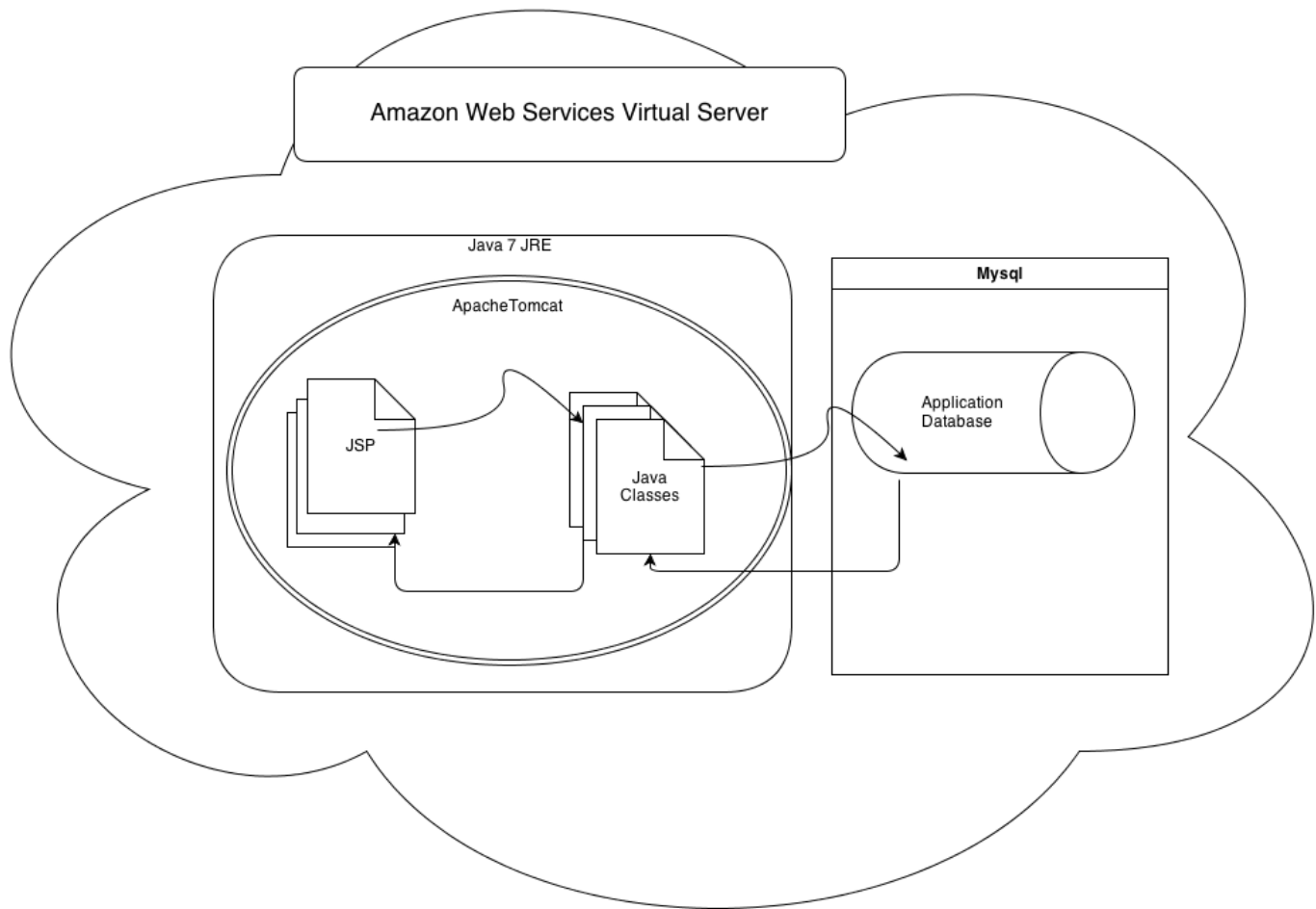
## 2 Mandated Constraints

### 2.1 The system must be implemented using the following technologies:

- The application must run on the Java 7 Runtime Environment
  - Rationale– We want this product to be able to run on the most up-to-date version of the Java environment .
  - Fit Criterion– The application must be developed using the Java 7 Development Kit
- The applications front end must use JSP technology
  - Rationale– We want our web pages to be dynamic to cut down on storage and organizational needs.
  - Fit Criterion– All viewable content will be displayed on JSP. The JSP will be implemented using small amounts of code in the pages with the assistance of separately defined java classes.
- The application must be run on Tomcat 6 or 7
  - Rationale– We want to have our application run off of a trustworthy Java server program.
  - Fit Criterion– The application will be tested and developed using Tomcat to ensure it will run on it correctly.
- The application must implement a Mysql database for storing information
  - Rationale– We want to store our account information in a trustworthy industry grade database.
  - Fit Criterion– The storage of all user account information (password, username, address, etc...) will be stored in a Mysql database.
- The application must give consumers an ability to use Paypal
  - Rationale– We want customers to be able to use a secure internet transaction method for purchases.

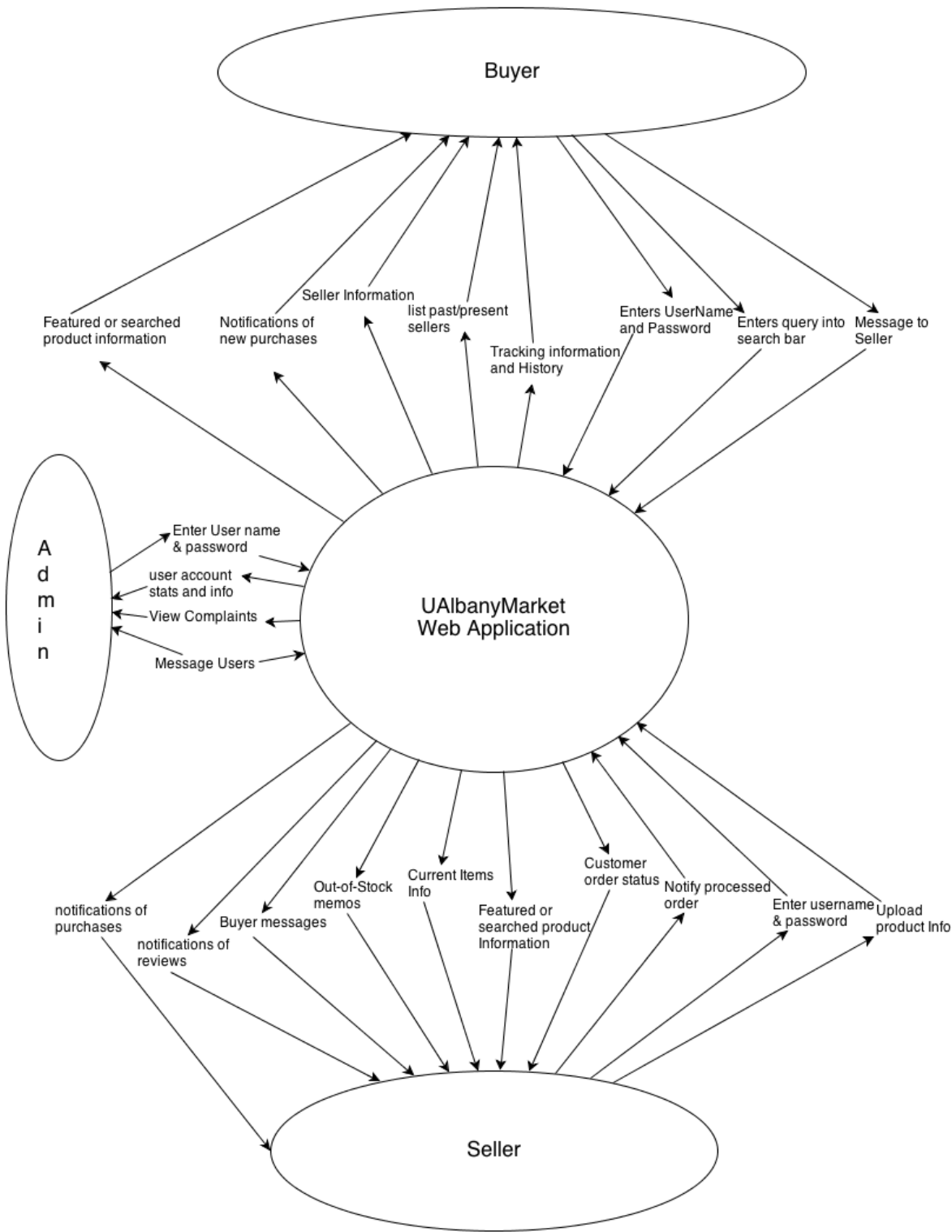
- Fit Criterion– Paypal will be a clickable payment option upon purchase of an item.
- The application must be hosted on an Amazon Web Services Virtual Server
  - Rationale– We wish to host our content on a cloud server to be able to make necessary edits/updates from wherever necessary.
  - Fit Criterion– The application will be stored and run from a micro-instance virtual server on Amazon Web Services.

## 2.2 Implementation Environment



3 Scope of the Work

3.1 Context of the Work

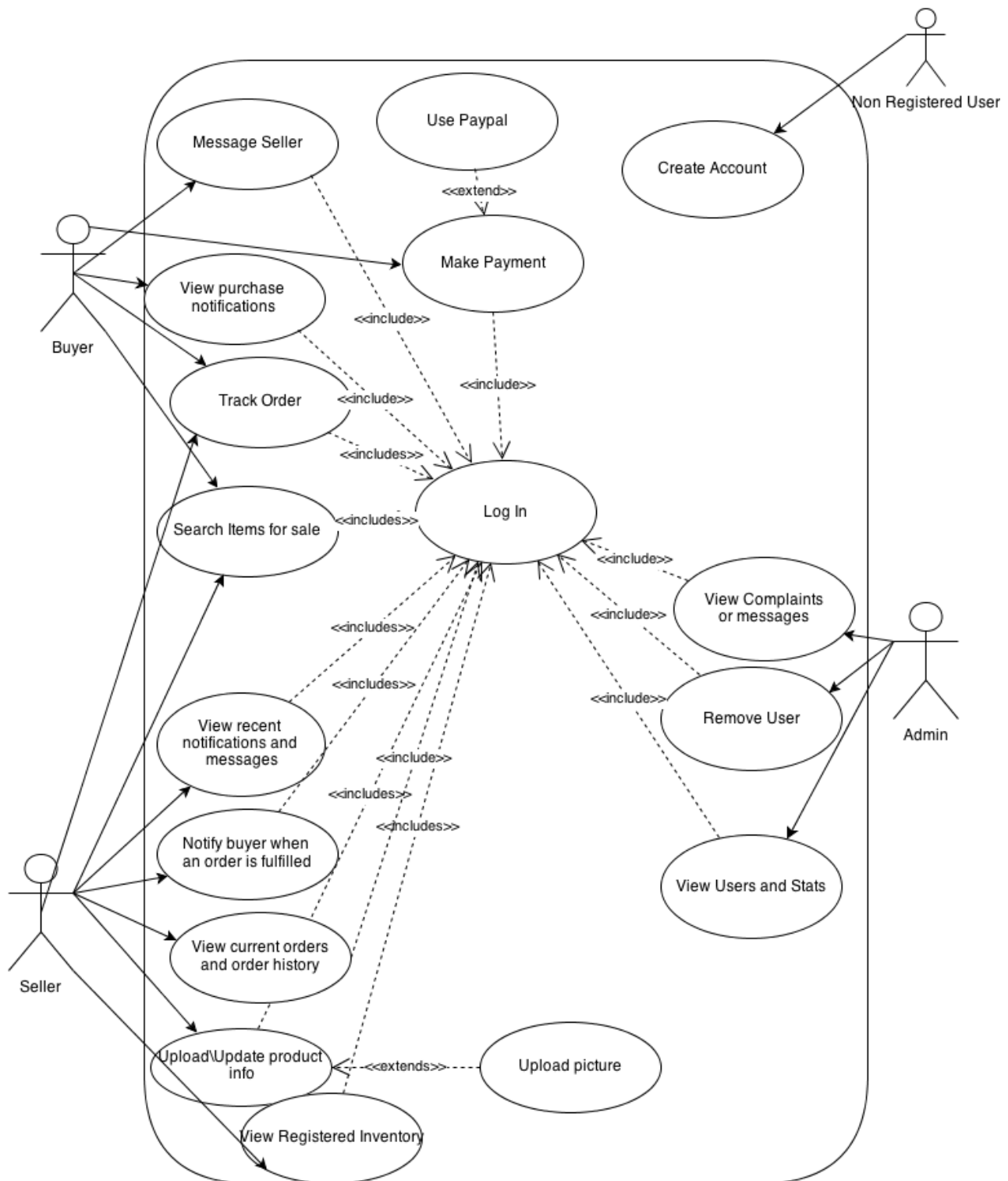


### 3.2 Work Partioning

Event Name	Input and/or Output
1. buyer logs in	user name and password(in), buyer profile or error message(out)
2. buyer searches Item	query retrieved(in), featured and searched product information(out)
3. buyer views new purchases	new purchase information(out)
4. buyer views seller information	seller information(out)
5. buyer views past and present sellers	past and present seller's information(out)
6. buyer views tracking details	tracking information(out)
7. buyer views purchase history	purchase history(out)
8. buyer enters message to a seller	message and seller name(in)
9. buyer purchases item	payment info(info), order info(out)
10. seller logs in	user name and password(in), seller profile or error message(out)
11. seller views recent purchases	notifications of recent purchases(out)
12. seller views recent reviews	recent reviews and average review rating(out)
13. seller views buyer messages	seller specific buyer messages (out)
14. seller views notifications	recent purchases ,reviews, and out-of-stock memos(out)
15. seller views current items	sellers registered inventory and information(out)
16. seller searches other sellers' items	query entered(in) featured and searched product information(out)
17. seller views order statuses	orders status information(out)
18. seller processes order	order status and information(in)
19. seller uploads a product	item's information and pricing information(in)
20. admin logs in	user name and password(in), admin page or error message(out)
21. admin views account	user's account information(out)
22. admin views complaints	complaints and messages(out)
23. admin messages user	Message and User specific info(in)

## 4 Scope of the Product

### 4.1 Product Boundary



## 5 Functional and Data Requirements

### 5.1 Functional Requirements

<i>Requirement Shell</i>		
Requirement #: 1	Requirement Type:	Event/Use Case#:1,10,20
<b>Description:</b> The application will allow registered visitors to log in via correct user name and password combination		
<b>Rationale:</b> We want to be able to identify each user that is currently using the system and know the correct information to send them.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> There will exist a form prompting for user name and password. When the user enters a user name and password combination the application will attempt to find it in the database. Upon successful authentication user will be redirected to personal profile. If unsuccessful an error message will be displayed and the user allowed to try again.		
Customer Satisfaction: 1	Customer Dissatisfaction: 5	
<b>Dependencies:</b>		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<i>Requirement Shell</i>		
Requirement #: 2	Requirement Type:	Event/Use Case#:1,10,20
<b>Description:</b> A logged in user will have the ability to log out		
<b>Rationale:</b> We want users to be able to log out so we won't have to dedicate memory to those who are no longer using the application.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> Once a user clicks the log out button all information about the logged out users session will be forgotten. If a user logs out they will only be able to access the home page and the login page. None of that user's information will be accessible until the next time they log in		
<b>Customer Satisfaction:</b> 1	<b>Customer Dissatisfaction:</b> 5	
<b>Dependencies:</b>		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 3	Requirement Type:	<b>Event/Use Case#:</b> 2,16
<b>Description:</b> Users will be able to search for items through a search bar.		
<b>Rationale:</b> We want the user to be able to find products they are looking for without listing all items in the database		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> Upon submission of a query the system shall compare the text entered to the titles of products stored in the database of all sellers registered. It shall then return first a list of links of products with exact title matches, followed by a list of items containing exact substring matches if and only if the entered query is composed of multiple words. It shall list 10 products at a time to prevent long delays.		
<b>Customer Satisfaction:</b> 4	<b>Customer Dissatisfaction:</b> 3	
<b>Dependencies:</b>		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 4	Requirement Type:	<b>Event/Use Case#:</b> 3
<b>Description:</b> The buyer will be able to view a list of recent purchases on their profile page		
<b>Rationale:</b> We want the buyer to be able to see recent purchases that they have made on their profile in case there are anomalies. This way they don't have to search for recent activity it will simply be provided to them. This will be available immediately following login		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> There will be a frame in the buyer's home page that will list the 5 most recent items purchased from the site. It shall list the title of the item as well as the price and the time purchased.		
<b>Customer Satisfaction:</b> 2	<b>Customer Dissatisfaction:</b> 2	
<b>Dependencies:</b> requirements for purchase history		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		



<b>Requirement Shell</b>		
<b>Requirement #:</b> 5	Requirement Type:	<b>Event/Use Case#:</b> 4
<b>Description:</b> The user will be able to view information about the seller of the product they are viewing		
<b>Rationale:</b> We want users to be able to make an educated decision as to whether or not a seller is trustworthy or of quality.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> In an item details page there will be, under the name of the item, the name of the seller which shall also serve as a link. That link will display the sellers information including overall rating, number of sales, and location by communicating with the database.		
<b>Customer Satisfaction:</b> 3	<b>Customer Dissatisfaction:</b> 3	
<b>Dependencies:</b> requirements for listing seller information		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 6	Requirement Type:	<b>Event/Use Case#:</b> 5
<b>Description:</b> A buyer will be able to see a listing of all sellers they have dealt with.		
<b>Rationale:</b> We want the buyer to be able to know who they purchased items from in case of errors in the order and be able to rate those they have dealt with.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> There will be a link on the buyers home page that will take them to a list of past and present sellers they have dealt with. The system will execute a method to retrieve from the database a unique listing of sellers according to the purchases that buyer has made.		
<b>Customer Satisfaction:</b> 2	<b>Customer Dissatisfaction:</b> 3	
<b>Dependencies:</b>		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 7	<b>Requirement Type:</b>	<b>Event/Use Case#:</b> 6,17
<b>Description:</b> The user will be able to view tracking information about an item they have ordered.		
<b>Rationale:</b> Most buyers care to see information about their item in transit so they know whether an item they ordered was actually fulfilled and to get a rough estimate on when they will receive it.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> All items under recent purchases or purchase history will contain a link to view tracking info. That link will bring you to a web page of the delivery company's containing tracking info.		
<b>Customer Satisfaction:</b> 4	<b>Customer Dissatisfaction:</b> 3	
<b>Dependencies:</b> Delivery Company		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<i>Requirement Shell</i>		
Requirement #:8	Requirement Type:	Event/Use Case#:7
<b>Description:</b> Buyers will be able to view a listing of every purchase they made on the site in the past 5 years		
<b>Rationale:</b> We want buyers to be able to keep record of their purchases our site so they won't have to write everything down.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> After each purchase made the system will log the purchase noting item, seller, and whether or not it was successful. Purchase info will be stored in the database sequentially storing the oldest purchase first. It will then list them when asked in reverse order displaying all the information.		
<b>Customer Satisfaction:</b> 4	<b>Customer Dissatisfaction:</b> 4	
<b>Dependencies:</b> database requirments		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 9	Requirement Type:	<b>Event/Use Case#:</b> 8
<b>Description:</b> A customer of a seller will be able to send a message of text to that seller.		
<b>Rationale:</b> We want the customers be able to notify sellers directly of issues with orders.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> Upon viewing a listing of past/present sellers there will be a link under each sellers name. If that link is clicked it will prompt the seller with a text box to enter a message no longer than 200 ascii characters with a submission button. When that button is pressed the system will check if the message contains text, if not it will do nothing, if there is the system will store that message in that sellers database.		
<b>Customer Satisfaction:</b> 2	<b>Customer Dissatisfaction:</b> 3	
<b>Dependencies:</b> requirements for listing viewing sellers		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<i>Requirement Shell</i>		
Requirement #: 10	Requirement Type:	Event/Use Case#: 9
Description: They buyer will be able to purchase an item that they want		
Rationale: This is a trading application, if this is not done there is no reason for having the site		
Source: Professor Chen		
Fit Criterion: Each item detail listing will contain a link to purchase the item. Once pressed it will direct the buyer to a page containing shipping and payment forms. If all required shipping fields are filled and the payment clears, the system will display a receipt and the purchase info will be added to the users account history.		
Customer Satisfaction: 1	Customer Dissatisfaction: 5	
Dependencies: payment requirements		
Supporting Materials:		
History: Created March 22, 2013		

<i>Requirement Shell</i>		
Requirement #: 11	Requirement Type:	Event/Use Case#: 11
<b>Description:</b> Sellers will be able to view a listing of recent items that they have sold		
<b>Rationale:</b> We want sellers to be able to keep track of their recent sales so they will be immediately informed upon login whether something was purchased.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> There will be a frame on the sellers home page displaying the 5 most recent purchases. This will take the information from the database of past purchases of that seller and display them.		
<b>Customer Satisfaction:</b> 3	<b>Customer Dissatisfaction:</b> 3	
<b>Dependencies:</b> Sales history requirments		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<i>Requirement Shell</i>		
Requirement #: 12	Requirement Type:	Event/Use Case#: 11
Description: Sellers will be able to view sales history going back 5 years		
Rationale: We want to make sure the sellers have good records in case problems occur with customers		
Source: Professor Chen		
Fit Criterion: There will be a link on the sellers page that will take them to a page that lists past sales. The sales shall be retrieved from the database. The database will store the sale after each purchase making a one-to-one correspondence with buyer purchases to ensure no inventory or sales problems.		
Customer Satisfaction: 2	Customer Dissatisfaction: 2	
Dependencies:		
Supporting Materials:		
History: Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 13	Requirement Type:	<b>Event/Use Case#:</b> 12
<b>Description:</b> Sellers will be able to view customer reviews of their sales.		
<b>Rationale:</b> We want sellers to be able to get feedback on their transaction so they can improve their business		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> Reviews from customers will be stored in a section of the database under the seller's user id after being submitted by customers. The system will then output the customer reviews to single page that the seller can access from his home page and review.		
<b>Customer Satisfaction:</b> 3	<b>Customer Dissatisfaction:</b> 2	
<b>Dependencies:</b>		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 14	Requirement Type:	<b>Event/Use Case#:</b> 13
<b>Description:</b> The seller will be able to view message sent from their customer		
<b>Rationale:</b> We want sellers to read messages from their customers that could pertain to purchases or even complements, concerns, etc...		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> There will be a link on the seller's home page that will take them to a page containing messages from buyers. The messages will be retrieved from the database as based on sellers name, the text will then be put in a frame and displayed on the page.		
<b>Customer Satisfaction:</b>	<b>Customer Dissatisfaction:</b>	
<b>Dependencies:</b> requirement 9		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 15	Requirement Type:	<b>Event/Use Case#:</b> 14
<b>Description:</b> Seller will have an all in one box to give notice about different account activity		
<b>Rationale:</b> We want an item that will quickly notify the seller of different activities on the application to make things easier for the seller		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> This will be a frame on the seller's home page that will give boolean notices about reviews, sales, and out-of-stock memos. This will simply print a "yes" or "no" next to each topic to let the user know if anything has changed. It will retrieve info from all the different database sections to see if anything was added.		
<b>Customer Satisfaction:</b> 4	<b>Customer Dissatisfaction:</b> 1	
<b>Dependencies:</b>		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 16	Requirement Type:	<b>Event/Use Case#:</b> 15
<b>Description:</b> The seller will be able to view their inventory stats		
<b>Rationale:</b> We want the sellers to know their inventory so they will know when to update their listings		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> After sales the numbers in the database will be updated to reflect the correct number of products left for sale. That information will then be available upon request to the seller. They will be able to click a link, that link will send them to a page listing item names, after each item name will be printed a number corresponding to the number left in stock		
<b>Customer Satisfaction:</b> 3	<b>Customer Dissatisfaction:</b> 3	
<b>Dependencies:</b> item database requirements		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 17	Requirement Type:	<b>Event/Use Case#:</b> 18
<b>Description:</b> Once a seller processes an order they will be able to submit notification to the application		
<b>Rationale:</b> We want customers notified when a order is shipped		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> Under the recent sales page, items that are not fulfilled will have a link to fulfill order. Once clicked it will modify the order that is stored in the database to being fulfilled.		
<b>Customer Satisfaction:</b> 4	<b>Customer Dissatisfaction:</b> 4	
<b>Dependencies:</b>		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 18	Requirement Type:	<b>Event/Use Case#:</b> 19
<b>Description:</b> The seller will be able to create a product posting		
<b>Rationale:</b> There will be nothing to buy on the website if there are no products on the site.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> There will be an option under the current items page to add new items. This directs the seller to a page that will allow for upload of a picture of the item, the cost of the item, and a description of the item. This information will then be stored in another database under that seller's user id.		
<b>Customer Satisfaction:</b> 5	<b>Customer Dissatisfaction:</b> 5	
<b>Dependencies:</b>		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 19	Requirement Type:	<b>Event/Use Case#:</b> 21
<b>Description:</b> The administrator will be able to view all account information of both buyers and sellers (note cannot edit)		
<b>Rationale:</b> If complaints are made or suspicious activity made, the admin must be able to check truth of claims or see if activity for a user is suspicious.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> The admin account can view a list of current users. Upon clicking a user the admin will be brought to a page containing that users recent purchases or sales, messages they have sent, and registration information. All information will be called from the database under that user's id		
<b>Customer Satisfaction:</b> 1	<b>Customer Dissatisfaction:</b> 1	
<b>Dependencies:</b>		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<b>Requirement Shell</b>		
<b>Requirement #:</b> 20	Requirement Type:	<b>Event/Use Case#:</b> 22
<b>Description:</b> The admin will be able to view complaints issued by users		
<b>Rationale:</b> In case there are problems we want the admins to be as informed as possible		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> The admin will have a section in the database dedicated to message from users. Those messages will be posted to a page accessible from the admin page.		
<b>Customer Satisfaction:</b> 2	<b>Customer Dissatisfaction:</b> 3	
<b>Dependencies:</b>		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		



<i>Requirement Shell</i>		
Requirement #:21	Requirement Type:	Event/Use Case#:23
<b>Description:</b> The administrator will be able to send messages to users		
<b>Rationale:</b> We want the admin to be able to send a message to any user to notify the user of warnings or to tell a user of resolved complaints.		
<b>Source:</b> Professor Chen		
<b>Fit Criterion:</b> From the view accounts page there will be a link under the user's name that will prompt a message box that will send a message to the user. If the text is empty no action will occur, else the message will be sent to that user and the message stored in the database.		
<b>Customer Satisfaction:</b> 1	<b>Customer Dissatisfaction:</b> 2	
<b>Dependencies:</b> user view message requirements		
<b>Supporting Materials:</b>		
<b>History:</b> Created March 22, 2013		

<i>Requirement Shell</i>		
Requirement #: 22	Requirement Type:	Event/Use Case#:s24
Description: Unregistered users will be able to register		
Rationale: We need to have a registration system in order to get users, without users there is no point to the application		
Source: Professor Chen		
Fit Criterion: From the home page a visitor will be able to click a link and be brought to a registration page. The page will ask for first name, last name, email address, username, and password. The information will then be stored in the database and the user redirected to the log in page.		
Customer Satisfaction:1	Customer Dissatisfaction:5	
Dependencies:		
Supporting Materials:		
History: Created March 22, 2013		