

The Knoitall Platform

Product Requirements

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1.1. Overview

What We Are Building

Knoitall is building a social knowledge network that lets anybody share or sell what they know. Key components of the Knoitall platform are:

1. A personal learning activity feed built for each user based upon their interests with the ability to follow learning providers and their posts
2. An e-commerce platform that allows individuals the ability to post learning-related events and items for sale through Knoitall
3. Administrative controls that allow users to track sales, consumers, followers, as well as their own purchases through a personal transcript.

Through Knoitall, a user can create learning posts or list items for sale.

Who are we Building it For

Knoitall believes that an opportunity exists in the market to create a better social experience for the world by focusing on the personal development of each individual member. We are competing for the 15-30 free moments that the world spends each day on social media, and we hope to move these people to a platform that will maximize the value of that time spent by giving them content that is truly relevant and helps them learn about their topics of interest.

Bloggers, influencers, and businesses will find high value in our platform as a tool to educate their audience and build their brand. And for many of these individuals, we will provide them with an entirely new revenue stream to help them monetize the online audience they have created by selling what they know.

Our Technologies

Knoitall is being built on PHP/Symfony platform using Bootstrap on the front end and MySQL as the datastore. All code is maintained in the Knoitall Github repository.

Knoitall leverages the technologies provided by a number of third parties:

1. The learning feed technology is provided by GetStream, and is accessed through an API

2. Payment technologies are provided through Stripe. Each user can set up or link their personal Stripe account to Knoitall so that they can accept payment for items sold through the network

The Knoitall Learning Post

Foundational to the Knoitall platform is the ability to create a simple learning post. This is a free post, similar to a blog post or twitter post, but with some unique features that align the post to learning:

- The post may be tagged to the Knoitall learning taxonomy so that it may be associated to users who have an interest in that learning category
- Learning outcomes: the specific learning outcomes are identified for the consumption of any learning post
- A steps tool: within the post itself, the user can insert specific learning steps, each associated with an image or video, to help explain to the user the process for completing a particular task or to simplify the learning process

Listing an Item for Sale Through Knoitall

The following types of items may be listed for sale through Knoitall:

1. Coaching or tutoring sessions
2. Group Classes or Webinars
3. Ongoing Group Lessons
4. Any form of self directed learning
5. A learning product
6. A learning package (certificate, degree, etc.)

Payments for these items are managed through a user's Stripe payments account. These accounts are linked to the Knoitall platform.

The User Sign Up Process

Users flow through the following steps to join the Knoitall community:

Sign up for free

×

Join the World's Knowledge Network

Learn from your favorite brands and share your own expertise

- Create your personal learning feed
- Educate others
- Grow your knowledge network

First name

Enter your first name

Last name

Enter your last name

Screen name

Your name or your business's name

Email address

Your email address

Password

Create a password

Repeat password

Type your password again

Register

Returning User? [Sign in to your account](#)

1. Create their account with a user name, password, and screen name
2. Create your knowledge feed by identifying areas of interest from the Knoitall taxonomy:

1. Create Your Knowledge Feed

Select your interests

You may select as many as you'd like.

Arts & Crafts +

Business +

Computers & Software +

Cooking & Beverage +

Dance, Drama & Music +

Education +

Engineering +

English, Literature & Writing +

Health & Health Care +

History +

Hobbies & Games +

Home & Garden +

Languages +

Legal Studies +

Parenting +

Philosophy +

Religion +

Science & Math +

Sports & Leisure +


Continue

3. Select People and Providers to follow:

2. Make Your Knowledge Feed Your Own


Select people and providers to follow

☐




Running Medic
Learning categories: Sports & Leisure: Running, Cross Country & Marathon Training






☐



Zimbazee Learning Center
Welcome to my page. Å Here you'll find opportunities to connect directly with me, take classes in San Diego, and view other resources that I have found helpful in pursuit of my passions, which are running, native gardening, and education.
I love to connect with others, learn their secrets, test them out, and help others succeed, whether it's completing your first marathon or building your native garden.
I formed Knoitall with a partner and a set of investors so that we could help others share what they know and sell their expertise. Å We support people from all walks of life...teachers, athletes, and even businesses that want to teach others more about their products and services.Å
Learning categories: Sports & Leisure: Running, Cross Country & Marathon Training

4. Invite others to join








kristy@keusder.cc


3. Invite Your Friends to Join

Share what you know, learn what they know and together build your knowledge network.









Invite

Skip

This creates an email invitation to each person identified by the user.

The Leaning Feed

Each user will have a learning feed where they are kept up-to-date on new learning posts and items listed that map to their learning

The screenshot displays the Knoitall web application interface. At the top, there is a navigation bar with the Knoitall logo, a search bar, an optional zip code field, a submit button, and links for Sign Up and Login. Below the navigation bar, the main content area is divided into two columns. The left column features a post titled "[Provider_Name] listed a [program type]". The post includes a placeholder for a program title, learning outcomes, price, and duration, followed by a brief description. A large SeaWorld logo is prominently displayed in the center of the post. Below the logo, there are social media interaction buttons for Like (5), Comment (10), and Share. The right column contains four placeholder boxes for Map Insert, Categories, Formats, and Outcomes Insert. At the bottom of the page, there is a footer with links for Knoitall, About, Business Solutions, Help, Privacy, and Legal.

interests. The learning feed is a mash up of learning content from the individuals and businesses that the user has chosen to follow based upon their interests.

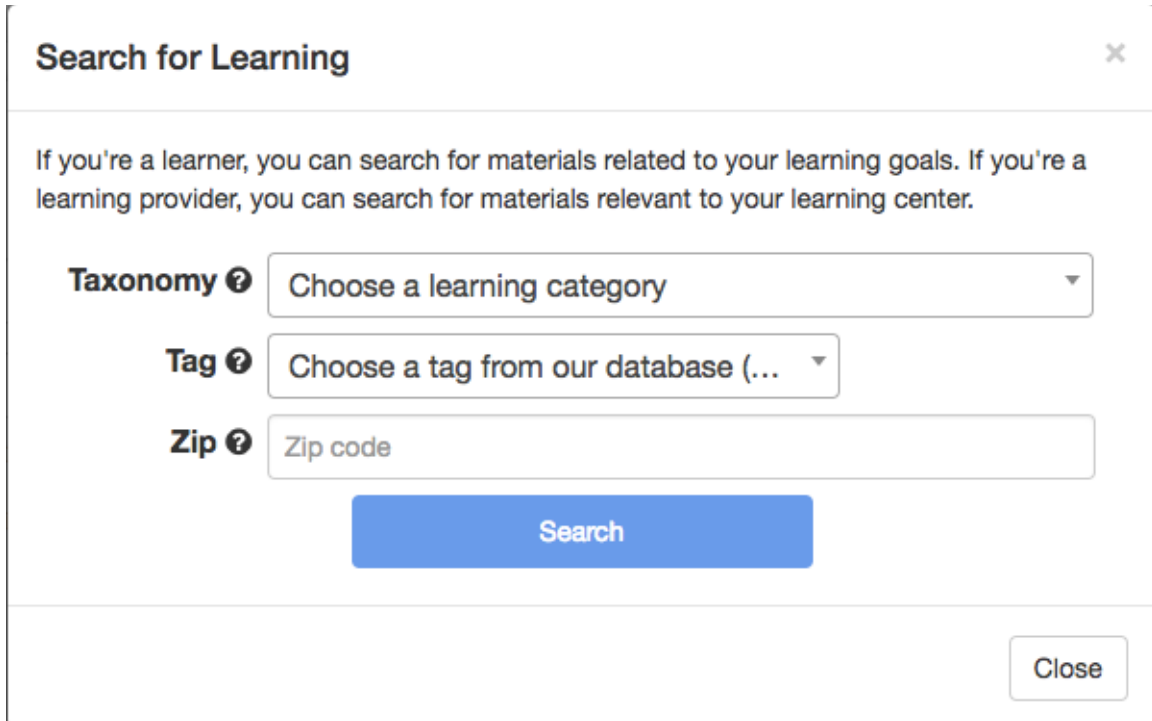
Directly within the learning feed the user has the ability to open up a link to create their own content through a learning post, or they can list an item for sale.

In-Feed Advertising

Knoitall will support the ability to create advertising campaigns that are placed directly within the user's feed to support highlighting certain learning providers and/or opportunities. Advertising will be managed through a cost-per-click inventory management application.

Knoitall Search

Initially, Knoitall will launch with a rudimentary search tool that will allow users to search by the Knoitall taxonomy. The user can type in a set of letters corresponding to the taxonomy, and then select the



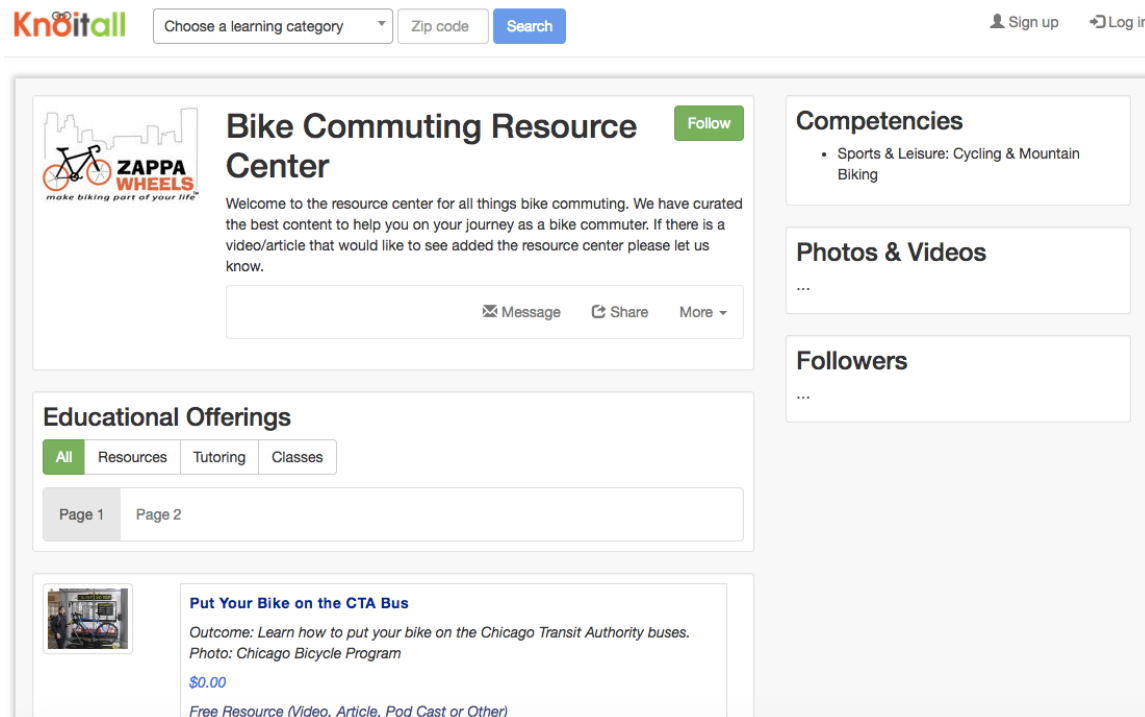
The screenshot shows a modal dialog titled "Search for Learning" with a close button (X) in the top right corner. Below the title is a descriptive text: "If you're a learner, you can search for materials related to your learning goals. If you're a learning provider, you can search for materials relevant to your learning center." There are three input fields: "Taxonomy" with a dropdown menu showing "Choose a learning category", "Tag" with a dropdown menu showing "Choose a tag from our database (...)", and "Zip" with a text input field containing "Zip code". A blue "Search" button is centered below these fields. A "Close" button is located in the bottom right corner of the dialog.

category for searching purposes. In addition, the user can tie the search to a geographic area by entering a zip code, confining the results to that geography.

Ultimately, Knoitall will deploy a more robust search tool like Amazon CloudSearch.

A User's Personal Learning Center

Each user will have a public-facing learning center through which all of their learning content is available for consumption.



****IMPORTANT: A USER SHOULD BE ABLE TO CREATE MULTIPLE LEARNING CENTERS**** Each of these learning centers should be assigned to the user's account just like groups are assigned to a Facebook or LinkedIn user.

Private Learning Centers

Users will have the ability to keep their learning center public, or to privatize it so that only those who have been approved can view the contents of their learning center. A user can choose to privatize their learning center in one of three ways:

1. They can accept and approve requests to join their learning center
2. They can limit the learning center to those who have created a user id with a specific email extension (example: @intel.com)

3. They can set up SSO for direct access to their learning center.

If a learning center is private, any listings that are created within that learning center are also private, and only available through the learning center. If a learning center is public, all of the items listed in the learning center are available to be added to other learning centers. If the user elected to add the offerings of others into his/her learning center, the offerings that map to the users interests should be displayed in the learning center.

Since the user is the owner of this learning center, the user should be able to edit things like the name, description, image, etc.

1.6. The Knoitall Learning Taxonomy

When learning items are listed through Knoitall, they are mapped to a two-level taxonomy.

When items are entered through our upload feature, they are mapped to level one of the taxonomy. Twice a day a perl script runs through our database and attempts to assign these items to level 2 categories within our taxonomy. This perl script should view the title field of every item and use that field to assign level 2 categories.

Level three categories are obtained from the description of the item. There may be multiple level 3 topics assigned to an item. These topics are populated through our learning outcomes field.

1.7. Mapping Learning Topics to a Learning Feed

All learning feeds support the content of those learning providers the user has elected to follow. The content displayed should be limited to the topics that were expressly identified by the user during the sign up process. These topics can be edited within the users profile at any time.

As new users join and add content, if their content maps to the interest of a user, the user will be notified of the new provider and can elect to follow the provider. When the user elects to follow the provider, their content will automatically be added to the user's feed.

Notifications

Key to the Knoitall platform is the communications platform that "pushes" notifications to users when others add content that impacts the user's feed. In addition, the user may be notified whenever anyone chooses to follow the provider, or to share the content of the provider.

1.8. Listing an Item for Sale


Any user on the Knoitall platform can create a learning offer and list it for sale.

Knoitall

Search

Optional Zip

Submit









 [Publish a Post](#) / [List an Item](#)

Tutoring or Coaching to One Person

How to Make Money on Knoitall

Learn how to monetize what you know on Knoitall

In this one hour tutoring session you will learn how to monetize what you know by tutoring others.



Post

In order to list an item for sale, the user must complete the listing form with the following required fields:

1. Offer Type (tutoring, class, product, etc.)
2. Offer Title
3. Learning Outcomes
4. Description

The following optional components may be added to the listing in order to properly position it for sale:

1. Tag it to the Knoitall taxonomy
2. Provide an image or video associated with the listing

- 3.If the item is delivered face-to-face, the item can be assigned to a location
- 4.A schedule for when the learning is delivered
- 5.Price and inventory (number of units for sale)
- 6.Teacher description
- 7.Age range
- 8.Requirements (items or admission requirements)

Knoitall Administration

Knoitall provides a robust administration component to help people manage their own learning content and their learning consumers. The following administrative components are available to the user:

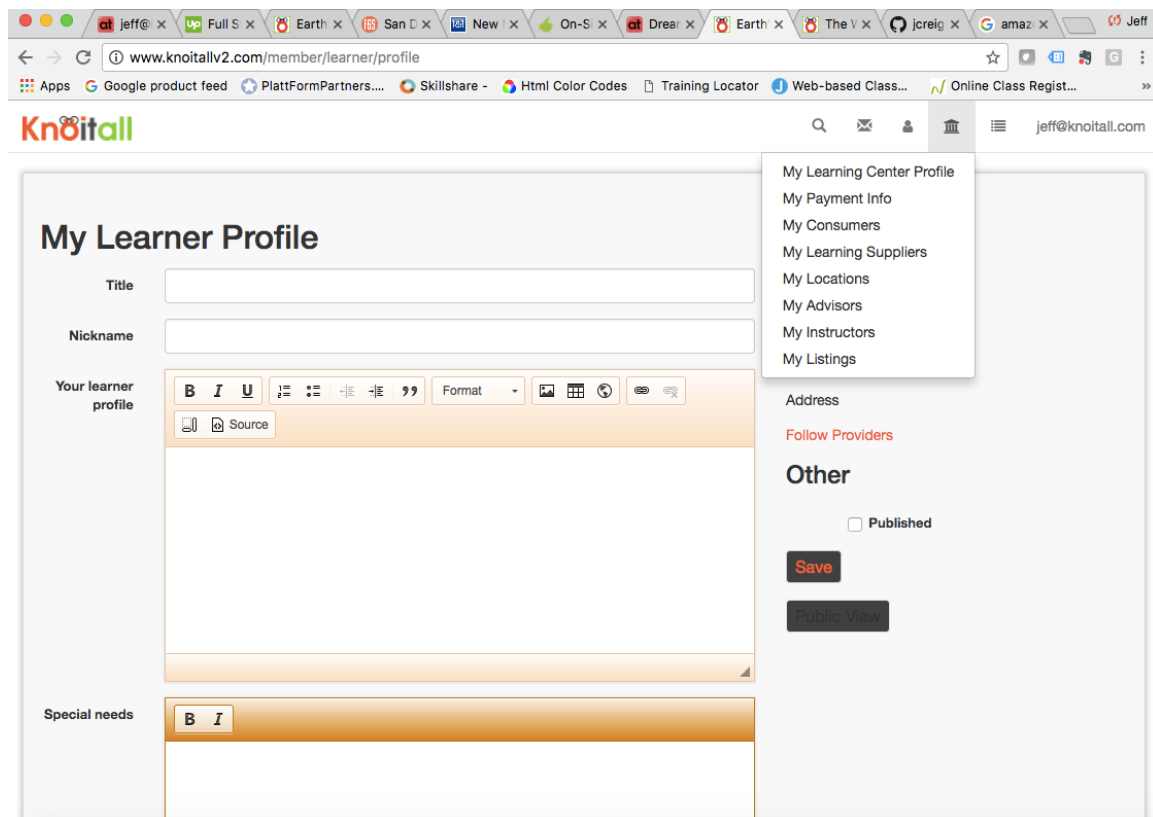
- 1.A learning profile where I can share my learning interests, and key information, with others in the network. In addition, I maintain all of the learning I've consumed through my learning transcript
- 2.A store platform where I can manage my content, users, and others who I may assign to my learning offers.

The screenshot shows the 'My Learner Profile' form in the Knoitall application. The form is divided into several sections:

- Title:** A text input field.
- Nickname:** A text input field.
- Your learner profile:** A rich text editor with a toolbar containing bold (B), italic (I), underline (U), bulleted list, numbered list, link, unlink, and quote icons. Below the toolbar is a 'Source' button and a large text area.
- Special needs:** A section with a toolbar containing bold (B) and italic (I) icons, followed by a text area.
- Optional fields:** A sidebar on the right containing fields for 'Image', 'Phone', and 'Address'. Below these is a 'Follow Providers' section and an 'Other' section with a 'Published' checkbox.
- Buttons:** 'Save' and 'Publish Now' buttons are located at the bottom right of the form.

A dropdown menu is open from the user profile icon in the top right corner, showing options: 'My Learner Profile', 'My Interests', 'Others I Follow', 'My Transcript', and 'Profile Wizard'.

The Problem for Consumers



The number one challenge for consumers is knowing where to begin. They lack the confidence that they've made the right choice, and they are seeking affirmation from others to validate their decision.

1.9. The Problem for Organizations

The problem for organizations is in connecting their audience to the learning opportunities the Organization cares about. The organization wants to direct their audience to a subset of the Knoitall catalog and focus attention towards the learning opportunities that fulfill the needs of that Organization.

1.10. How the Knoitall platform solves these problems in the market.

Because of these problems, the current market for learning is inefficient, and in need of a marketplace platform that removes these inefficiencies. Knoitall removes these inefficiencies in the following ways:

1. Knoitall expands the visibility and distribution for a provider's learning offerings.

2. Knoitall reduces the costs to reach new students from 40% to 10%.
3. Knoitall provides a common framework for consumers that helps them assess between the various learning opportunities and gives them the assurance they are making the right buying decisions.
4. Knoitall provides tools that automate the creation of private learning centers that contain the specific learning opportunities for a specific organization.

1.13. Business Model

The types of offerings that can be marketed and sold through Knoitall include all forms of learning-related products and services, including classes, tutoring, webinars, products, camps, lessons, degrees and free learning resources. **Revenues come through transaction fees, product referrals, and advertising.**

3. Products and Services

Knoitall is building a world class social commerce and advertising platform for the learning vertical delivered as a Software as a Service through www.Knoitall. Learning descriptions of the items available for sale are maintained in a centralized database housed within Knoitall's servers. KNOITALL DOES NOT PROVIDE A PLATFORM TO DELIVER EDUCATION. Instead, Knoitall sells inventory in virtual products and services...those being products or enrollment in learning opportunities that are delivered in the future.

3.1. Seller Services

Knoitall provides robust tools to allow sellers to perform the following functions within the marketplace:

1. List items for sale through the marketplace
 - a. Control inventory of sales for each item
 - b. Provide a description of the item
 - c. Assign a category to each item
 - d. Assign an advisor to each item
 - e. Assign an instructor to each item
 - f. Assign supplies to each item (if a class or other learning event)
 - g. Assign a location to each item
2. Upload multiple items for sale
3. Advertise items
4. Receive payment for sales that occur through the marketplace
5. View customer information
6. Cancel upcoming events and auto-refund those who have enrolled in the event
7. Interact with customers after a learning event has occurred
 - a. Grade the student
 - b. Provide a digital badge
 - c. Provide feedback

The Company's solution supports both providers with thousands of events and multiple locations, and providers with only a few programs at a single location.

3.2. Consumer Services

Knoitall provides robust tools to allow consumers to perform the following functions within the marketplace:

1. Search for learning opportunities
2. Browse through categories to find learning opportunities
3. Compare between various learning opportunities
 - a. Filter on price, location, format, age
 - b. Read reviews from other consumers
 - c. View purchase and refund terms
 - d. View Requirements
 - e. View learning outcomes
4. Identify learning interests and receive personal updates on offerings that map to those learning interests.
5. Connect with the learning provider to receive answers to questions regarding the learning opportunity.
6. Purchase learning products and services
7. Follow a learning provider

3.3. Organization Services

The Knoitall platform supports organizations that want to deliver a customized learning center to their audience. Organizations can perform the following activities through Knoitall:

1. Remove public access to their learning center
2. Filter the Knoitall catalog to only those offerings that fall into specific categories
3. Once content is filtered into specific categories, the organization can further filter those results to a limited set of providers who deliver those offerings.
4. Add a single offering to their learning center.

4. Stakeholder and User Descriptions

4.1. Buyer Demographics

Knoitall supports buyers of continuing education who are primarily women between the ages of 25-45. They are the primary buyers of continuing education to adults and Knoitall programs to kids. The dominant population is married, employed, and with one or more school-aged children.

Over 40% of adults will communicate with the provider before making a decision on a program of study. For this reason, we provide and monitor a communications platform that gives the buyer direct access to advisors within the learning providers covered in our marketplace.

Their expectations for a web experience are high. In addition to providing a seamless user experience and solid vendor platform, Knoitall, Inc. must position itself to this market as a reputable manager of this marketplace, providing transparent and relevant rankings of the sellers within the marketplace, removing fraudulent and/or inappropriate sellers, and protecting the buyer's purchases.

4.2. Buyer Summary

Name	Represents	Role
Women 25-45	Target buyers of continuing education	Gatekeepers and stakeholders in the education of their kids as well as the primary buyers of continuing education to adults.

4.3. Success Factors

Deliverables	Clean user experience modeling Ebay and Amazon.com to deliver to the user a complete list of educational alternatives that fulfill the user requirements; including communications functionality; purchasing capabilities, and post-event evaluation
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4.4. Seller Demographics

Description	They view our solution as an access channel to prospective purchasers. They seek to position their offerings in the most prominent way within our marketplace, and to advise and market their programs directly to potential purchasers.
Type	Most are not experienced web users, or experienced with the use of any technology. They want easy/seamless access to prospective students through our solution.
Responsibilities	They are responsible for selling the programs or products they offer.
Success Criteria	Additional students as a result of their involvement with Knoitall, Inc.
Involvement	They are the representatives of the offerings their organization provides. They will be the key champions of our solution to their organizations.
Deliverables	Event management, enrollment and transaction technologies. Access to immediately update program descriptions, event schedules, and product information through our site; Ability to directly interact with prospective students, view enrollment information, and reverse transactions for events that are canceled.

5. Knoitall Phase 1 Requirements (completed)

5.1. Definitions, Acronyms, and Abbreviations

“Event” is used in this document to refer to classes, tutoring, or other learning opportunities that may be scheduled and in which the user may enroll. This is in contrast to hard products.

“Section” is used to refer to a scheduled instance of an event. Key to the data model is understanding the association of an event (parent) to its sections (child). An event may be created once, but may be associated with multiple sections.

5.2. Key Requirements

The Knoitall phase 1 development (prototype) is intended to demonstrate key features of the Knoitall online marketplace and enrollment management system. These features include:

1. The ability for sellers to create an account and add listings for sale.
2. The ability for sellers to receive notifications when activities have occurred in the marketplace, to include sales, requests for information, the addition of the seller to another learning center.
3. The ability for sellers to receive funds for purchases that occur within the Knoitall marketplace.
4. The ability for consumers to search for offerings by keyword, browse by category, view event details, and purchase items.
5. The ability for organizations to set up and support a rudimentary learning center where the offerings of other providers can be added.
6. The ability to handle enrollment transactions and product referrals through a centralized web-based interface
7. The ability for consumers to assess learning providers, and to view learning provider assessments as a component of the product detail.
8. Ability to handle both the uploading of a currently existing event catalog and the creation of an event directly through Knoitall.
9. A bar-coded payment receipt, that, when scanned, leads to a notification to Knoitall that a payment is owed.
10. Spidering of the database to pull out learning outcomes based upon item descriptions

11. Spidering technology to pull out level II categories based upon the titles of items.
12. Communications platform that generates emails based upon key events tied to data fields.

5.3. Detailed Requirements

Detailed requirements include:

1. Perform Key Word Search
2. View Search Results
3. View Event Details
4. Browse by Subject
5. Purchase items for sale
6. Review sellers and their offerings
7. Create barcoded event receipt that, when scanned, stores a notification within Knoitall that a payment is owed to a provider
8. Add/Update Content
9. View Content
10. Login and Logout

In addition to the above features, the data model and architecture must be flexible enough to support providers with single or multiple locations, product types, and points of contact.

6. Product Requirements

6.1. Summary of Capabilities

The enrollment and ecommerce platform through which Knoitall supports the consumers and sellers of learning will include the following functionality:

- Shopping cart functionality to support saving items for purchase at a future time, as well as the combining of items for purchase (events and products) from multiple providers
- Cookies to allow the automatic login of returning visitors
- OAuth to allow login through Facebook or LinkedIn.
- Combining the buyer and seller into a single login and user interface
- Ability to search for and apply supplies to a learning item so that they may be purchased together (through the shopping cart).
- Affiliate platform that allows learning providers to select and sell the offerings of others and receive credit for these sales (requires affiliate code to be passed to product suppliers so that these sales can be tracked).
- Anonymous communications platform that does not reveal the personally identifiable information of the buyer or seller
- The ability to push content to consumers based upon their learning profile
- Seller analytics that provide information on visitors, buyers, and prospects
- Improved search and sort functionality
- Rating platform tied to an algorithm that rates each provider based upon content within the database
- Spidering functionality that automatically crawls key learning websites to find and bring existing learning opportunities into a provider's account and store them in a pending status until the learning provider approves them to be published
- The ability to search and browse within a limited set of offerings tied to a learning center.
- Ability to parse the database by categories and providers to deliver a parsed set of offerings into a learning center

- Ability for consumers to follow a learning provider and be notified when offerings are added
- Ability for a user to claim a learning center and take over management of an existing learning center
- Ability for a user to switch between the role of learning provider and learning consumer within the same account
- Ability for a provider to add other provider's content to his/her learning center
- Ability for a consumer to identify learning interests and receive automatic updates when new learning has been added to his/her learning interests
- Ability for a provider to be added to another learning center to act as a teacher for that learning center
- Ability for a location in one learning center to be added to another learning center
- Inventory control functionality that allows for limits on the number of items sold or the number of leads delivered tied to each listing
- A consumer transcript of items purchased and items in the shopping cart
- Analytics platform for learning providers
 - Consumer purchases
 - Followers
 - Endorsers who have added provider content to their pages
- Separate profiles for provider, instructor, advisor, and location
- Link to location detail from within google maps
- Ability to create account through Facebook and/or LinkedIn
- Communications platform tied to activities within the marketplace
- Ability for a consumer to hold a seat for others
- Ability for consumer to email item details to another
- Ability to privatize a learning center
- Payments platform that takes our 10% out at the time of the transaction and forwards the remainder of the payment directly to the learning provider's account

- Ability for a learning provider to create their own supplies list and add supplies from their list to each item (like they add a location, advisor, and instructor)
- Viral Coefficient
- Tin Can Compliance for learner transcript
- Online event reservation and transaction functionality

6.2. Data Model

6.2.1. Overview

The Knoitall website must be able to handle event enrollments as well as linking to products from vendors with the ability to track a product through to sale so that Knoitall can collect a fee. In addition, the data model must be able to accommodate a taxonomy. The primary focus of the data model is towards supporting a web-based enrollment platform. Linking to products is secondary.

Much like Ebay, we will be deploying a web interface that allows providers to post events for enrollment. The process is provider-driven, and provider-maintained.

The philosophy behind the data model is to be flexible enough to handle the requirements of the small learning provider with a single location to the very large learning provider with multiple locations, and multiple points of contact.

6.2.2. The Small Vs. Large Provider

The very small provider will most likely have one point of contact that will represent all roles in the data model. The data model needs to provide a simple user interface for this individual to manage enrollments. The large provider will very likely have multiple points of contact, and multiple types of programs, both of which are represented in the data model.

6.2.3. Database Tables

See Knoitall Data Model for a complete list of tables and fields in the database.

6.3. Home Page

The Home Page represents the primary gateway to the products and services offered through Knoitall. The Home page should contain the following primary sections:

1. Shopping Cart, Wish List, Your Account, Browse, Search, List, Help, About, Sign In
2. Search Bar
3. Taxonomy
4. Access for learning providers to add events, manage existing inventory, and interact with prospects and students
5. Access for Instructors to build their profiles
6. Company Info

6.4. Perform Search

Like on Craigs List, the city is defaulted. In our case it is defaulted to San Diego. Knoitall will focus on regional providers of continuing education within San Diego first. Expansion will occur throughout California. Once we expand outside san diego, cities will be added to the list of cities and states.

The key words entered generate a query in the system for all events that occur within the city or county selected. If more than one word is entered, the query should place equal weight on each word entered, and should query the database

on eventname, eventdescription and categoryname (if entered. This is an optional field). The words in the eventname should be weighted more than the words in the description. If the categoryname is populated, then this should be weighted higher

than the words in the description. The query should place more weight on the closeness together of the words. All things being equal, favor those events that are closer to today's current date.

6.5. Search Index

Knoitall will search on the following fields:

- Event_provider
- Event_title
- Event_description
- Event_outcomes
- Event_format

6.6. Stemming

Knoitall has developed a stemming dictionary that should be applied to the search to improve search relevance.

6.7. Synonyms

Knoitall needs to support the mapping of synonyms to the search index so that words such as MBA are mapped to Master of Business Administration.pandora.com

6.8. Browse by Subject

Some users don't have keywords in mind, and would rather have categories or subjects from which to choose. The Knoitall prototype will include the ability to browse by subject. Users may view the learning opportunities and products associated with a category of interest. Subjects will be arranged in a pre-defined hierarchy or "taxonomy". Upon selecting a subject, the subcategories of that subject will be displayed as links in the Browse pane of the Search Results page. The user may then "drill-down" to a more specific topic, use a breadcrumb to move back up the hierarchy, or examine the offerings and products associated with the current subject.

Provider administrators will be able to assign a subject to each learning opportunity or product (see "Add/Update Content").

6.8.1. Stimulus/Response Sequences

1. The user clicks on a linked subject in the Browse by Subject sidebar.
2. The system displays classes, tutoring, and/or products associated with that subject on the Search Results page.
3. The system updates the Browse by Subject sidebar with the subcategories of the selected subject.
4. The system updates the sidebar's breadcrumb.
5. The user selects a new subject from the list or the breadcrumb.
6. The system updates the Search Results page.

6.8.2.Functional Requirements

If the user has yet to perform a Browse by Subject within the session, then the Browse by Subject sidebar:

- will display as links all subjects which have no parent subject (other than the root)
- will not include a subject's title within its title
- will have as its breadcrumb a single link indicating the root

When the user clicks on a linked subject within the sidebar or its breadcrumb, the system will:

- display all objects on the Search Results page which are:
 - classes, tutoring, or products
 - associated with the selected subject
 - update the Browse by Subject sidebar to:
 - display as links all subcategories of the selected subject
 - include the title of the selected subject in the sidebar's title
 - use untitled if the subject has no title
 - add the selected subject to the end of the breadcrumb if the user did not click from the breadcrumb
 - remove all subcategories after the selected subject in the breadcrumb, if the user clicked from the breadcrumb

Subjects will not be displayed if they have no subcategories and no classes, tutoring, or products associated with them. (Or will not be linked: TBD).

If there are no subjects to display within the sidebar, a message will be displayed instead.

6.9. Search Results

Search results should include the following information on each item:

1. Event Provider
2. Event Title
3. Event Outcomes
4. Event Price
5. Event Format
6. Event Image

In the search results, the following fields should be used to filter the search results:

1. Provider Rating
2. Price
3. Sub Category (category 2)
4. Format
5. Age

6.10. Ranking Search Results

- Location: Lat/Lon within a 20-mile radius of a zip code takes priority over online options
- Keyword string in event_title has 2X ranking versus keyword string in description or learning outcomes

The search results should bring up the most current sections of the events being displayed. Results should be automatically sorted by the most current sections to the least current based upon the field "startdate".

If no offerings are found matching the valid search criteria, a message will be displayed.

6.11. View Details

Where they appear on the Knoitall site, titles of classes, tutoring opportunities, products, and providers will typically be linked to a Detail page for that item. For example, titles will be linked when they appear on the Search Results page, in the Cart, or on another item's Detail page. Detail pages provide the user with further information on the item of interest, including its complete description.

For a class, degree, or tutoring opportunity, the Detail page will display the titles of the provider and any prerequisites, which will link in turn to their own Detail pages. Other helpful information will be presented where available, including the type of offering (e.g. "tutoring"), the taxonomic subject assigned to it (e.g. "music"), and any age requirements.

Additional information will be given for each scheduled instance of a learning opportunity, permitting the user to select a convenient schedule and location, or a section with a favorite instructor. The user may view the price, additional fees, start and end dates and times, delivery method, and availability, where this data has been provided. The location and room number will be listed, along with the names of any instructors or advisor. All told, the Detail page will give users information to help them make an enrollment or purchase decision. To that end, available items will have enroll or purchase buttons, which will place the item in the Cart for later purchase or enrollment.

As with search results, the Knoitall site may be configured to filter sections (scheduled instances) so that they do not appear on the Detail page if there are no seats available. They may also be excluded if they are "embargoed" (should not yet appear on the site), or have "expired" (should no longer appear on the site). The provider's administrators may assign and modify these dates (see "Add/Update Content").

A provider's own learning center

Users may also want more information about a provider of interest. The provider Detail page will include any information about awards or accreditations, reservation terms, locations and addresses, and a link to their website, if available. A list of linked offerings may follow, to

encourage the user to shop for learning opportunities or products from this provider.

6.11.1.Stimulus/Response Sequences

1. The user clicks on the linked title of a class or tutoring opportunity.
2. The system displays the Event Details page, with details about the offering.
3. The user presses controls to view the details of prerequisites or place a section in the Cart.

6.11.2.Functional Requirements

- The title of the provider will link to the Provider Detail Page for that provider.
- The title of each prerequisite will link to the Detail Page for that item.
- The system will display information about a section associated with the event, only if the quantity available (if defined) is greater than zero (TBD if this filter is to be applied), the expiration date (if any) is not in the past, and the embargo date for the section (if any) is not in the future.
- For each item displayed, the system will provide a purchase button provided:
 - the quantity available (if defined) is greater than zero (TBD if this filter is to be applied),
 - the begin orderable date (if any) is not in the future, and
 - the end orderable date for the section (if any) is not in the past.
- The purchase button will take the user to the Cart page and insert the item in the Cart (if not already present).
- For each section displayed, if available the system will display the section's:
 - Section id: [sectionid]
 - Delivery Method: [deliverymethod]
 - Instructor: [instructorname][instructorimage]
[instructoremail]
 - Start Date:[startdate]

- Completion Date: [completiondate]
- Start Time: [starttime]
- Completion Time: [completiontime]
- Days of the Week: [daysoftheweek]
- Location: [locationaddress1, locationaddress2, city, state][map it](#)
- Room Name/Number: [room]
- Credits: [numberunits] [\[unittype\]](#)
- Tuition: [price]
- Additional fees required: [\[feeamount\]](#)
- Requirements: [requirements]
- Instructor recommended items for this event: [recommendations]
- # seats remaining:[numberofseats]
- If the section has a location, the system will provide a link to map the location
- If the section has an advisor, the system will display a link to email the advisor
- Labels will not be displayed for unavailable fields.
- If the system is unable to find the event or access its data for display, but is able to display the page, an error message will be presented.
- If the URL for this page is used to access the page at a later point in time (e.g. via a bookmark), the page will function as defined above, given the state of the content in the caches at the time the page is so accessed.

7. Provider Rating System

An algorithm will be developed and applied to each learning provider to support a provider ranking system. The following (existing) fields will be used to provide a numerical ranking for a learning provider:

Field	Ranking system
# Locations	2 points for each location
Location Type	2 points for each college, business, or hospital; 1 point for residence, online, community center
Business Name	5 points for business name field completed
Accreditation	10 points for regional accreditation; 5 points for any other accreditation
Purchase/Refund Terms	30 day full refund; 5 points Full refund for all sessions; 4 points Full refund for all remaining sessions; 3 points 50% refund for all remaining sessions; 2 points
# instructors	2 points for each instructor
# advisors	2 points for each advisor
# consumers	.1 point for each consumer to a maximum of 20 points
# listings	.5 points for each listing to a maximum of 10 points

Purchasing

7.1. The Knoitall Payment Process

Abstract: The Knoitall platform will generate a unique bar code with each item purchased. The bar code will be compatible with QR scanners on both iphone and android phones that allows the merchant to scan the bar code from the consumer on the first date of the event. When the bar code is scanned, a wireless message is sent back to Knoitall with the bar code information, including the IP address for the device through which the bar code was sent. Based upon the successful submission of the bar code back to Knoitall, Knoitall will validate the consumer's participation in the event or successful delivery of the learning-related item.

Steps

- The event provider downloads the free bar code reader application available through the iStore or the Android store.
- Consumer submits an event reservation through Knoitall
- Knoitall generates an enrollment receipt for the event with a unique bar code and enrollment id at the top of the page (similar to what one receives when they print their boarding pass for Southwest Airlines). The consumer can print the receipt from their desktop, or await the email version delivered by Knoitall
- Knoitall emails the receipt to the consumer's email address.
- The consumer brings the enrollment receipt on the first date of the event
- The event provider receives the receipt and barcode from the participant
- The event provider scans the bar code using his/her iphone with the Knoitall barcode scanning application
- The iphone delivers a message back to the Knoitall platform containing the bar code data and the IP address of the phone.
- This data is taken by Knoitall and is used to validate that the consumer has attended a "real" event.
This validation prompts the Knoitall system to pay the event provider for this individual enrollment
- The individual is moved from pending status within Knoitall to a "process for payment" status.
- The event provider is paid for this consumer

7.2. The shopping cart

7.2.1. Stimulus/Response Sequences

- The user clicks on the enroll or purchase button next to an offering.
- The system displays the Cart page, which includes the item added.
- The user views the items in the Cart (see View Cart).

7.2.2. Functional Requirements

Upon pressing an enroll or purchase button, the system will place the event into the shopping cart for purchase.

An offering will remain in the Cart until the user chooses to remove it (see Remove from Cart), or completes checkout.

7.3. View Cart

7.3.1. Stimulus/Response Sequences

- The user presses a control to view the Cart, or presses a control to place an offering in the Cart (see Add to Cart).
- The system displays the Cart page, including the items in the Cart.
- The user clicks on links to view details about offerings in the Cart.
- The user presses a control to remove an item from the Cart (see Remove from Cart).
- The user presses checkout to purchase the offerings in the Cart (out of scope).

7.3.2. Functional Requirements

For each section in the Cart, the system will display the following where available:

- The title of the class or tutoring opportunity, or untitled if there is no title (see the wireframe)
- The title of the provider, or untitled if the provider has no title (see the wireframe)
- The type of learning opportunity (class or tutoring)
- The section's:

- Title
- Price
- Quantity available
- Start date
- Completion date
- Location (title)

See www.Knoitall for more details on the cart.

7.4. Remove from Cart

7.4.1. Stimulus/Response Sequences

- 1.The user presses a button to remove an offering from the Cart.
- 2.The system removes the item from the Cart, displaying the Cart page without the offering.

7.4.2. Functional Requirements

When the user presses a button to remove an offering, the system will:

- Ask for confirmation? (TBD)
- Remove the item from the Cart.
- Display the Cart page without that item (see View Cart).

If the system cannot remove the item from the Cart, but is able to display the Cart page, an error message will be presented, as depicted in the wireframe.

7.5. Confirmation Page

7.5.1. Stimulus/Response Sequences

- The system displays the Confirmation page in response to some event (see the other features).
- The user views the confirmation or error message.
- The user follows links off of the page to continue the session.

7.5.2. Functional Requirements

The system will display the error or confirmation message resulting from a previous activity (see the other features).

If the user is logged in as a provider administrator, the system will display a link to the Content Management Home page for their provider.

10. The two roles initially supported through Knoitall

Knoitall will support the following roles on login (both roles should be supported through an initial login):

- The learning provider. This role allows for the creation and maintenance of saleable events within Knoitall and the provider's Knoitall learning center.
- The Consumer. This role allows for a person to create a learning profile and have items that meet the consumer's profile automatically pushed to the consumer. This also allows for the maintenance of payment information within the consumer's account.

Plans should be made to support additional roles over time.

10.1. The Provider Account

The provider account defaults to the tab, "Post My Events", which allows the administrator to quickly post a new event for sale, or to manage existing events.

10.1.1. Posting an Event for Sale or Updating an Existing Section

In order to post an event for sale, the provider will complete the form to include all required fields. The provider may enter the optional fields to provide additional information to help sell the event.

10.1.1.1. Stimulus/Response Sequences

- From the Provider Account, the user is presented with a blank form to use to post a new event for sale. If any events have been previously scheduled, these events will be summarized at the bottom of this page, and may be clicked to edit.
- Once the posting form has been completed, the following components of the event will be saved and made available to the user when future events are posted for sale:
 - Events
 - Advisors
 - Locations
 - Instructors
- Each of these will be available next to the text field associated with the field as pull down lists.
- If the user selects recurring for the schedule, a custom scheduling box is brought up that allows the user to schedule this event to automatically repost on a set schedule. The custom scheduling

option should closely match the options for a recurring schedule in MS Outlook.

- Once completed, the system validates the form, and display messages on the form page if there are errors.
- The user corrects errors and resubmits the form.
- The system adds the section or updates the section's information.
- The system displays a confirmation message on the Confirmation page.
- The user follows links off of the Confirmation page, to continue with Content Management.

The lists of sections and classes will:

- Be alphabetical by section or class title
- Default to the first section or class in the list
- Use untitled for any section or class with a null title

When the user clicks to edit a section, the system will refresh to display the event section for updating.

The layout of the Add/Update Section page will be as shown in <http://www.Knoitall/pages/admin/provideraccount.html>. The fields will be labeled as shown on the page.

The system will display the title of the event for which the user is adding or updating a section.

If the user chose to update an existing event, the form will pre-fill with the selected section's:

- Start date
- Completion date
- Start time
- Completion time
- Days of the week
- Schedule (once or recurring)
- Quantity available
- Delivery method
- Requirements
- Number of units
- Fees

- Location
- Advisor
- Instructor(s)

A list will be presented for selection of the location, and will:

- Include all locations defined for the provider
- Be sorted alphabetically by location name
- Use untitled for any location without a name
- Default to the first location in the list, if not pre-filled upon update or re-filled upon retry

A list will be presented for selection of an advisor, and will

- Include all advisors defined for the provider
- Be sorted alphabetically by last name
- Use untitled for any advisor without a name (see the wireframe for copy)
- Default to none, if not pre-filled upon update or re-filled upon retry
- Default to none available, if the provider has no advisors

A list will be presented for selection of instructors, and will

- Include all instructors associated with the provider
- Be sorted alphabetically by last name
- Use untitled for any instructor without a name
- Permit more than one instructor to be selected
- Permit instructors selected to be deselected

If the following can't be pre-filled because the current value is not in the list described above, the system's behavior is TBD

The fields for entry of the following will be limited to the lengths specified:

Start date: TBD

Completion date: TBD

Start time: TBD

Completion time: TBD

Days of the week: TBD

Quantity available: TBD

Delivery method: TBD

Technical requirements: TBD

Number of units: TBD

If the user chooses to cancel prior to successful submission of the form, the system will display the Confirmation page with a message acknowledging the cancellation.

Upon submission of the form, if any of the required fields are missing (or the none or none available options are submitted from the list), the system will display the form with error message(s).

Upon submission of the form, if any of the following are true, the system will display the form with error message(s):

- The start date is non-null and not in date format (TBD)
- The completion date is non-null and not in date format (TBD)
- The start date and the completion date are in date format and the completion date is before the start date
- The quantity available is non-null and non-numeric
- The number of units is non-null and non-numeric
- The quantity available is less than zero
- The number of units is less than zero

The copy and placement of error messages will be as shown in the wireframe.

Upon display of one or more error messages on the form page, the form will refill with the values submitted for the following fields:

- Start date
- Completion date
- Start time
- Completion time
- Days of the week
- Quantity available
- Delivery method
- Technical requirements
- Number of units

- Unit type
- Location
- Room
- Advisor
- Instructor(s)

If there are no errors upon submission of the form, but the system is unable to perform the add or update, and is able to display the Confirmation page, an error message will be displayed on the Confirmation page.

If there are no errors in the form and the system is able to add or update the section's information, the system will display a confirmation message on the Confirmation page.

Information regarding the new or updated section which is cached will appear on the site after the system's caches are refreshed. The content of caches and the timing and method for refresh of caches are TBD.

If the system is unable to (access data or components necessary to) generate, pre-fill, or validate the form, but is able to display the Add/Update Section page, an error message will be displayed on the page. Wording TBD. This can happen yet isn't the same as .16 above...

10.1.2. Add/Update Advisor

10.1.2.1. Stimulus/Response Sequences

- From the Content Management Home page, the user clicks to add an advisor, or selects an advisor and clicks to update.
- The system displays the Add/Update Advisor page.
- The user fills out the form and submits it.
- The system validates the form, and display messages on the form page if there are errors.
- The user corrects errors and resubmits the form.
- The system adds the advisor or updates the advisor's information.
- The system displays a confirmation message on the Confirmation page.
- The user follows links off of the Confirmation page, to continue with Content Management.

10.1.2.2. Functional Requirements

On the Content Management Home page, the system will display:

- a control to add an advisor
- if the provider has any advisors, a list of all of the provider's advisors a control to update the selected advisor

The layout of the advisor add/update portion of the Content Management Home page will be as shown on the website.

The list of advisors will:

- Be alphabetical by last name
- Default to the first advisor in the list
- Use untitled for any advisor without a last name

When the user clicks to add or update an advisor, the system will display the Add/Update Advisor page.

- The layout of the Add/Update Advisor page will be as shown in the wireframe.
- The fields will be labeled as shown on the website.
- If the user chose to update, the form will pre-fill with the selected advisor's:
 - First name
 - Last name
 - Email address

- User name
- Password
- Notes

If the user chose to update, the Repeat Password will be pre-filled with the advisor's Password.

The following fields will be masked upon display and data entry:

- Password
- Repeat password

The fields for entry of the following will be limited to the lengths specified:

- First name: TBD
- Last name: TBD
- Email address: TBD
- User name: TBD
- Password: TBD
- Repeat password: TBD
- Notes: TBD

If the user chooses to cancel prior to successful submission of the form, the system will display the Confirmation page with a message acknowledging the cancellation (see the wireframe).

Upon submission of the form, if any of the following required fields are missing, the system will display the form with error message(s):

- First name
- Last name
- Email address
- User name
- Password
- Repeat password

Upon submission of the form, if any of the following are true, the system will display the form with error message(s):

- The password is non-null and the repeat password is non-null and they do not match
- The password is non-null and less than TBD in length

- The username is non-null and less than TBD in length
- The username is not unique across all users.
- The email address is non-null and does not contain the character @ (format requirements TBD)

Upon display of one or more error messages on the form page, the form will refill with the values submitted for the following fields:

- First name
- Last name
- Email address
- User name
- Password
- Repeat password
- Notes

If there are no errors upon submission of the form, but the system is unable to perform the add or update, and is able to display the Confirmation page, an error message will be displayed on the Confirmation page, as shown in the wireframe.

If there are no errors in the form and the system is able to add or update the advisor's information, the system will display a confirmation message on the Confirmation page, as shown in the wireframe.

Information regarding the new or updated advisor which is cached will appear on the site after the system's caches are refreshed. The content of caches and the timing and method for refresh of caches are TBD.

If the system is unable to (access data or components necessary to) generate, pre-fill, or validate the form, but is able to display the Add/Update Advisor page, an error message will be displayed on the page, as shown in the wireframe. Wording TBD. This can happen yet isn't the same as .16 above...

11. Security

11.1. Passwords

Password fields will be masked using standard HTML password controls.

11.2. Flexibility/Scalability

11.2.1. Providers

The prototype must support small to large providers, which may have one or many instructors, administrators, advisors, locations, and pre-defined product types.

11.2.2. Future Extensions

The prototype may be extended in future releases to support additional product types. Architectural features which encourage the ease with which the system may be extended would be advantageous. In addition, features which allow bulk updates to the content could be added to the system.

12. Database System

The database system is not stipulated, but must allow subqueries. The database must be an ODBC compliant database to allow connections from Java. Most popular databases are ODBC compliant (Postgres, Oracle, Access, etc.).

13. Application Server

13.1. Web Server

A web server is not required for the prototype, however it may be necessary to run a web server in a production environment as a security layer in front of the application server.

13.2. Client Browser Software

The prototype will be accessed through a standard web browser. We will test with Microsoft Internet Explorer, Safari, Chrome, and Firefox.

14. Event Reservation Functionality

The user may select a program from either the search results page or the product details page, and may elect to enroll in the event. The following process occurs for enrollment and/or product purchases:

- Sign In/Welcome
- Shipping Address Information
- Payment Information
- Items for purchase
- Place Order

Once the enrollment option is selected, the following process occurs:

The event is added to the user's shopping cart, and the user is presented with a page highlighting other similar products which may be purchased, including items required for the event. These items are displayed next to the user's shopping cart information

The user may elect to view more information on the other items, add item to cart, or proceed to checkout. If the user elects to view more information on a particular product, this information is displayed alongside the user's shopping cart

Once the user proceeds to checkout, he/she is presented with a page allowing the user to enter their password for existing customers, or to select New Customer. The user is also prompted for an email address at this stage

The user is presented with a page to gather shipping information

The user is presented with a page to gather payment information. This includes the ability to apply learning points and/or a gift certificate for purchase of events.

The user is presented with a page identifying items for purchase, a view refund policy button, and a View event reservation policy button, and a Place Order Button.

Once the Place order button is selected, this generates an email to the provider for followup on the enrollment. This information includes event reservation policy, and event refund policy.

14.1. Shopping Cart Capabilities

The Cart will hold items for purchase or registration, until the user is ready to checkout. Information on price, provider, and availability will

be included for each item. Schedule and location may also be displayed for learning opportunities. The items will be sorted by type. Titles will link to Detail pages, in case the user wishes to review descriptions or other information. A remove button will remove an item from the Cart. A checkout button will be provided, but will be non-functional for the first release of the prototype. Users must login in order to view or add to their Cart (see "Login and Logout").

The shopping cart stores items for purchase and/or enrollment. The shopping cart may be accessed at any time throughout the user's shopping experience.

15. Product Referral Functionality

Knoitall will provide a platform similar to Google's product API so that retailers can upload product catalogue information so that learning providers can search for and find products to recommend alongside events within the Knoitall database. Refer to <http://www.google.com/support/merchants/bin/answer.py?answer=188494> for the Google product upload specifications. We would like to closely mirror these requirements so that products providers can upload their product catalogues to Knoitall using the same spec.

Knoitall seeks to provide a referral fee structure to products suppliers for all merchandise that is sold through their sites that originated from within Knoitall. In order to accomplish this, code will need to be placed on the supplier's fulfillment pages to be able to track the products purchases back to Knoitall.

Suppliers will need to set up an account within Knoitall and provide credit card information so that their card may be charged each time a product is successfully purchased.

When product information is uploaded to Knoitall, this information will be available to events providers and their instructors when events are being created so that the event and products can be associated with one another. In addition, products will be available as part of the search.

Products merchants will be charged a 10% referral fee for all products that are purchased as a result of a referral from Knoitall. A portion of the referral fee will be shared with the events provider and/or instructor as an incentive to recommend the product to consumers alongside the event. So, for example, if a swimming course is offered, the instructor can recommend a kick board or ear plugs from a products merchandiser.

The Knoitall site should provide the capabilities to allow products providers to automatically upload a products catalogue.

16. Reporting

The Reporting module will have a component that allows for the storing of transactions by provider, and by customer. Both will access these reports through their personal user modules.

- Users will have access to a report of purchase history from their account information module.
- Learning Providers will have access to purchase history through their enrollment management application.

Customer Support Processing

Back-end functionality needs to exist to allow for the integration of customer data into a CRM.

The Customer Support team needs to access transaction records, customer profiles, and financial information through the CRM. A plan to migrate data from the data source to the CRM needs to be developed to accommodate this.

Emails that are generated automatically from the site to customers will need to be logged into the CRM for full CRM functionality. These CRM activities include communication with customers, financial and transactional summaries, and order fulfillment.

17. User Account Functionality

The User Account module will support the activities of both the buyers and sellers within our exchange. Key activities include:

17.1. Buyer

- Create/Edit Address Information
- Create/Edit Learning Profile
- Create/Edit Payment Information
- View past purchases, saved items
- View learning points
- Apply a gift certificate to the account

17.2. Vendor

The vendor's activities are supported through a robust content and enrollment management platform, which includes the ability to:

- Create Vendor Profile
- Add products
- Add events, including scheduling, pricing, payment terms and assignment of inventory
- Cancel event sections
- View event enrollment data
- View transactional data

17.3. Event Management Functionality

The event management component automates a number of event management activities for the vendor, including:

- Informing provider when information is expired and needs to be refreshed in reference to predefined schedule
- A summary of all vendor offerings in table or tree structure
- Ability to add or delete events, programs, locations and advisors
- Ability to map and link events to programs, locations and advisors
- Ability to link advisors to programs or events

- Ability to manage and update event and program content including all relevant fields
- Ability to change information in a group, example: event start dates and end dates are set in one step, then applied to all events.
- Error checking and QA process built into application, ex. are programs linked to locations
- Permission based access to user interface, ability for provider to assign authorities to access
- Clear documentation of features with help files
- Ability to generate reports for printout, transmission or comparison
- New providers will be authenticated by Knoitall personnel, and then provided with their account.

18. Website Navigation

18.1. Menu Bar

18.2. Breadcrumb

19. Data Manipulation Functionality

The presentation layer for this application must be separated from the engineering layer, giving control over the look and feel of the site, and management of site sections to a team of marketing and inventory management personnel. In addition to look and feel, this team will be able to make assignments of objects within the database so that these objects appear together in the search results, and throughout other site components.

19.1. Add/Update Content

Provider-managed content is a critical and distinguishing feature of the Knoitall enrollment management system. The prototype will walk administrative users through the process of adding or modifying content for their provider. "Content" for the prototype will include classes, tutoring opportunities. It will also include advisors and instructors, and provider locations, rooms, and unit types. Administrators may associate these items with scheduled instances of classes or tutoring opportunities.

For security, administrators must login before managing content for their provider (see "Login and Logout"). Logging-in will take the administrator to the Content Management Home page, and enable links to this page from other locations on the site.

From the Content Management Home page, the administrator may select the type of item to add or update. The Knoitall prototype will make sure that necessary items exist before permitting new ones to be created. For example, if scheduled instances (or "sections") should always be associated with classes, the administrator will have a list of classes from which to pick. If no classes have been created, the administrator will be guided to create classes before proceeding to schedule them.

Once an add is underway, the administrator will be presented with a series of pages for collection of required and optional information about the item. For example, the provider administrator may enter a start and end date to a section of a class. Content will be validated along the way and messaging will inform the user of any errors. The administrator will also be able to select from lists in order to associate other items. For example, the administrator may associate an instructor, location, room number, and prerequisites with the section.

When performing an update, the administrator will be provided the opportunity to modify fields or associations, or add optional ones. For

example, a scheduled section of a class may be moved to a different room, assigned an additional instructor or prerequisite, or given an advisor. In general, descriptions of items may be updated, or their availability or dates for appearance on the site may be adjusted. Registration periods, prices and fees, and taxonomic categorization will all be under the control of the provider. Given the variety of types of objects, fields, and associations which may be administered, the prototype may be used to demonstrate the flexibility and power of provider-driven content.

The content manipulation module will give Knoitall personnel the ability to place content, event and product information within various sections of the site, either through priority assignment, and/or assigning items to show up along with other items in the database. Knoitall personnel will have the ability to view into the backend database, perform searches by provider, and view content in tree structures, by subject category, etc.

19.2. Automatic Manipulation of Content

Certain processes within the Knoitall site will be automated, including:

- pushing content to registered users that grant permission through the learning profile form
- automatically removing events from the system that are either full, or canceled, or have expired
- automatically alerting users regarding event changes, cancellations, including automatic refunding of monies paid

19.3. Reporting Functionality

Accurately logs page load activity, search requests, user actions. Logs are archived on a periodic basis in delimited format for data mining. Metrics can be set to screen for certain events and alert site owners via email/pager.

20. Login and Logout Requirements

- OAuth functionality
- Cookies to support automatic session records
- Ability to Login with existing Facebook and LinkedIn accounts

In order to use the Cart or manage content, users and provider administrators must create accounts. Login pages will be provided. For security, users must have administrative privilege for a particular provider in order to add or update content.

Upon successful login, the provider administrator will be taken to the Content Management home page. Other users will be taken to the site's Home page. Once logged-in, users and administrators may logout. Upon timeout of the session, a logged-in user or administrator will automatically be logged-out: subsequent attempts to access the Cart or any of the Content Management pages will send the user to the login page, with an informational message.

Affiliate Platform

21. Affiliate Platform

Knoitall will support a platform to track sales and activity back to individual learning centers for the purpose of building out an affiliate network with the suppliers who are currently on the site.

The Knoitall platform includes a “built-in” affiliate opportunity for providers of learning. Each learning provider has their own learning center available to them through Knoitall.com. From this learning center the provider can promote their own learning opportunities, and they can add the learning products and services of others. On any item that sells through a provider’s own learning center Knoitall will split the Knoitall transaction fee 50/50 with the provider.

For those learning providers that have no technology to enroll students online, Knoitall can provide them with a Learning Management platform where the learning provider can direct its audience to enroll through a privately branded learning center (Knoitall.com/learn/Provider_Name).

Knoitall supports the buyer requirements for finding, assessing, and purchasing learning-related products and services, and the seller requirements for listing these items for sale, and managing the sales and ongoing customer interactions.

21.1. The Opportunity

Knoitall, Inc. provides a solid opportunity for the providers of learning-related products and supplies to expand their distribution channel through third party learning providers on the Knoitall platform. Through the Knoitall affiliate program learning providers are incentivized to build out their supplies lists on Knoitall and sell third-party products alongside their own offerings. A painting instructor is incentivized to offer paint brushes, and a guitar instructor is incentivized to offer sheet music, guitar strings, and other items that may be needed for the class.

21.2. How it works

Products Suppliers can sign up with Knoitall by completing our supplier sign up form online. Knoitall will only accept 1-2 product suppliers per learning category. If accepted by Knoitall, and upon agreement to the Products Suppliers can sign up with Knoitall by completing our supplier sign up form online. Knoitall will only accept 1-2 product suppliers per learning category. If accepted by Knoitall, and upon agreement to the sales terms implemented by Knoitall, the supplier will upload their

product catalog to Knoitall (or an API can be established between the supplier and Knoitall). Knoitall will notify its learning community that the supplier has been added, and Knoitall will allow providers to add items from the supplier catalog to their own learning centers.

Knoitall will set up an affiliate id for each of its teachers and learning providers, and will pass through this information to the supplier's website so that payments that occur through Knoitall can be tracked by Knoitall, by our learning providers, and by the supplier.