

E-Book Application System Integration (E.A.S.I.)

Acceptance Test

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Prepared For:

Ms. Jen Cannell Ms. J'aimé Pfeiffer Questar III Capital Region BOCES

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Product Overview

Seraphim's clients, Ms. Jen Cannell and Ms. Jaimé Pfeiffer, are in need of a single sign-on system for students to access and download e-books from their district's libraries. E-Book Application System Integration (E.A.S.I.) will be a web application capable of receiving e-books from multiple vendors' sites and will act as a central place for all available e-books for each district. E.A.S.I. will be autonomous – as administrators update the site with new e-books and vendors, the system will automatically access the new content, granting E.A.S.I. service to students for years to come.

Development Life Cycle

Seraphim's Software Development Life Cycle, located to the right, describes the process Seraphim will go through in order to plan, create, test and eventually deploy E.A.S.I..

<u>Requirement Analysis:</u> Obtaining the client's needs.

Identification: Identify the client's needs.

<u>System Design:</u> Configure the blueprints of the system.

<u>Implementation:</u> Code and initiate the system requirements.

<u>Testing</u>: Confirm that the system meets established standards.

<u>Risk Analysis:</u> Determine criticality the system can perform.

Deploy: Bring the system to a live state.

<u>Maintenance:</u> Keep the system functioning once completed.

Environments

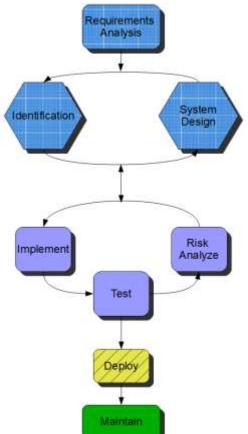
Seraphim will be using the following environments to create, test and complete the project.

Development Environment

The development environment listed below is the hardware and the software that Seraphim plans to use in producing the project:

Software Engineering Lab – Computer #1:

• Operating System: Windows 7 Enterprise (x64)



- Memory: 6100 MB
- Disk Space: 499.78 GB
- Processor: 3.20 GHz Intel Core i5-3470
- Relevant Software: Adobe, Google, Microsoft Office programs, Mozilla Firefox, Oracle, Audacity, SmartDraw, Eclipse

Software Engineering Lab – Computer #2:

- Operating System: Mac OS 10.7.5
- Processor: Intel Core i5
- Memory: 4 GB Ram
- Speed: 2.5 GHz
- Relevant Software: iMovie, iPhoto, Photo Booth, Safari

Server:

- Operating System: CentOS 5.2, Kernal 2.6.18-92e15
- Server Name: oraserv.cs.siena.edu
- CPU Type: Intel Xeon 2.66 GHz
- Memory: 8GB Memory

Ms. Mathews' Development Environment:

- Operating System: Microsoft Windows 7 Home Premium
- Processor: Intel[®] Core[™] i7-3610QM CPU @ 2.30Hz 2.30 GHz
- Memory: 8.00 GM
- Relevant Software: Adobe Reader X, BlueJ, caliber, Eclipse, GIMP, Git Bash, Google Chrome, Google Drive, HTML-Kit, Mozilla Firefox, Notepad++, Putty, Skype, SQL Server Management Studio, WinSCP

Mr. Mango's Development Environment:

- Operating System: MS Windows 7 Home Premium 64-bit SP1
- Processor: Intel Core i7 720QM
- Speed: 1.60GHz
- Memory: 8.0GB Dual-Channel DDR3 @ 659MHz
- Audio: NVIDIA High Definition Audio
- Monitor: Vizio 42" Internet TV
- Relevant Software: Aptana, Eclipse, GIMP, Audacity, Notepad++, Google Chrome, Mozilla Firefox, Opera web browser, Android 4.4.2 on Samsung galaxy s3

Mr. Street's Development Environment:

- Operating System: Windows 7 Home Premium 64-bit
- Processor: Intel(R) Core(TM) i7-2600 CPU @ 3.40 GHz
- Memory: 8192 MB RAM
- Display: NVIDIA GeForce GTX 550 Ti
- Audio: Dual Speakers IDT High Definition Audio
- Monitor: 23" Cross Width High Definition Video
- Relevant Software: Eclipse

Mr. Roth's Development Environment:

- Operating System: MS Windows 7 Home Premium 64-bit SP1
- Processor: Intel Core i7 2675QM
- Speed: 2.20GHz
- Memory: 8.0GB RAM
- Audio: Intel ® Display Audio
- Relevant Software: Audacity, Notepad++, Google Chrome, Mozilla Firefox, Microsoft Office 2007, Adobe Reader, PageBreeze 5

Mr. Carpenter-River's Development Environment:

- Operating System: Windows 7 Home Premium Service Pack 1
- Processor: Intel i5-3317U 20 GB SSD in cache
- Memory: 6 GB
- Speed: 1.70 GHz
- Audio: Dolby Home Theater v4
- Monitor: Generic PnP Monitor Intel(R) HD Graphics 4000
- Relevant Software: Eclipse, Notepad++, Google Chrome, Firefox, Skype

Operating Environment

The operating environment for this software will be any computer or smartphone that has internet capability and access our server.

Maintenance

The maintenance environment will consist of all hardware and software used to create our software (to be determined by the client).

Use Case Narratives

Use Case Narratives are used to describe the processes that each user type can activate when navigating throughout the system. Seraphim will have the following user types to access E.A.S.I.: Student, Teacher and Administrator.

Student

The Student will log into E.A.S.I. using a district, username and password, and will only be allowed access into the system if providing the right credentials. The Student will have access to all the books available to the Student's district and level. The Student has the ability to view the books as genres and levels or as a unique search. Each of these options will display the e-books found in the corresponding categories. The Student can search by title, author or ISBN-13, or use the advanced search to find e-books across categories. The Student can access their account, which will display the Student's first and last name, user type, district, and history of the e-books viewed. The Student will have the option to log out, or will be automatically logged out after being inactive for five minutes.

Teacher

The Teacher has access to all processes that a Student does:

The Student will log into E.A.S.I. using a district, username and password, and will only be allowed access into the system if providing the right credentials. The Student will have access to all the books available to the Student's district and level. The Student has the ability to view the books as genres and levels or as a unique search. Each of these options will display the e-books found in the corresponding categories. The Student can search by title, author or ISBN-13, or use the advanced search to find e-books across categories. The Student can access their account, which will display the Student's first and last name, user type, district, and history of the e-books viewed. The Student will have the option to log out, or will be automatically logged out after being inactive for five minutes.

The Teacher has access to all books available in the Teacher's district, regardless of level. The Teacher has the ability to edit Student accounts, either by changing their level of access or adjusting individually which e-books a Student has access to.

Administrator

The Administrator has access to all processes that a Student does:

The Student will log into E.A.S.I. using a district, username and password, and will only be allowed access into the system if providing the right credentials. The Student will have access to all the books available to the Student's district and level. The Student has the ability to view the books as genres and levels or as a unique search. Each of these options will display the e-books found in the corresponding categories. The Student can search by title, author or ISBN-13, or use the advanced search to find e-books across categories. The Student can access their account, which will display the Student's first and last name, user type, district, and history of the e-books viewed. The Student will have the option to log out, or will be automatically logged out after being inactive for five minutes.

The Administrator has access to all processes that a Teacher does:

The Teacher has access to all books available in the Teacher's district, regardless of level. The Teacher has the ability to edit Student accounts, either by changing their level of access or adjusting individually which e-books a Student has access to.

The Administrator has access to a suite of tools accessible from the "My Account" page: "Account", "Vendor" and "Books". The Administrator, clicking "Accounts", will allow them to find a Student, Teacher or Administrator and change their information. Changing their information could mean: adding or removing a Student, Teacher or Administrator, changing which districts a Student or Teacher is associated with, etc. The Administrator, viewing "Books", will have the ability to find e-books brought into the system from the vendor sites (through a MARC file) and change the information attached to the e-books. This information includes: the district it's available to, the description, the subject, the genre, or the level. The Administrator may choose to remove individual books from the system. The Administrator, viewing "Vendor", may add new vendors to the system along with the URL for that vendor. The Administrator may choose to remove individual vendors from the system.

UML Diagrams

Use Case Diagram

The idea of a UML Use Case diagram is to display the full functionality of the system in a visual manner. It shows the relationship between each of the user case narratives and the activities on which they will partake onto the system. It also displays the actions that the system will participate in without the user initiating the action.

Use Case Diagram Legend

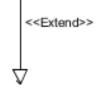


Actor: Actors (human or non-human) interact with the system. Human actors will be found on the left side of the System Boundary, while non-human actors will go on the right side. Each actor name will be displayed below the actor icon, and will be attached to one or more actions found within the System Boundary.

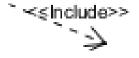
System Boundary: Contains all actions an Actor is capable of performing within the system.

Scenarios/Uses: The actions (or activities) that will occur within the system, and often are used to show how actors interact with the system. These actions may also show system-initiated actions, without the need for users to activate them.

Participation Line: The Participation Line will connect actors with their appropriate use cases, showing which uses the actor will be participating in.



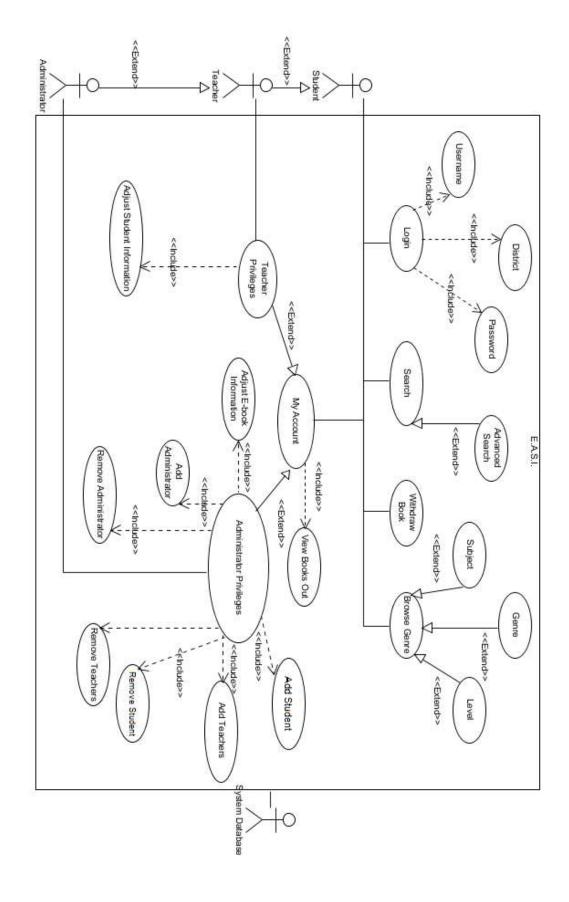
Extend Relationship: Is a "Is-A" relationship, where the object is expanding on its parent's domain. For example, Advanced Search Is-A Search and Teacher Privileges Is-A My Account.



Include Relationship: Is a "Has-A" relationship, where the object is always included in its parent. For example, Login Has-A Username, District and Password.

Use Case Diagram

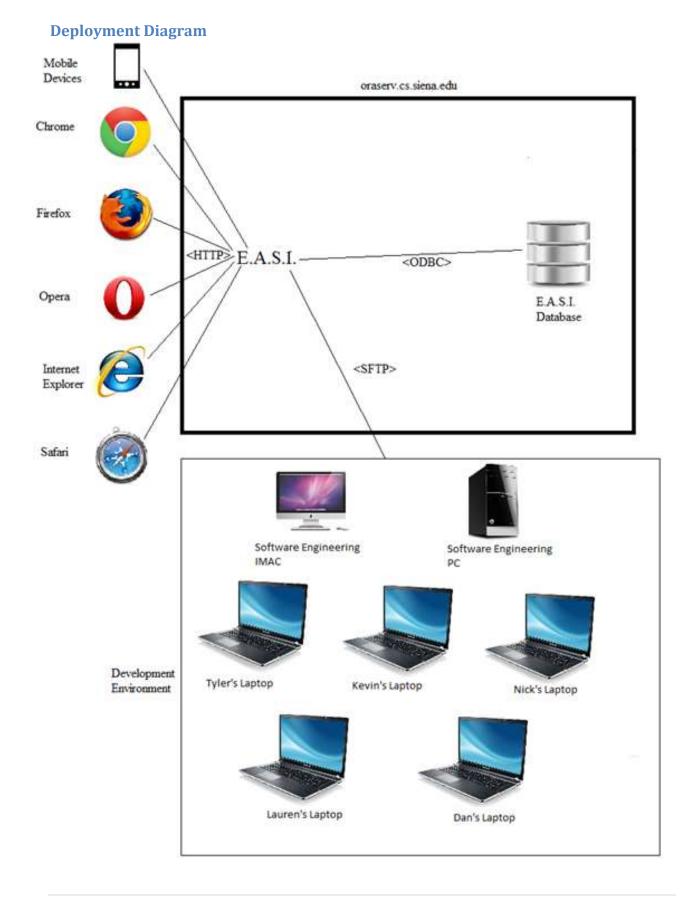
The next page shows the E.A.S.I. system as represented in a UML Use Case Diagram, using the legend above.



Deployment Diagram The deployment diagram displays the physical layout of the system and its components.

Deployment Diagram Legend

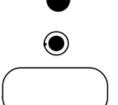
cproyment Diagram	Legend
	System Boundary: All objects within the system boundary are considered part of the system, while those outside of it are not. The system boundary will show interactions between the system and the outside components.
	Connection: Displays the flow of information between objects.
<http></http>	HTTP: Hypertext Transfer Protocol (HTTP) describes the format of the messages (packets) being transferred between objects and the actions servers will take when activating various commands.
<scp></scp>	SCP: Secure Copy (SCP) describes the process of transferring information safely across local and remote servers.
<odbc></odbc>	ODBC: Open Database Connectivity (ODBC) represents the flow of data between the user end and the system's database.



Activity Diagram

Activity diagrams describe the flow of activities, decisions and actions that the system can take. Each part of the diagram shows an activity or data and the actions that can be performed with it.

Activity Diagram Legend



Initial Node: The first node and starting point for the activity.

Final Node: The final node and the end point for the activity.

Activity Object: The activity (process) to complete when reaching the object.



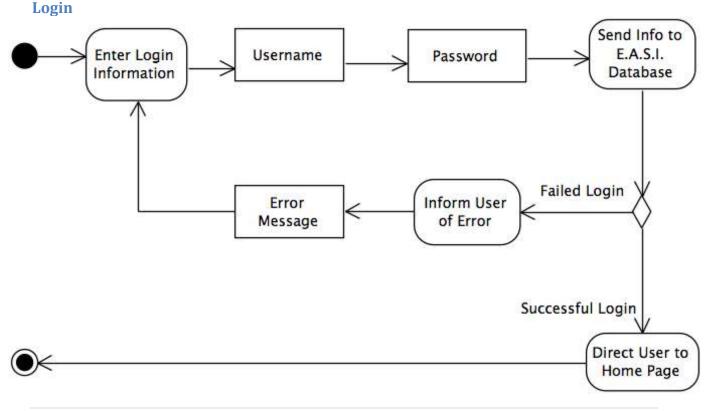
Decision Node: Describes a branching in the activity. This is usually used to show that a decision must be made to access the next set of steps.

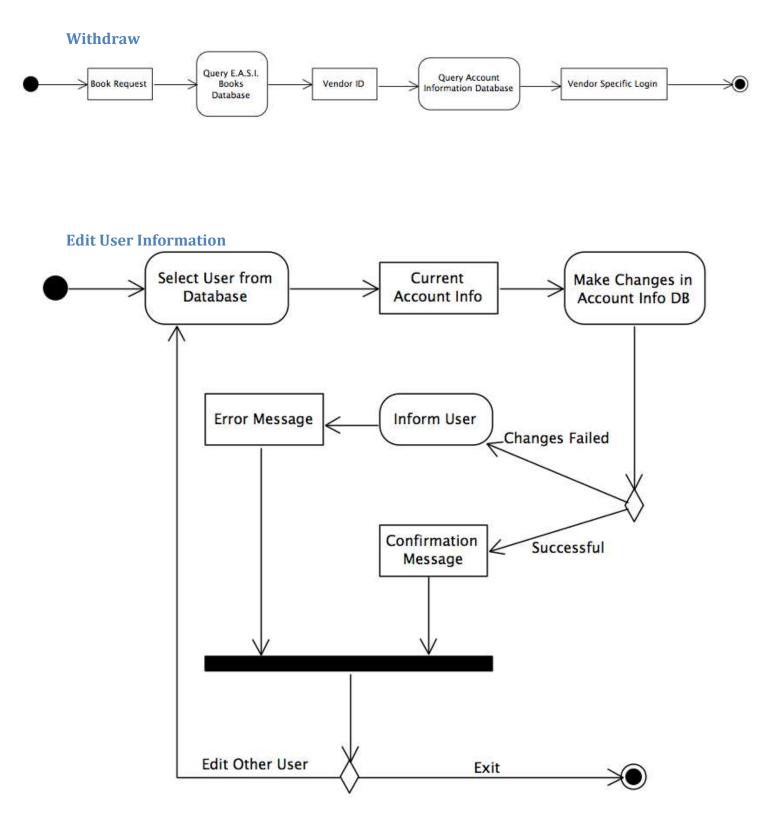


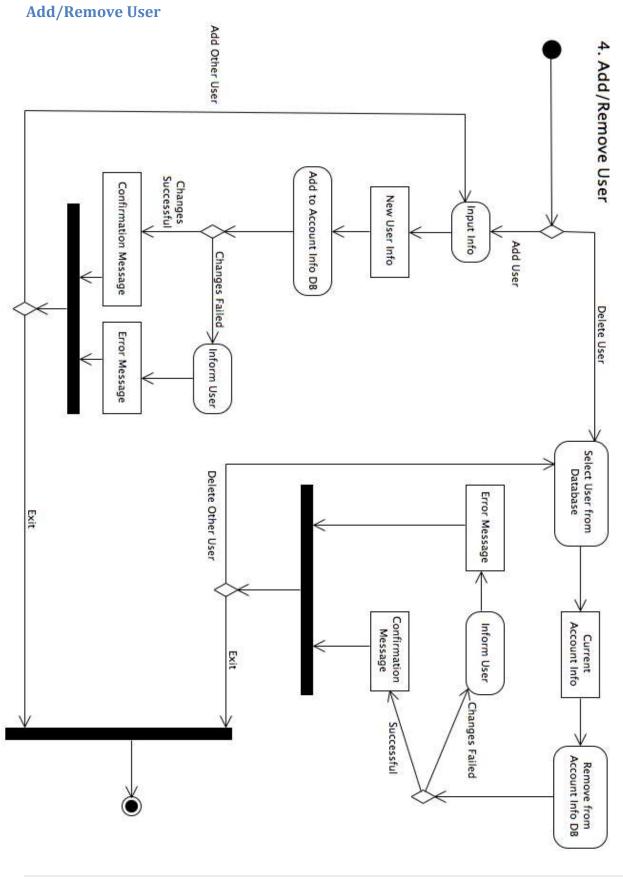
Data Object: The data to be used during the process, and can either represent input or output.

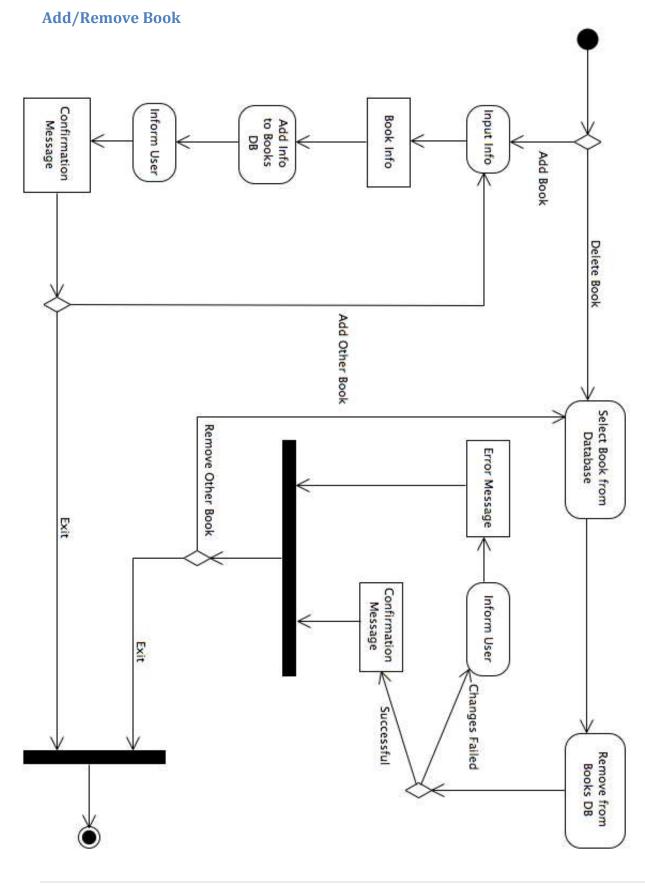
Split/Join: Can either split activities to run different processes, or joins two activities once completed.

Flow: Shows the flow of action from objects and nodes.

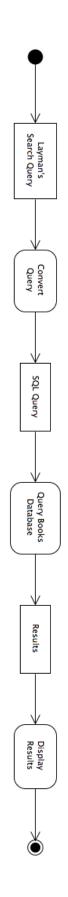








Search Books



Website Maps

Website Maps displays the structure of the website in a tree hierarchy, showing each page that will be displayed for every user, and how users navigate across the website.

Website Map Legend

Home Page: The access screen of E.A.S.I., before the user access the main page of the system.



Home page

<u>~</u>



HTML Page

Document: Represents a document that will be seen by the user.

Web Form: A form where user input is required for an action to occur.

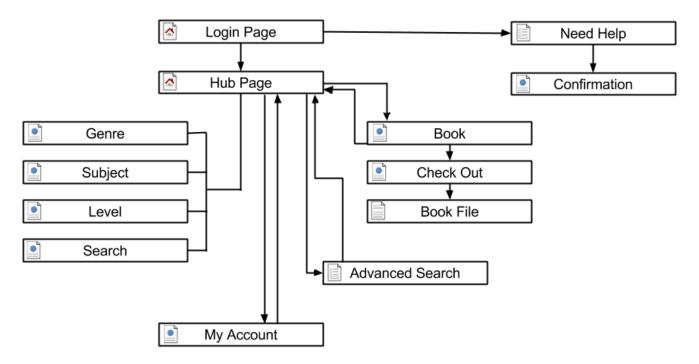
HTML Page: Represents any single web page within E.A.S.I.

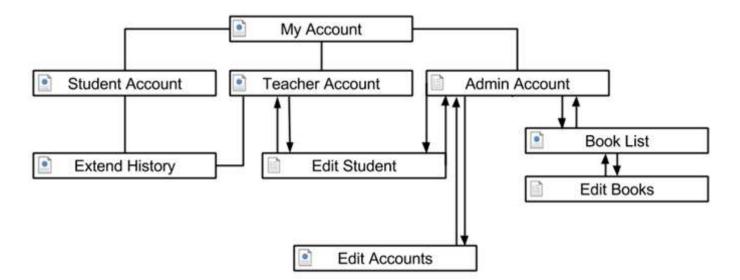
Link: A page the will be accesses from another page (inside or outside of the system).

 \longrightarrow

Page Redirect: Indicates a change in the user's screen, based on the user's action.

Website Map





Data Flow Diagrams

Data Flow Diagrams (DFDs) are a visual representation of the information between different system processes. The DFDs are used to describe the way data will be stored and retrieved by the system and those that influence the system. Each DFD examines a system component at a different level of detail.

Data Flow Legend



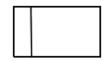
Process: A process is a system function that will represent data that is being stored, transferred or otherwise manipulated.



Entity: An entity represents sources of data into the system and the destinations of which data is sent from the system.



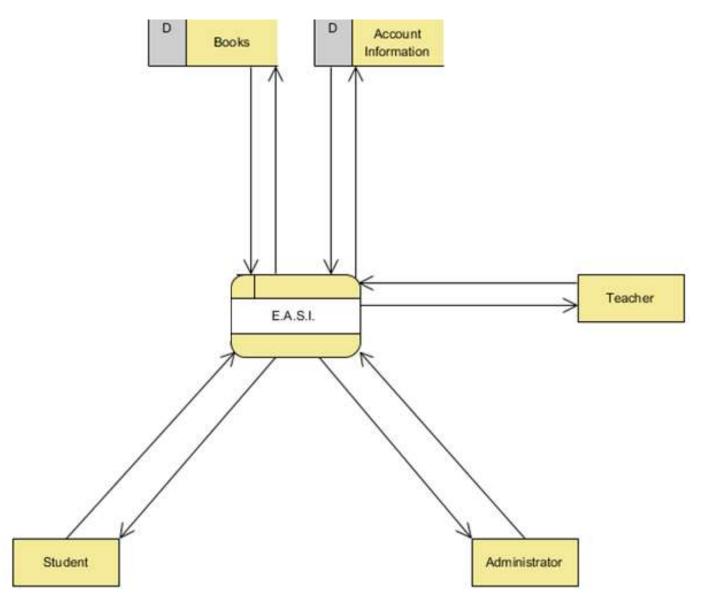
Data Flow: A data flow arrow shows the movement of information between entities.



Data Store: Data storage shows the location where data is held, either temporarily until it moves onto another location, or permanently, for the system's own use.

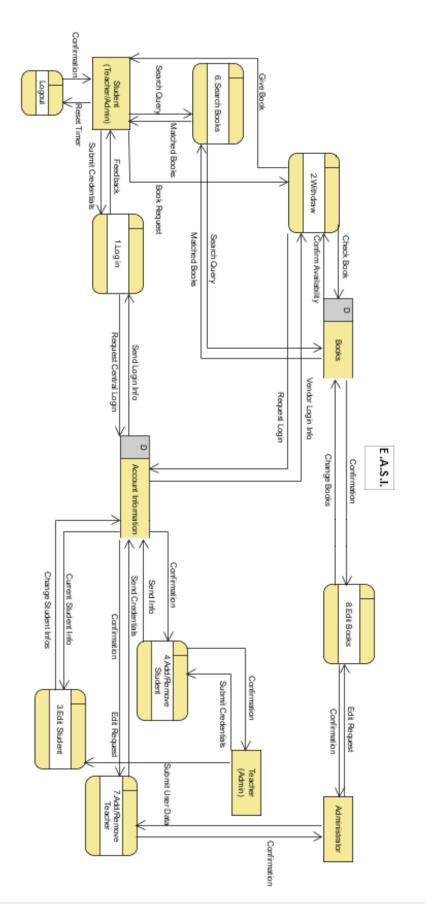
Context Diagram

The Context Diagram describes the users and processes that interact with E.A.S.I. This includes, but is not limited to, databases such as Books and Account Information, users such as Student, Teacher and Administrator, and access to information given and taken from the Vendor sites. This diagram is the highest level of the Data Flow diagrams, and hopefully clarifies how the system receives and outputs information.



Level 0 Diagram

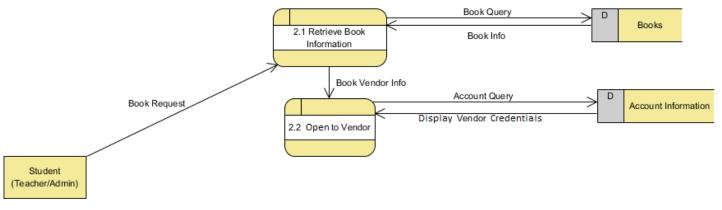
The Level 0 Diagram, as shown on the next page, is the next highest level of Data Flow diagram, and expands on the initial information provided in the Context Diagram. It shows the major processes that will be present in E.A.S.I., as well as how information is controlled among and inbetween the processes. The Level 0 Diagram shows what the major activities the system and users will be engaged in.



Level 1 Diagrams

All subsequent diagrams after a Level 0 expand on the specific processes originally displayed in the Context and Level 0 diagrams.

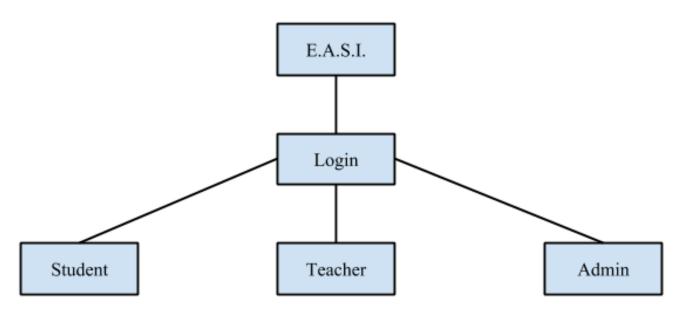
Withdraw

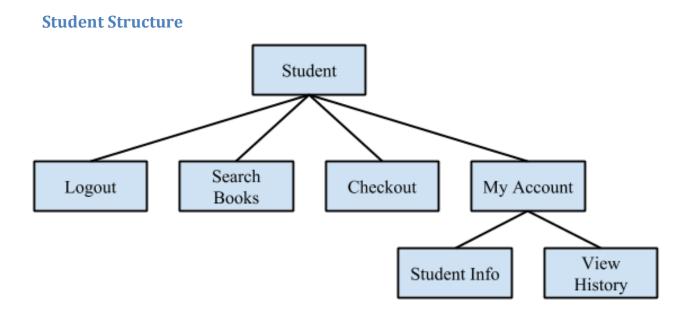


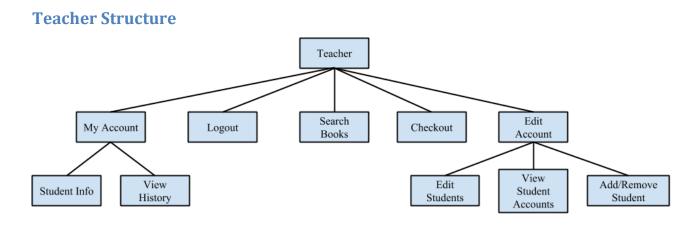
Structure Diagram

Each Structure diagram displays a tree hierarchy with each of the user types and the appropriate components of the E.A.S.I. system.

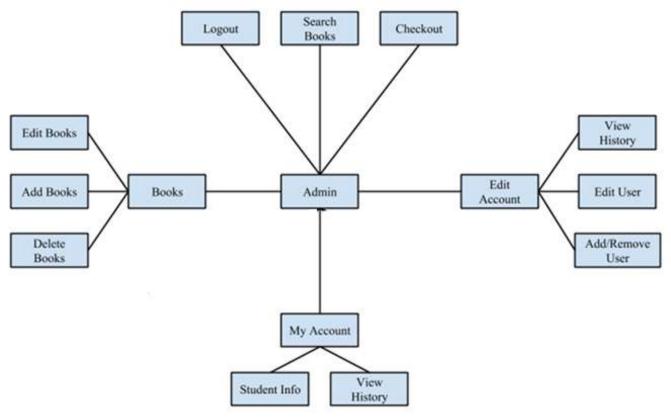
Overview Structure







Administrator Structure



Requirements Inventory

The Functional Requirements Inventory are the list of features that E.A.S.I. is expected to perform, and defines the behavior of the system. The Non-Functional Requirements will specify E.A.S.I. properties, those that are not necessarily specific functions of the system but rather what the system is intended to present to the user. Each of the inventories is subject to change as Seraphim progresses further into the design of E.A.S.I.

Functional Requirements

E.A.S.I. has three types of users: Students, Teachers and Administrators, each with their own functions when interacting with the system. The following list details the requirements of each human user that will interact with E.A.S.I.: Student, Teacher and Administrator.

Student

- Will use the main login screen to access the system
 - The credentials will include the district, username, and password of the user
 - Any failed login attempt (ex. wrong username & password combination) will display the appropriate error message
- Access to e-books' information, such as the e-book cover, description, title, author, ISBN-13, publisher
- Ability to login to the vendor and access the e-books
 - Will be given their username and password for accessing the e-book's vendor site

- Ability to organize and search e-books
 - Able to organize by genre or level
 - Able to search across categories or for specific e-books
- Will be able to log out of E.A.S.I.

Teacher

- Will inherit all functional requirements specified for the Student
- Ability to change student account information
 - Ability to view and change username or password
 - Ability to view and change user's level access
 - Ability to get a Student access to specific e-books
 - Change how many books they can "check out"

Administrator

- Will inherit all functional requirements specified for the Teacher
- Ability to change the district for Student accounts
- Ability to add or remove Student accounts
 - Add student accounts for each vendor site
 - An "import" system will be in place so that the administrators can import a document containing all the username and password information for all the students
- Ability to add or remove Teacher accounts
- Ability to add or remove Administrator accounts
- Ability to add or remove e-books
- Ability to adjust any and all details for e-books

Non-Functional Requirements

The following list contains those items that are not specific features in the software, but rather what E.A.S.I. is expected to accomplish overall. These features cannot be objectively measured. E.A.S.I. will have the following features:

- The system will be responsive, which is the ability of the system to respond to queries within a reasonable amount of time
- The system will be scalable, with the ability to control access about 85,000+ students
- The system will be secure, allowing users to transverse the system without accessing protected data
- The system will be viewable and functional on multiple platforms and browsers (including: Android Mobile Browser, iPhone Mobile Browser, Safari, Firefox, Chrome, Opera, Internet Explorer)
- The system will be intuitive for all users
- The system will be able to be maintained by the administrators of the system

Data Dictionary

The Data Dictionary describes what information will be stored within the system. The data dictionary will describe the data types, names, and the purpose of each data piece within E.A.S.I.

Data Dictionary Legend

User Type: Which user type(s) the data will apply to.

Data Name: The name of the data entity.

Applicable To: What Use Case in E.A.S.I. the data entity relates to.

Data Type: The type of data this entity is.

Data Size: The size of the data entity.

Description: A brief description of what the data entity is.

Acceptable Input: The types of input allowed for the data entity.

Good Example(s): List(s) of proper constructed input.

Bad Example(s): List(s) of improper constructed input.

Notes: Any additional information.

Data Dictionary

title	r y author	readingLevel	company	permissionLevel Account	schoolDistrict	password	userID	lastName	firstName	Data Name
Book	Book	Account	Account	Account	Account	Account	Account	Account	Account	Data Applicable To Type
Varchar	Varchar	Number	Number	Number	Varchar	Varchar	Varchar	Varchar	Varchar	Data Type
1-100 characters	1-60 characters	1-2 characters	1 Character	I character	1-50 characters	8-255 characters	6-30 characters	1-100 characters	1-100 characters	Data Size
Title of a book	Author of a book	Reading Level of a book	Indicates whether a user is part of BOCES or Questar III	Either a user is a student, teacher, or I character administrator	School District a user is currently enrolled in	Password of a user	Username of a user	Last name of a user	First name of a user	Description
ASCII char 32 (space), -, A-Z. a-z.',', ASCII char 128 to ASCII char 165	ASCII char 32 (space), A-Z. a-z.',', ASCII char 128 to ASCII char 165	6-0	0-1	6-0	a-z, A-Z ', &, _,	a-z, A-Z, 0-9, ASCII Special Characters (,><>?::"[[()\[!@#\$%\&*(.=_+	A-z.0-9	ASCII char 32 (space), -, A-Z, a-z, ',', ASCII char 128 to ASCII char 165	ASCII char 32 (space), -, A-Z, a-z, ', ., ', ASCII char 128 to ASCII char 165	Acceptable Input
Cell, Divergent, The Life and Times of Dr. Lim	Stephen King, Veronica Roth, Dr. Seuss	2.3,12	0.1	1, 2, 3	Shenendehowa School District, Christian Brothers Academy	AwesomeT-rex19	dw01stre, cd04olde	Smith. Wolczak, Aldren Pippen, Hammond-Wood	John. Mary Beth Jo Anne Elizabeth. José	Good Example(s)
°₀		0.15.3.7	315,6	12, 4, 8	District 9	gonnagethacked	12monkeys!	Sm1th, 41dren Pippen	J0hn. [V]4ry [3e+4. Alexander (Alex)	Bad Example(s)
						Must include at least three of the following four characters: lowercase letter, uppercase letter, number, special character, will be encrypted	Usernames are unique			Notes

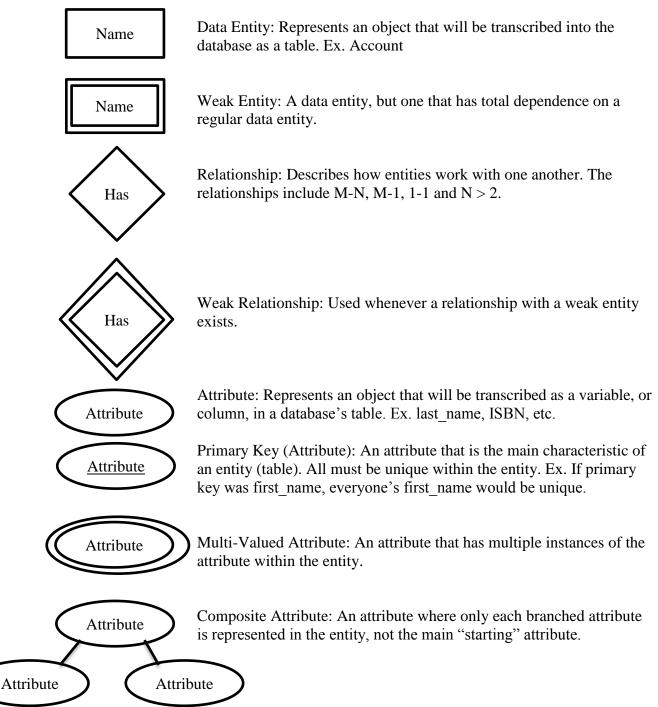
messageFormula Errors	Ð	genre	link	bookCover	bookLevel	ISBN	description	company
Errors	Errors	GenreList	Book	Book	Book	Book	Book	Book
Varchar	Varchar	Varchar	Varchar	Varchar	Number	Number	Varchar	Number
1-100	1-20 Characters	1-30 characters	1-300 characters	1-150 characters	1-2 characters	13 digits	1-1000 characters	1 Character
Regular Expressions for showing a detailed error message to user	1-20 Characters Numerical Error Id	1-30 characters Genre of a Book	Link that leads to the vendor's website where the book is stored	URL to the cover of a book	Reading level of a book	International Standard Book Number of a book	Description of a book	Indicates whether a book belongs to BOCES or Questar III
ASCII char 32 (space), -, A-Z, a-z, ', ., ', ASCII char 128 to ASCII char 165	a-z, A-Z, 0-9	a-z, A-Z, space	ASCII char 32 (space), -, A-Z, a-z, ', ., ', ASCII char 128 to ASCII char 165, {, }, =	ASCII char 32 (space), -, A-Z, a-z, ',', ASCII char 128 to ASCII char 165, {, }, =	6-0	0-9, -	ASCII char 32 (space), -, A-Z, a-z, ', ., ', ASCII char 128 to ASCII char 165	0-1
Book TITLE could not be found from VENDOR.	trig9	Fantasy	http://qiiisls.lib.overdrive.com	http://images.contentreserv img.jpg	2,3,12	978-0-123456-47-2	(Short narrative describing book)	0.1
Book Error.	&*%^\$ &*^	Blue	c overdrive.com	gdf âtm v	0,15.3.7	1234567898765, onethree-fourteen	Thrilling, twist, 3/5 stars	315, 6

timeStamp	dueDate	dateWithdrawn	quantity	vendorAccount	password
Logged	Withdrawn	Withdrawn	Hosts	Account	LogsIn
Timestamp	Date	Date	Number	Varchar	Varchar
0			1-99	6-30 characters	1-255
A marker for when an error is thrown. Part of a primary key.	A marker for when the book will become more available	A marker for when the book was removed from the system	Number of the given book hosted by the vendor	6-30 Username of a user characters within a vendor site A-z,0-9	Individual Vendor log-in passwords
0-9, -, :, ASCII Char 32	0-9,-	0-9, /	0-9	A-z,0-9	a-z, A-Z, space, 0-9
2038-01-09 03:14:07	02-14-2015	2-7-2015		dw01stre, cd04olde	password1
IN The FuTuRe	Next Tuesday	Last Tuesday	22 All of them	12monkeys!	ST3V3 COMMANDS TH33 TO OP3N

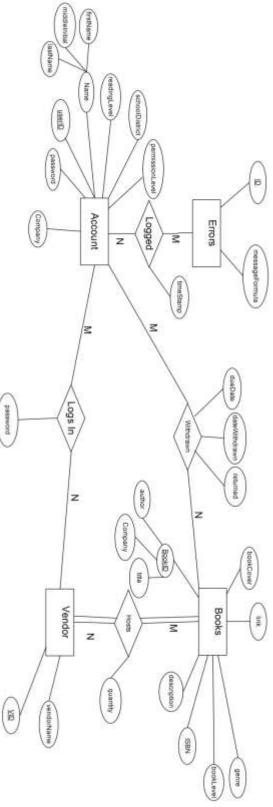
Entity-Relationship Diagram

An Entity-Relationship (ER) Diagram is a model for displaying the design of the database. It is used to represent the logical format of a database.

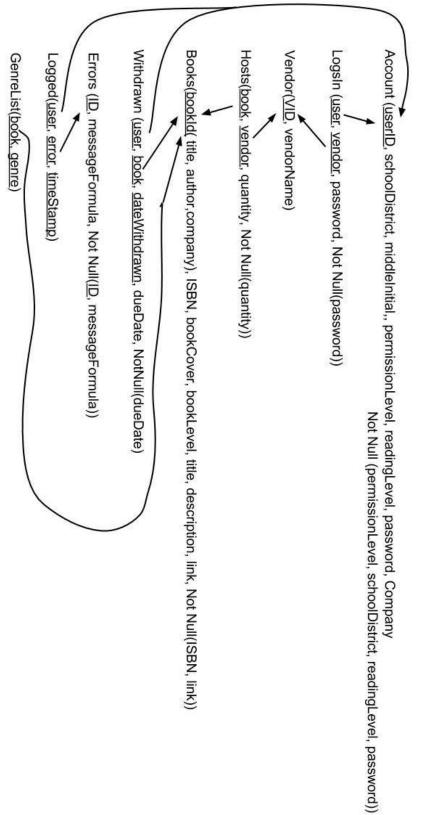
Entity-Relationship Diagram Legend







Database Schema



Prototype Screens

The following images and explanations are visual representations of the first prototypes that will be created as E.A.S.I. The prototypes presented here do not represent the final design of E.A.S.I. and are subject to change, but they do represent some of the core functions and processes that E.A.S.I. is going to have.

What E.A.S.I. will be doing:

- 1. As administrators add the information for each book (MARC file or manually), the system will add the book information, and incorporate it into our database.
- 2. The system will only open the vendor site link, and show the student's account information for that vendor, when the user goes to view/download an e-book.
- 3. The system will handle all internal requests, such as search, clicking, logging in, etc.

All code can be accessed here: <u>https://github.com/SienaCollegeSoftwareEngineering/2014-15-</u> <u>Team-Documentation---Seraphim/tree/master/public_html</u>.

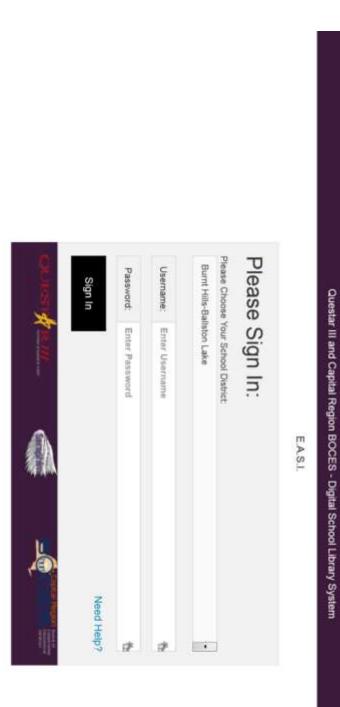
Final Prototype may be accessed here: <u>http://oraserv.cs.siena.edu/~perm_seraphim/prototypes/</u>

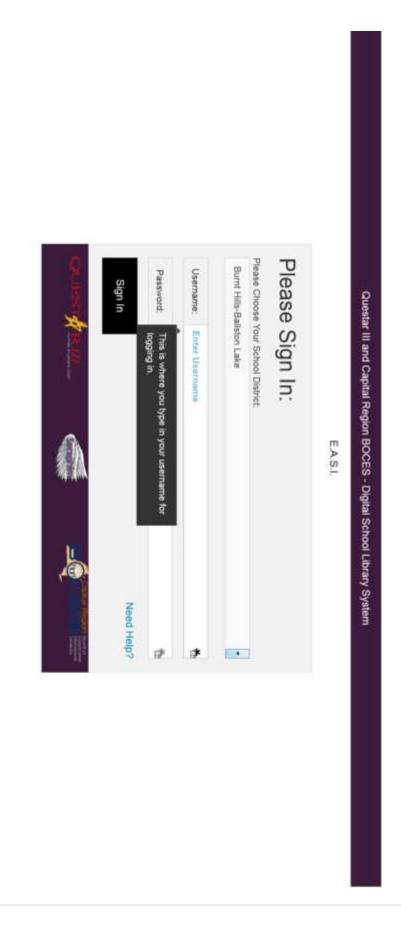
Access Screen

This access screen, as shown on the next few pages, represents the login screen for E.A.S.I. All users will be presented with this screen, and must enter correct credentials in order to access the system.

The login screen will have the following features:

- A drop down listing every district that is available for the system
- A username and password to access the system
- A "Sign In" button
- A "Need Help?" link, which provides a small pop-up explaining how to contact someone in charge (most likely the administrator in charge of maintaining the system)
- Any login attempts that fail will be represented with an error message that displays what goes wrong next to the correct field of choice
- Each of the representations of the images will have links to their main websites (in order): <u>http://www.questar.org/</u>, <u>http://oraserv.cs.siena.edu/~perm_seraphim/</u>, and <u>http://www.capitalregionboces.org/</u>





£	Please provide us with an email and we will respond as soon as we can.	Need Help?	EASL	Questar III and Capital Region BOCES - Digital School Library System
	İ	×		

Main Page

The main page of the website, as shown on the next page, is what all users will first encounter when correctly entering into the system (as long as the user provides the right district, username and password credentials).

The website will have the following pages:

- The main page
- "My Account", a page to organize their account settings (or, for administrators, to organize other user type account settings or book settings)
- "Genres" will be a drop-down that leads to pages that have all the Fantasy books, Science Fiction, etc
- "Levels" will be a drop-down that leads to pages that have only books for certain levels.
- Searching in the search box will lead to the "search" page, which shows all the books found for the inputted text
- Clicking "Advanced Search" will lead to a separate page to search using advanced settings
- Clicking on any book cover will lead to a single page with that book's information

All pages of the website will have:

- The "header" (the top of the page; everything along the menu, such as the "Genres" and Search bar, and above)
 - Clients request that message header should be: "Capital Region BOCES and Questar III – School Library System"
- A logout button/link (not shown in pictures above); the user will be automatically logged out after five minutes of inactivity
- Whenever books are displayed (such as on the main page, searching, or in Genres/ Levels), they will show:
 - The book cover
 - When scrolling over the book image, a small, transparent, "block" will pop up over the book cover, displaying the title and author
 - Clicking on the book cover leads to a page that displays more information about that book
 - A download button; clicking the download button will mean a popup with the user's username and password for that vendor site (originally hidden, but can be made viewable; with a "Copy" button next to each). The vendor site will open, allowing the user to simply copy & paste the correct fields and, once accessing the vendor site, will bring them directly to that book, where they will have the option of downloading it.
 - Books will only appear depending on the user's level
 - Books will display in rows/columns, and will only have so many rows; there will be a "Next Page" and "Previous Page" options at the bottom

The main page will have the following features:

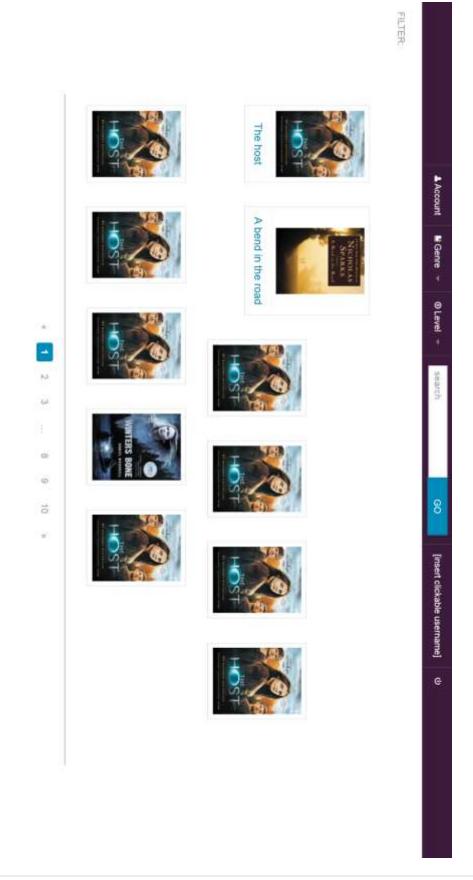
- A set number of books, in rows/columns
- All books will be randomly selected, from the database, of available books from the district for that user's level
- The books display method (as discussed in the above section)

The "Genres" will include:

- The following genres: Biography & Autobiography, Comic & Graphic Novels, Drama & Literature, Historical Fiction, History, Humor, Mystery & Thriller, Romance, Science & Nature, Sci-Fi & Fantasy, Fiction, Non-Fiction, Arts, Business & Finance, Education, Law, Medicine, Multicultural Studies, Religion, Social Science, Technology, Adventure, Audiobooks, Classics, Film, Horror, Music, Philosophy, Picture Books, Sport, Thrillers
- More Genres can be imported from the MARC Files and manually
- Genres will appear in alphabetical order
- These Genres will only show in the drop down menu if the topic is available (if there are 1+ books in the category)

The "Levels" options:

- Levels will be: K-5, 6-8, and 9-12
- When choosing a level, one will see all books found for that level
- Students in higher levels have access to books in lower levels
- Students can have access to specific books, as directed by Teachers or Administrators



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My Account

The "My Account" page will have the following features:

- The ability to see their first and last name (that's connected to the account)
- The ability to view their username, user account type (either student, teacher or administrator), and their district (students + teachers will not be able to change any of these)
- Individual abilities as dictated by their user account type (for example, administrators adding/removing vendors)

			5	Main	E.A.S.I
Dow	View	ernam me: m strict: E	/elc		
Download's History▼	View's History▼	Username: k05mang Name: masteradmin Kevin District: Burnt-Hills Ballston-Lake	ome, m	Accounts	
•		vin ton-Lake	Welcome, masteradmin	Vendors	A Home
			min	Books	A Home Account Genre -
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	Vame			
	Last Name			
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	Permissions			
	Edit Options			
Upload				

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	77	 _	(0)	Ш
Username	Results:	Search for Accounts	Search for Accounts:	Edit/Remove Accounts▼
District				₹
First Name				
Last Name				
Permissions				
Edit Options		đ		
		Advanced		

Vendor name	Vendors:	Search for Vendors	Find a Vendor:	Edit/Remove Vendor▼
Vendor Url				
Books#				
Edit options				
		đ		

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	_	Browse. No file selected	64	Ä	Accounts
		ġ.			Vendors
Add book manually		Title	Books to be added:		Books
VIE		Author			
		ISBN			
		Edit Options			
Upload					

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Title	Results:	Search for books	Search for books:	Edit/Remove Books▼
Author				
ISBN				
Edit Options				
		P Advanced		

Searching/Advanced Search

Searching/Advanced Search options:

- Any search part will lead to a page that shows all book options.
- Searching involves entering in book title, author or ISBN-13
- Advanced Search will at least be able to:
 - search parts available in normal searching
 - search in any number of categories from Genres
 - search for viewing, e-books or audiobooks

Book View

Book Descriptions pages will have:

- A bigger version of the book cover
- Full description of the book
- Title, Author, ISBN-13
- The ability to view/download it (given information in a tab)





Packaging Specification

Seraphim's supervisors, Dr. Fryling and Dr. Lim, will receive a copy of E.A.S.I. electronically, via GitHub and a Flash Drive, with all of the correlation documentation after the Acceptance Test is completed. If the clients wish to incorporate E.A.S.I. into their system, they will contact member(s) of the group to incorporate it into their system under a separate contract.

Testing Plan

Overview

The strategy for testing the system is to ensure that the system meets its design specifications, as well as both the functional and non-functional requirements. E.A.S.I. will be vigorously tested on both mobile and desktop machines, using Windows, Linux and Mac Operating Systems as well as the popular browsers: Mozilla Firefox, Internet Explorer, Google Chrome, Opera, and Safari. The testing will use a multi-step process that goes through each of the activities that are in the system: unit testing, integration testing, system testing, performance testing, and acceptance testing.

Exception Handling

The goal of Seraphim is to create a system that accomplishes the functions provided in the Software Plan as well as listed above. As part of these goals, E.A.S.I. will be able to handle all software exceptions as they arise; in the event of an exception error, the system will be able to handle it without the entire system failing. All the input into the system will be validated before the input is stored or made available to the users. At this stage of the project, the potential errors to the system are still unknown, but do include validation of user credentials and vendor information. Exceptions might be made possible either through user interaction or by the system itself, but in either case, E.A.S.I. will be designed to recover from any such events.

Acceptance Test

The accepted criteria for E.A.S.I. will include all previously stated requirements and functions listed in this document as well as the Software Plan. If the final product is unable to meet the specified requirements or functions, a reasonable explanation must be provided, which will be measured by the supervisors, Dr. Meg Fryling and Dr. Darren Lim. Each portion of E.A.S.I. will be tested in each stage to ensure that the individual components function before having the system integrated as a whole. At the end of the project, an acceptance test will take place to ensure Seraphim has met the system and client needs. Once the acceptance test has taken place, Seraphim and the clients will measure the requirements that have been successful.

Integration Testing

Integrating Testing will be done within each unit test of E.A.S.I. to ensure that each test can work with its components, both within and those that share data with other unit tests. When any change occurs in the code for any unit, testing will occur for the connected units. The goal is for each unit still functions properly even if parts of other units change. Each specific input test is outlined in the unit tests.

System Testing

System Testing within E.A.S.I. will ensure that the system complies with both the functional and non-functional requirement specifications. The type of system testing that will be completed will be black box testing. This type of system testing is completed by entering various inputs to test the outputs of the system. Each specific input test is outlined in the unit tests.

Performance Testing

Performance Testing is used to make sure the system is responding to user requests in a reasonable timeframe, especially when used by many users at the same time. For most systems, a series of tests will be run by multiple users (to be determined) to run stability and performances tests, such as (for E.A.S.I.): multiple login and submission attempts, accessing e-Books, searching within the system and accessing e-Book history.

Unit Tests and Test Cases

Each unit test is a test run to ensure that the system is running properly and that it has all the fore-mentioned functions. Each unit test is a step-by-step process for input and what to expect when certain functions are set in motion. Some tests will be performed separately, while others will be performed together. Once all unit tests have been approved, a full system test will be run to ensure that all the functions work together.

Each unit test has a series of test cases, which are directions for input and the order in which the system will receive them. It will contain details on what to expect for each input, and what the system should do if incorrect input is received.

Appendices

Unit Tests

All Unit Tests are in the following pages.

Note: Any with "Observed Result" as "N/A" means they were anticipated for the final project but were not implemented, due to not being able to get the information necessary to implement them.

Team Name Sera Project Name E.A. Client Name Jen Directory of <i>Unit Tests</i> Directory Status U Pass/Fail Status Nur	Jnit T	Seraphim E.A.S.I. Jen Cann ests Unit Unit Number	Seraphim E.A.S.I. Jen Cannell and J'aime Pfeiffer ests Unit Number Unit Test Name	Date Last Tested	Comments or brief description
σ	100%	<u> </u>	l ogin	01/00/00	l onin abilities of all users
_	93%	2	Add E-Book	04/19/15	Admin's ability to add a e-book (MARC file)
¬	0%	ω	Search Books	01/00/00	User to find e-books via
σ	100%	4	View/Get Book	01/00/00	User see book information and get e-book
т	60 %	5	Add Students	01/00/00	Admin add student (import file)
т	53%	6	Edit Account	01/00/00	Admin edit Student,
P	100%	7	Add Teacher	01/00/00	Admin add teacher
Р	100%	8	Remove User	01/00/00	Admin remove user
σ	100%	9	Add Administrator	01/00/00	Admin add administrator
п	0%	12	View History	01/00/00	User view e-Book history
–	50%	13	Edit e-Books	01/00/00	Admin edit e-Book inform
-	100%	14	Logout	01/00/00	User automatically/self logout

Date of last test =			13 passed	13	100% passing	100%	Immary	= Unit Summary	P
		Error Messages	Error message	Filled form, wrong district	Press submit	Type in right username and password but have the wrong district	Wrong district	1.013	ogin עיש
		Error Messages	Error message	Filled form, wrong password	Press submit	and and	Wrong password	1.012	σ
		Error Messages	Error message	Filled form, wrong username	Press submit	Type in a non- exisiting username	Non-existent username	1.011	q
		Error Messages	Error message	Empty fields	Press submit	Leave all fields empty	All fields empty	1.010	ס
		Error Messages	Error message	Empty password/district	Press submit	Leave password/district biank	Empty password/district	1.009	P
		Error Messages	Error message	Empty username/district	Press submit	Leave username/district blank	Empty username/district	1.008	ס
		Error Messages	Error message	Empty username/passwor d	Press submit	Leave username/passwor d blank	Empty username/password	1.007	σ
		Error Messages	Error message	Empty district	Press submit	Leave district unselected	Unselected district	1.006	ס
"No password has been typed"	"No passwor been typed"	Error Messages	Error message	Empty password	Press submit	Leave password blank	Empty password	1.005	Р
		Error Messages	Error message	Empty username	Press submit	Leave username blank	Empty username	1.004	P
		Logged In As Admin	Logged in as Admin	Empty form	Press submit	Submit adminstrator account credentials	Log in as Administrator	1.003	ס
		Logged In As Teacher	Logged in as Teacher	Empty form	Press submit	Submit teacher account credentials	Log in as Teacher	1.002	σ
		Logged In As Student	Logged in as student	Empty form	Press submit	Submit student account credentials	Log in as Student	1.001	σ
Comments	Con	Observed result	Expected result	State Before Test	Steps to be Executed	Action to perform test (input)	Description	Test Number	Pass/Fail Status
							Test Cases		

Add Book

	Π	Test Cases								
Pass/Fail Status	Test Number	Description	Action to perform test (Input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	2.001	Add Book Appropriately (manual) Information	Submit Book Information	Press submit	Empty Form	Addition and Confirmation	Book Added To Database		LM	4/19/15
σ	2.002	Empty Title	Leave tille field blank	Press submit	Empty Form	Error message and user prompted for title	(Alert)		LM	4/19/15
P	2.003	Empty Author	Leave author field blank	Press submit	Empty Form	Error message and user prompted for author	Error Message (Alert)		LM	4/19/15
۳	2.004	Empty ISBN	Leave ISBN field blank	Press submit	Empty Form	Error message and user prompted for ISBN	Error Message (Alert)		LM	4/19/15
P	2.005	Empty Reading Level	Leave reading level field blank	Press submit	Empty Form	Allow submission	N/A			
P	2.006	Empty Description	Leave description field blank	Press submit	Empty Form	Allow submission	Book Added To Database		LM	4/19/15
P	2.007	Empty Genre	Leave genre field blank	Press submit	Empty Form	Allow Submission	Book Added To Database		LM	4/19/15
σ	2.008	Empty Genre with filled Leave genre field Subject blank	Leave genre field blank	Press submit	Empty Form	Allow submission, inform user that field is blank	N/A			
Ψ	2.009	Empty Subject with filled Genre	Leave subject field blank	Press submit	Empty Form	sion, hat	N/A			

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Contractor				1 failed		000000000000000000000000000000000000000		tests	15	2
4/19/15	test =	Date of last test =		14 passed		93% passing	93%	Immary	= Unit Summary	п
4/19/15	LW		Can't read file	Form with Book Information	Empty Form	Select File	Vendor Selected and File Selected	Add Book Automatically	2.015	۳
4/19/15	LM	No error message	Doesn't allow it into database	Error message and prompt user for corrected ISBN format	Empty Form	Press submit	Input a string with an invalid character	Invalid ISBN format	2.014	σ
4/19/15	LM		Error Message (Alert)	Error message and prompt user for corrected input	Empty Form	Press submit	Input a string with an invalid character	Invalid characters in field	2.013	σ
4/19/15	LW		Error Message (Alert)	Error message	Empty Form	Press submit	Leave all fields blank	All Fields Empty	2.012	٩
			WA	Error message and user prompted for teacher edition status	Empty Form	Press submit	Leave teacher edition status field blank	Empty Teacher Edition Status	2.011	Ψ
			N/A	Error message and user prompted for vendor	Empty Form	Press submit	Leave vendor field blank	Empty Vendor	2.010	Ρ

Search Book(s)

	Π	Test Cases								
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	
т	3.001	Basic Search	Enter Query into search field	Press Go	Empty field	Return page of search related books		Not Programmed	LM	
т.)	3.002	Basic Empty Search	Leave search field blank	Press Go	Empty field	No Change in page		Not Programmed	LM	
٦	3.003	Search with no results	Enter answerless query into search field	Press Go	Empty field	Return page stating no results were found		Not Programmed	LM	
.	3.004	Advanced Search	Leave username blank	Press submit	Empty form	Return page of search related books		Not Programmed	LM	
т	3.005	Empty Advanced Search	Leave password blank	Press submit	Empty form	No Change in page		Not Programmed	LM	
. п	3.006	Advanced Search: Filled Author	Leave district unselected	Press submit	Empty form	Return page stating no results were found		Not Programmed	Ш	
٦	3.007	Advanced Search: Filled Title	Leave district unselected	Press submit	Empty form	Return page stating no results were found		Not Programmed	LM	4/19/15
т.	3.008	Advanced Search: Filled Genre	Leave district unselected	Press submit	Empty form	Return page stating no results were found		Not Programmed	LM	4/19/15
т	3.009	Advanced Search: Filled Multiple Genre	Leave district unselected	Press submit	Empty form	Return page stating no results were found		Not Programmed	LM	4/19/15

				17 failed				tests	17	
4/19/15	test =	Date of last test =		0 passed		0% passing	¢0	Unit Summary	= Unit Su	п
4/19/15	LM	Not Programmed	Return page stating no results were found		Empty form	Press submit	Leave district unselected	Advanced Search with no results	3.017	п
4/19/15	СМ	Not Programmed	Return page stating no results were found		Empty form	Press submit	Leave district unselected	Advanced Search: Filled Title, Autor & Multiple Genre	3.016	т
4/19/15	LM	Not Programmed	Return page stating no results were found		Empty form	Press submit	Leave district unselected	Advanced Search: Filled Title, Autor & Genre	3.015	п
4/19/15	EM	Not Programmed	Return page stating no results were found	- 22 	Empty form	Press submit	Leave district unselected	Advanced Search: Filled Author & Multiple Genre	3.014	п
4/19/15	LM	Not Programmed	Return page stating no results were found		Empty form	Press submit	Leave district unselected	Advanced Search: Filled Author & Genre	3.013	71
4/19/15	LM	Not Programmed	Return page stating no results were found	264 	Empty form	Press submit	Leave district unselected	Advanced Search: Filled Title & Multiple Genre	3.012	30
4/19/15	LM	Not Programmed	Return page stating no results were found		Empty form	Press submit	Leave district unselected	Advanced Search: Filled Title & Genre	3.011	39
4/19/15	EW	Not Programmed	Return page stating no results were found		Empty form	Press submit	Leave district unselected	Advanced Search: Filled Title & Author	3.010	71 (

View/Get Book

				0 failed	0			tests	2	
4/19/	st test =	Date of last test = 4/19/15		2 passed	2	100% passing	100%	immary	= Unit Summary	P
4/19/15	M	Not hidden	Pop-up shown	Displays Login Information	Selected book page	Click download	Select Book	Download book	4,002	σ
4/19/15	EM .		Book Description Page Accessed	Return page of selected book	Page of books (home or searched)	Click on book picture or title		Select Book	4.001	σ
d Test Date	Tested By	Comments	Observed result	State Before Test Expected result	State Before Test	Steps to be Executed	Action to perform test (input)	Description	Test Number	Pass/Fail Status
2								Test Cases		

Test Cases	Tes	Test Cases							
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By
ס	5.001	My Account		Click on my account	Any displayed non-error page within site	Displays appropriate MyAccount page	Account Page Accessed		LM
т	5.002	Browse for Student File	Selecting Click Ad Browsed form students	Click Add students	My Account Page	My Account Page with browse for student file		Not Programmed	LM
т	5.003	Process Students File		Upload Students Information	Un-Edited Database	Updated Database		Not Programmed	LM
σ	5.004	Add individual student		Click Add Individual Student	My Account Page	Display form for adding student	User Shown		LM
σ	5.005	Submit Individuals Form	Student	Click Submit	My Account Page with student form displayed	Database Updated with additional Student	Database Updated with Student		LM
Π	= Unit Summarv	mmarv	60%	60% passing	ω	3 passed		Date of last test =	ist test
t(5	tests			2	2 failed			

	unt 								2	
т	т	σ	Ρ	σ	P	σ	F	Р	Pass/Fail Status	
6.009	6.008	6.007	6.006	6.005	6.004	6.003	6.002	6.001	Test Number	Test
Edit School	Edit Reading Input new	Select User	Search User empty field	Search User by first and last	Search User by last	Search User by First	Edit User	My Account	Description	Test Cases
Input new School	Input new Reading Level			First & Last Name	First Name	First Name			Action to Description perform test (input)	
Click Submit	Click Submit	Click on user in populated list	Click Submit	Click Submit	Click Submit	Click Submit	Click Edit User tab	Click on my account	Steps to be Executed	
Form Filled Modal	Form Filled Modal	Populated List	User Search Fields	User Search Fields	User Search Fields	User Search Fields	My Account Page	Any displayed non-error page within site	State Before Test	
Update Database	Update Database	Deploy Modal containing current information in form	Popup about needing filled forms	Populate User List below form	Populate User List below form	Populate User List below form	Displays User Search Fields	Displays appropriate Went to My MyAccount page Account	Expected result	
		N/A	All EASI users returned	Expected User Shown	Expected User Shown	Expected User Shown		Went to My Account	Observed result	
Error	Error						Error		Comments	
LM	LM		LM	LM	LM	LM	KM	KM	Tested By	
4/19/15	4/19/15		4/19/15	4/19/15	4/19/15	4/19/15	4/19/15	4/19/15	Test Date	

Edit Account

Edit Account Any User Editing information in My Account

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				9 failed	9			tests	19	
4/19/15	Date of last test =	Date of L		10 passed	10	53% passing	53%	mmary	= Unit Summary	-
										,
4/19/15	KM	Error		Update Database	Form Filled Modal	Click Submit	Input new Permission Level	Admin only Edit Permission Level	6.019	т
4/19/15	LM	Error		Update Database	Form Filled Modal	Click Submit	Input new User ID	Edit User Id	6.018	п
4/19/15	LM	Error		Update Database	Form Filled Modal	Click Submit	Input new Password	Edit Password	6.017	п
			N/A	Update Database	Form Filled Modal	Click Submit	Input new Name information	Edit All Name Fields	6.016	٦
			N/A	Update Database	Form Filled Modal	Click Submit	Input new Middle Initial & Last Name	Edit Last Name and Middle Initial	6.015	σ
4/19/15	LM	Error		Update Database	Form Filled Modal	Click Submit	Input new First & Last Name	Edit First & Last Name	6.014	т
			N/A	Update Database	Form Filled Modal	Click Submit	Input new First name & Middle initial	Edit First Name & Middle Initial	6.013	Ρ
4/19/15	LM	Error		Update Database	Form Filled Modal	Click Submit	Input new Last Name	Edit Last Name	6.012	т
			N/A	Update Database	Form Filled Modal	Click Submit	Input new Middle Initial	Edit Middle Initial	6.011	P
4/19/15	LM	Error		Update Database	Form Filled Modal	Click Submit	Input new First name	Edit First Name	6.010	т

_				0 failed	0			tests	ω	
= 4/19/15	Date of last test =	Date of la		3 passed	3	100% passing	100%	mmary	= Unit Summary	σ
4/19/15	LM			Database Updated with additional Teacher	My Account Page with teacher form displayed	Click Submit	Teacher Information	Submit Individuals Form	7.003	ס
4/19/15	LM			Display form for adding teacher	My Account Page	Click Add Individual Teacher		Add individual teacher	7.002	σ
4/19/15	LM			Displays appropriate MyAccount page	Any displayed non-error page within site	Click on my account		My Account	7.001	q
l Test Date	Tested By	Comments	Observed result	Expected result	State Before Test	Steps to be Executed	Action to Description perform test (input)	Description	Test Number	Pass/Fail Status
								Test Cases	les	

Remove User(s)

	Tes	Test Cases								1
Pass/Fail Status	Test Number	Description	Action to Description perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	
										_
σ	8.001	My Account		Click on my account	Any displayed non-error page within site	Displays appropriate Account Page MyAccount page Opened	Account Page Opened		LM	
σ	8.001	Edit User		Click Edit User tab	My Account Page	Displays User Search Fields	N/A			
P	8.001	Search User by First	First Name	Click Submit	User Search Fields	Populate User List below form	N/A			
σ	8.001	Search User by last	First Name	Click Submit	User Search Fields	Populate User List below form	N/A			
P	8.001	Search User by first and last	First & Last Name	Click Submit	User Search Fields	Populate User List below form	N/A			
σ	8.001	Search User empty field		Click Submit	User Search Fields	Popup about needing filled forms	N/A			
J	8.001	Select User		Click on user in populated list	Populated List	Deploy Modal containing current information in form	User Selected	Yes/No Confirmation	LM	
σ	8.001	Remove User		Click on remove after selecting user	Form Filled Modal	Remove user from database	Removed from From Accc Database With	Removed from Accounts, Withdrawn	LM	
								c.		
7	= Unit Summary	mmary	100%	100% passing		8 passed		Date of h	Date of last test =	

Add Administrator

Test Cases	Test	Test Cases								
Pass/Fail Status	Test Number	Description	Action to Description perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
					Any displayed					
Ū	0 001	My Account		Click on my	non-error	Displays appropriate Account Page	Account Page		KM	1/10/15
_				account	page within	MyAccount page	Accessed			1/10/10
					site					
D		Add		Click Add	My Account	Display form for	Admin Chaum			1/10/15
-	9.002	Admin		Administrator	Page	adding Administrator				4/19/10
I		Submit	Administrator)	My Account Page with	Database Updated	Admin Added			
٩	9.003	Individuals Form	Information	Click Submit	ator ayed	with additional Administrator	to Database		KM	4/19/15
P	= Unit Summary	mmary	100%	100% passing	3	3 passed		Date of last test =	ist test =	4/19/15
•	د ی	tests			0	0 failed				

View History

				2 failed	2			tests	2	
4/19/15	ist test =	Date of last test =		0 passed	0	0% passing	0%	mmary	= Unit Summary	п
		Programmed		history	Page	History			10.002	-
4/10/15	M	Not		Displays user's book	My Account	Click on View		View History	10 002	Π
					site					
		Programmed		MyAccount page	page within	account			0.00	-
4/10/15	M	Not		Displays appropriate	non-error	Click on my		10 001 My Account	10 001	Π
					Any displayed					
Test Date	Tested By	Comments	Observed result	Expected result	State Before Test	Steps to be Executed	Action to Description perform test (input)	Description	Test Number	Pass/Fail Status
								Test Cases	Tes	
							loaded' books	elated to 'down	formation r	Viewing History information related to 'downloaded' books
										View History

Edit	e-E	Book	(s)	
Luit	- L		(U)	

Edit E-book Any Admin editing of e-books	of e-books									
	Test	Test Cases								
Pass/Fail Status	Test Number	Description	Action to Description perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
			,							
σ	6.001	My Account		Click on my account	Any displayed non-error page within site	Displays appropriate Account Page MyAccount page Accessed	Account Page Accessed		LM	4/19/15
P	6.002	Edit Books		Click Edit e-book tab	My Account Page	Displays e-book Search Fields	Tab Opens		LM	4/19/15
σ	6.003	Search e- book title	Title	Click Submit	e-book Search Fields	Populate e-book List below form	Book Displayed		LM	4/19/15
P	6.004	Search e- book ISBN	ISBN	Click Submit	e-book Search Fields	e-book Search Populate e-book List Fields below form	Book Displayed		LM	4/19/15
σ	6.005	Search e- book author	Author	Click Submit	e-book Search Fields	Populate e-book List below form	Book Displayed		LM	4/19/15
σ	6.006	Search e- book empty field		Click Submit	e-book Search Fields	Show All e-Books	All Books Shown		M	4/19/15
σ	6.007	Select e- book		Click on e-book in populated list	Populated List	Deploy Modal containing current information in form	e-Book Info Shown		LM	4/19/15
т	6.008	Edit Author	Input new Author	Click Submit	Form Filled Modal	Update Database		Error	M	4/19/15
п	6.009	Edit title	Input new title	Click Submit	Form Filled Modal	Update Database		Error	LM	4/19/15
OK(S	6.010	Edit description	Input new description	Click Submit	Form Filled Modal	Update Database		Error	LM	4/19/15
e-Bo	6.011	Edit book level	Input new book level	Click Submit	Form Filled Modal	Update Database		Error	M	4/19/15

64 | P a g e

				7 failed				tests	14	
4/19/1	Date of last test = 4/19/15	Date of li		7 passed		50% passing	50%	mmary	= Unit Summary	т
4/19/15	LM			Database	Book Shown	Click Dete	Edit Book	Book	6.014	т
			1 Erom	Book Deleted From				Domovio o-		
4/13/13			Dase		Modal		ISBN		0.010	-
1/10/15			500	Indata Data	Form Filled		Input new		6 012	Π
			base		Modal		genre		0.012	-
4/10/15	M	Error	haco	I Indate Data	Form Filled	Click Submit	Input new	Edit nonro	6 012	Π

Logout

				0 failed	0			tests	2	
4/19/15	Date of last test =	Date of la		2 passed	2	100% passing	100%	mmary	= Unit Summary	P
			N/A	return to Iogin	any page	wait		wait for Time Out idle time out	6.002	P
4/19/15	LM		User Logged Out	return to Iogin	Any page	Click on log out		Log out	6.001	Ρ
Test Date	Tested By	Comments	Observed result	Expected result	State Before Test	Steps to be Executed	Action to perform test (input)	Descripti on	Test Number	Pass/Fail Status
								Test Cases	Test	
								stem	Logging out of the system	Logging or
										Logout

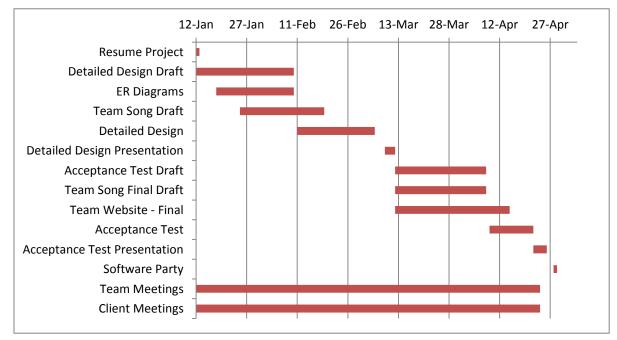
Glossary of Terms

E.A.S.I.: E-Book Application System Integration, the name of the e-book digital library being created for Capital Region BOCES and Questar III.

Project Timeline

The following is the list of tasks to be completed throughout this year for the E.A.S.I. system:

Task	Duration (Days)	Start	Finish
Resume Project	1	1/12/15	1/12/15
Detailed Design Draft	29	1/12	2/10
ER Diagrams	23	1/18	2/11
Team Song Draft	25	1/25	2/19
Detailed Design	23	2/11	3/6
Detailed Design	3	3/9	3/11
Presentation			
Acceptance Test Draft	27	3/12	4/8
Team Song Final Draft	27	3/12	4/9
Team Website - Final	34	3/12	4/15
Acceptance Test	13	4/9	4/21
Acceptance Test	4	4/22	4/27
Presentation			
Software Party	1	4/28	5/5
Client Meetings	~ 5	1/12	4/24
Team Meetings	~ 12	1/12	4/26



Bibliography

The following sources were used when creating the Requirements Specifications document:

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