

# LEAP

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Lightweight E-Book Access Platform

## Acceptance Test

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## **1. Project Overview and Summary**

The clients, Jaimé Phiffer of Capital Region BOCES and Jen Cannell of Questar III need a simple and easy to use central login platform in order to access e-books from all vendors and publishers. All users; younger students (grades K - 6), older students (grades 7 - 12), teachers, administrators, and the super administrator can view and filter e-books available to them. To checkout e-books, all users will be directed to the third-party websites. Older students, teachers, administrators, and the super administrator can reset their passwords. Teachers can also modify student accounts and administrators can also modify teacher accounts. The super administrator can modify other administrator accounts. The goal of LEAP is to make e-book management simpler for students and faculty by providing an easy to use portal to read e-books and manage their availability.

## 2. User Case Narratives

### 2.1 Younger Students

A younger student will navigate to the Lightweight E-book Access Platform (LEAP) login page. The younger student will attempt to login. If the younger student fails to login, the younger student will be brought back to the login page with an error message stating a wrong username or password was entered. After the younger student successfully logs in, a list of all available e-books for the younger student will be displayed. The e-books displayed will be populated according to the school that the younger student attends, the younger student's grade level, and any additional e-books the younger student's teacher wants the younger student to have access to. The younger student can search and sort the e-books available to the younger student based on various e-book attributes such as name, grade level, publisher and genre. When the younger student clicks on the e-book, the younger student is taken to the third-party website where the e-book is located in order to checkout the e-book.

### 2.2 Older Students

An older student will navigate to the Lightweight E-book Access Platform (LEAP) login page. The older student will attempt to login. If the older student fails to login, the younger student will be brought back to the login page with an error message stating a wrong username or password was entered. The older student can choose to reset their password and be prompted to enter their username. Then the older student will follow the password reset process. The password reset process entails entering the student's email so that LEAP can email that student a link to reset the student's password. After the older student successfully logs in, a list of all available e-books for the older student will be displayed. The e-books displayed will be populated according to the school that the older student attends, the older student's grade level, and any additional e-books the older student's teacher wants the older student to have access to. The older student can search and sort the e-books available to the younger student based on various e-book attributes such as name, grade level, publisher and genre. When the older student clicks on the e-book, the older student is taken to the third-party website where the e-book is located in order to checkout the e-book.

### 2.3 Teachers

A teacher will navigate to Lightweight E-book Access Platform (LEAP) login page and attempt to login. If the teacher fails to login, the teacher will be brought back to the login page with an error message stating a wrong username or password was entered. The teacher can choose to reset their password and be prompted to enter their username. The teacher will then follow our password reset process. The password reset process entails entering the teacher's email so that LEAP can email that teacher a link to reset the teacher's password. After the teacher successfully logs in, the screen will display all the e-books the teacher has access to, including teacher-specific e-books such as instructor manuals and answer booklets. The teacher can choose to filter books based on different search criteria like appropriate grade level, genre, or subject. The teacher can choose to click on an e-book and be brought to the third-party website where the e-book is located in order to checkout the e-book. The teacher will have access to a user management area where the teacher can modify or view account settings for the teacher's

students. These settings will include the student's password and the e-books the student has access to.

## 2.4 Administrators

An administrator will navigate to Lightweight E-book Access Platform (LEAP) login page and attempt to login. If the administrator fails to login, the administrator will be brought back to the login page with an error message stating a wrong username or password was entered. The administrator can choose to reset their password and be prompted to enter their username. The administrator will then follow our password reset process. The password reset process entails entering the administrator's email so that LEAP can email that administrator a link to reset the administrator's password. After the administrator successfully logs in, the screen will display all the e-books the administrator has access to, including administrator-specific e-books such as instructor manuals and answer booklets. The administrator can choose to filter books based on different search criteria like appropriate grade level, genre, or subject. The administrator can choose to click on an e-book and be brought to the third-party website where the e-book is located in order to checkout the e-book. The administrator will have access to a user management area where the administrator can modify or view account settings for the administrator's students. These settings will include the student's password and the e-books the student has access to.

In addition the administrator can go into settings and choose to edit account information for both teachers and students, modify third-party website settings, and view statistics. When the administrator chooses to edit accounts, the administrator will be prompted to either create a new account or edit an existing account. If the administrator chooses to create a new account, the administrator will be directed to a form to add a new teacher or student. Once the administrator is finished filling out the form, the administrator can choose done or cancel. If done is chosen, the form will be uploaded to the server. If cancel is chosen the administrator will be directed back to administrator settings. If the administrator chooses to edit an existing teacher or student account, the administrator will be directed to a search bar where the administrator can find the person and click the edit button in order to edit the account. When the administrator is editing a pre-existing user and the administrator is finished filling out the form, the administrator can choose done or cancel. If done is chosen, the form will be uploaded to the server. If cancel is chosen the administrator will be directed back to administrator settings. If the administrator chooses to modify the third-party website settings, the administrator will be directed to a list of all of the current publishers and vendors. The administrator can choose to click on add a new publisher or vendor, or they can click the edit button located next to one of the publishers or vendors. If the administrator chooses to add a new publisher or vendor, they will be directed to fill out a form. When the administrator is finished filling out the form, the administrator can choose done or cancel. If done is chosen, the form will be uploaded to the server. If cancel is chosen the administrator will be directed back to the modify vendors and publishers page. If the administrator chooses to edit a publisher or vendor, they will fill out an edit form. When the administrator is finished filling out the form, the administrator can choose done or cancel. If done is chosen, the form will be uploaded to the server. If cancel is chosen the administrator will be directed back administrator settings. If the administrator chooses to view statistics, the administrator will be directed to the statistics page which will show statistics such as what books

was rented the most. If the administrator chooses scraper schedule, the administrator can modify the schedule for the scraper.

## 2.5 Super Administrator

The super administrator will navigate to Lightweight E-book Access Platform (LEAP) login page and attempt to login. If the super administrator fails to login, the super administrator will be brought back to the login page with an error message stating a wrong username or password was entered. The super administrator can choose to reset their password and be prompted to enter their username. The super administrator will then follow our password reset process. The password reset process entails entering the super administrator's email so that LEAP can email that super administrator a link to reset the super administrator's password. After the super administrator successfully logs in, the screen will display all the e-books the super administrator has access to, including super administrator-specific e-books such as instructor manuals and answer booklets. The super administrator can choose to filter books based on different search criteria like appropriate grade level, genre, or subject. The super administrator can choose to click on an e-book and be brought to the third-party website where the e-book is located in order to checkout the e-book. The super administrator will have access to a user management area where the super administrator can modify or view account settings for the super administrator's students. These settings will include the student's password and the e-books the student has access to.

In addition the super administrator can go into settings and choose to edit account information for both teachers and students, modify third-party website settings, and view statistics. When the super administrator chooses to edit accounts, the super administrator will be prompted to either create a new account or edit an existing account. If the super administrator chooses to create a new account, the super administrator will be directed to a form to add a new teacher or student. Once the super administrator is finished filling out the form, the super administrator can choose done or cancel. If done is chosen, the form will be uploaded to the server. If cancel is chosen the super administrator will be directed back to super administrator settings. If the super administrator chooses to edit an existing teacher or student account, the super administrator will be directed to a search bar where the super administrator can find the person and click the edit button in order to edit the account. When the super administrator is editing a pre-existing user and the super administrator is finished filling out the form, the super administrator can choose done or cancel. If done is chosen, the form will be uploaded to the server. If cancel is chosen the super administrator will be directed back to super administrator settings. If the super administrator chooses to modify the third-party website settings, the super administrator will be directed to a list of all of the current publishers and vendors. The super administrator can choose to click on add a new publisher or vendor, or they can click the edit button located next to one of the publishers or vendors. If the super administrator chooses to add a new publisher or vendor, they will be directed to fill out a form. When the super administrator is finished filling out the form, the super administrator can choose done or cancel. If done is chosen, the form will be uploaded to the server. If cancel is chosen the super administrator will be directed back to the modify vendors and publishers page. If the super administrator chooses to edit a publisher or vendor, they will fill out an edit form. When the super administrator is finished filling out the form, the super administrator can choose done or cancel. If done is



chosen, the form will be uploaded to the server. If cancel is chosen the super administrator will be directed back super administrator settings. If the super administrator chooses to view statistics, the super administrator will be directed to the statistics page which will show statistics such as what books was rented the most. If the administrator chooses scraper schedule, the administrator can modify the schedule for the scraper. The super administrator with the can also add, edit and delete administrator accounts.

### 3. UML Use Case Diagram

#### 3.1 UML Use Case Legend



**System Boundary** - Represents the system; actors go on the outside of the boundary and scenarios go inside.



**Actor** - Actors can be human or non-human. Human actors can be found on the left side of the system and non-human actors can be found on the right side of the system. Actors interact with the system through scenarios.



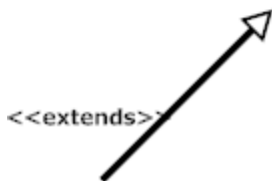
**Scenario** - Processes that occur within the system and interact with actors.



**Participation Line** - Shows what scenarios an actor can interact with.

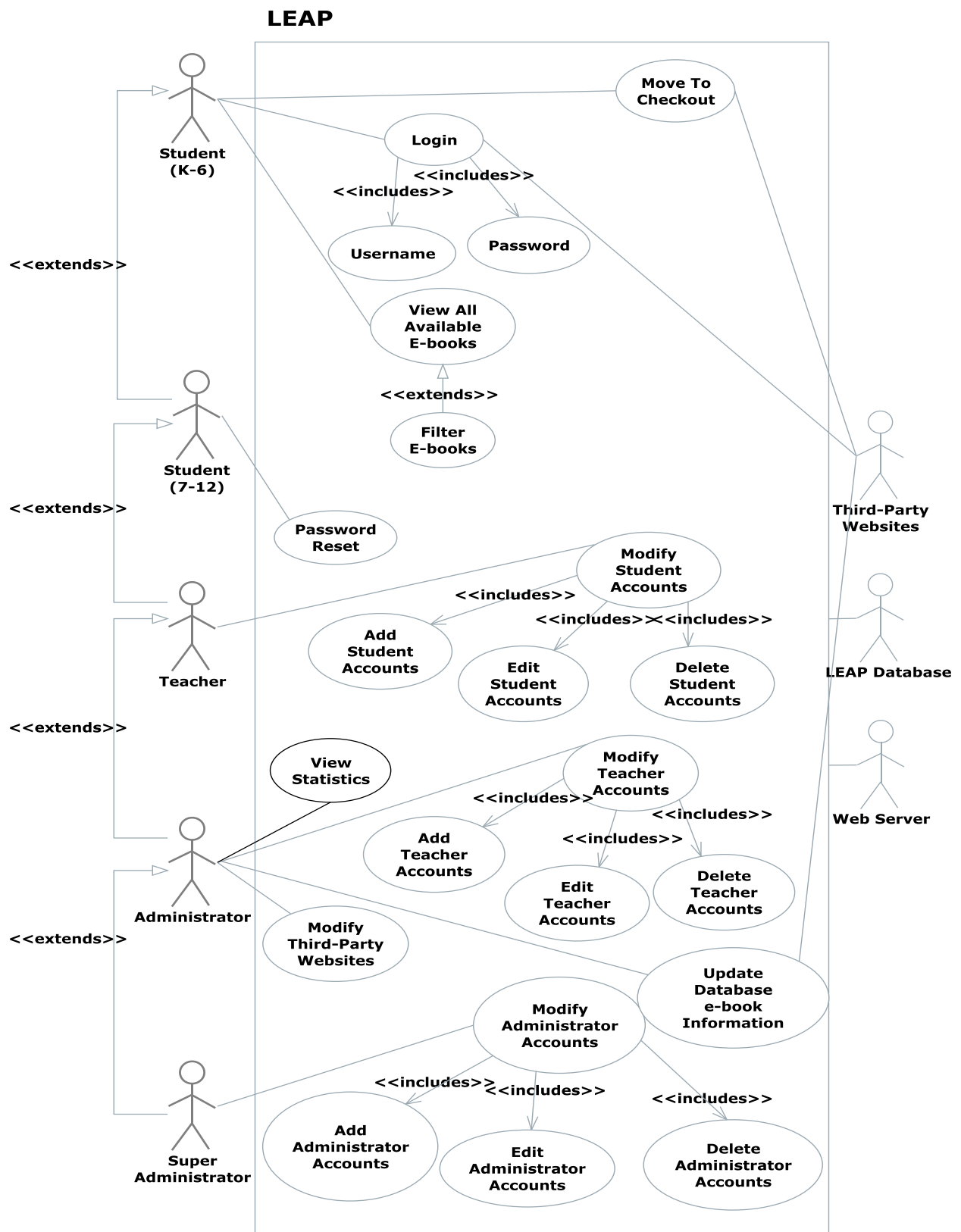


**Inclusion Arrow** - An arrow that points from one scenario to another scenario in order to show that something must be included for the scenario.



**Inheritance Arrow** - An arrow that points between two scenarios showing that one scenario inherits functionality from another. The scenario being pointed at is the parent.

### 3.2 UML Use Case Diagram



## 4. UML Deployment Diagram

### 4.1 UML Deployment Diagram Legend



<HTTP>

**HTTP** - The Hypertext Transfer Protocol is an application protocol for distributed, collaborative, hypermedia information system. HTTP is the foundation of data communication for the World Wide Web.



<SCP>

**SCP**- Securely transferring computers files between a local host and a remote host or between two remote hosts.

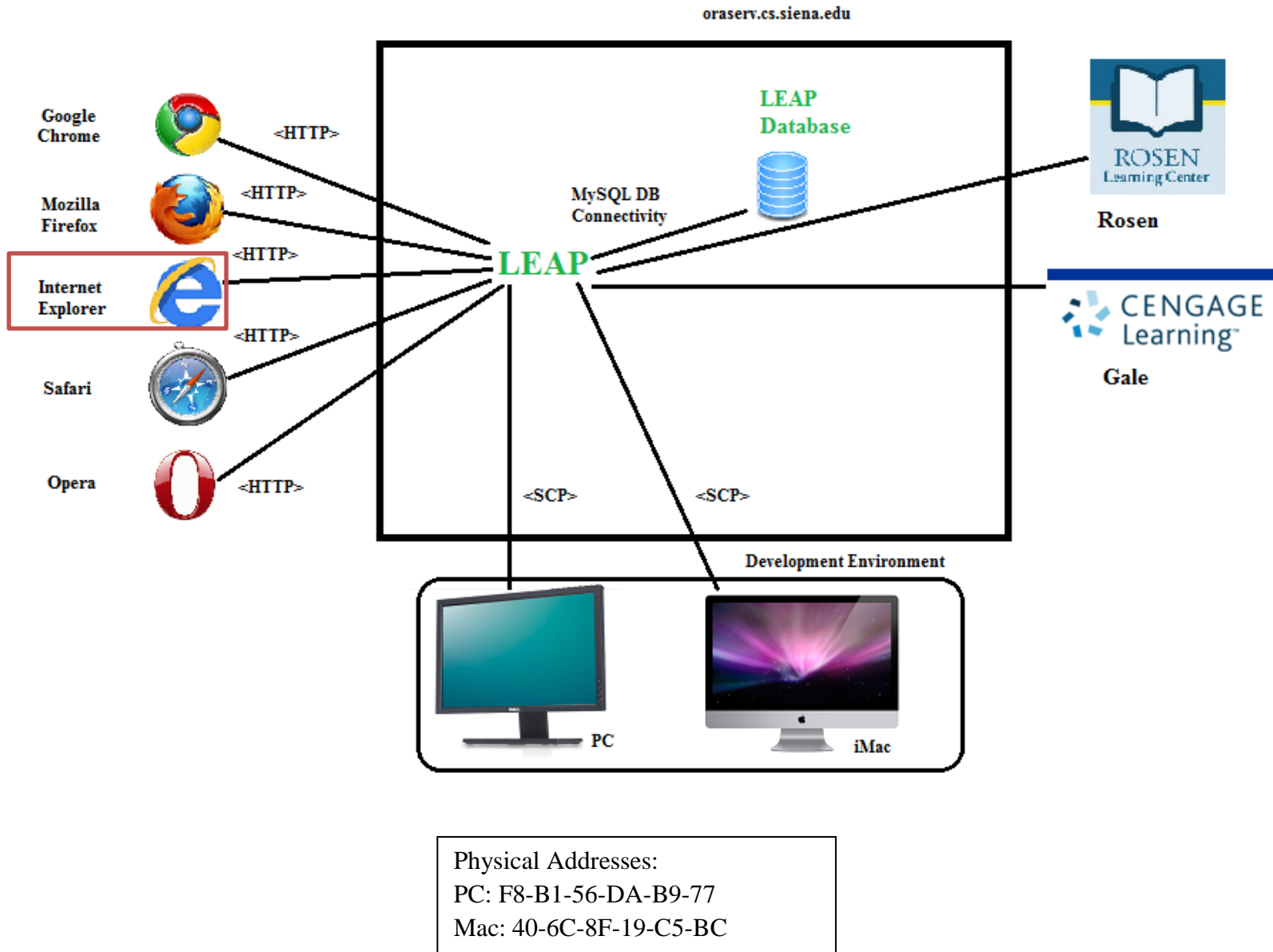


**System Boundary**- Represents what is within a system and what is outside of it.



**Connection**- Displays a relationship between boundaries.

### 4.2 UML Deployment Diagram



## 5. UML Activity Diagram

### 5.1 UML Activity Diagram Legend



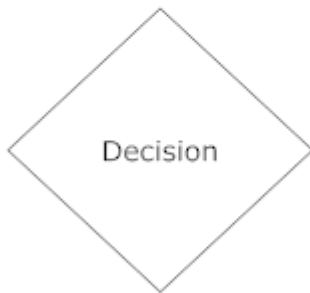
**Initial Node** - The initial node is the first node in the process. The initial node is the starting point for all movement.



**Final Node** - The final node is the last node in the process. When the activity flow has reached here, the process is over. There may be more than one final node.



**Activity Node** - Describes behaviors that will take place at this step, where activity is the behavior.

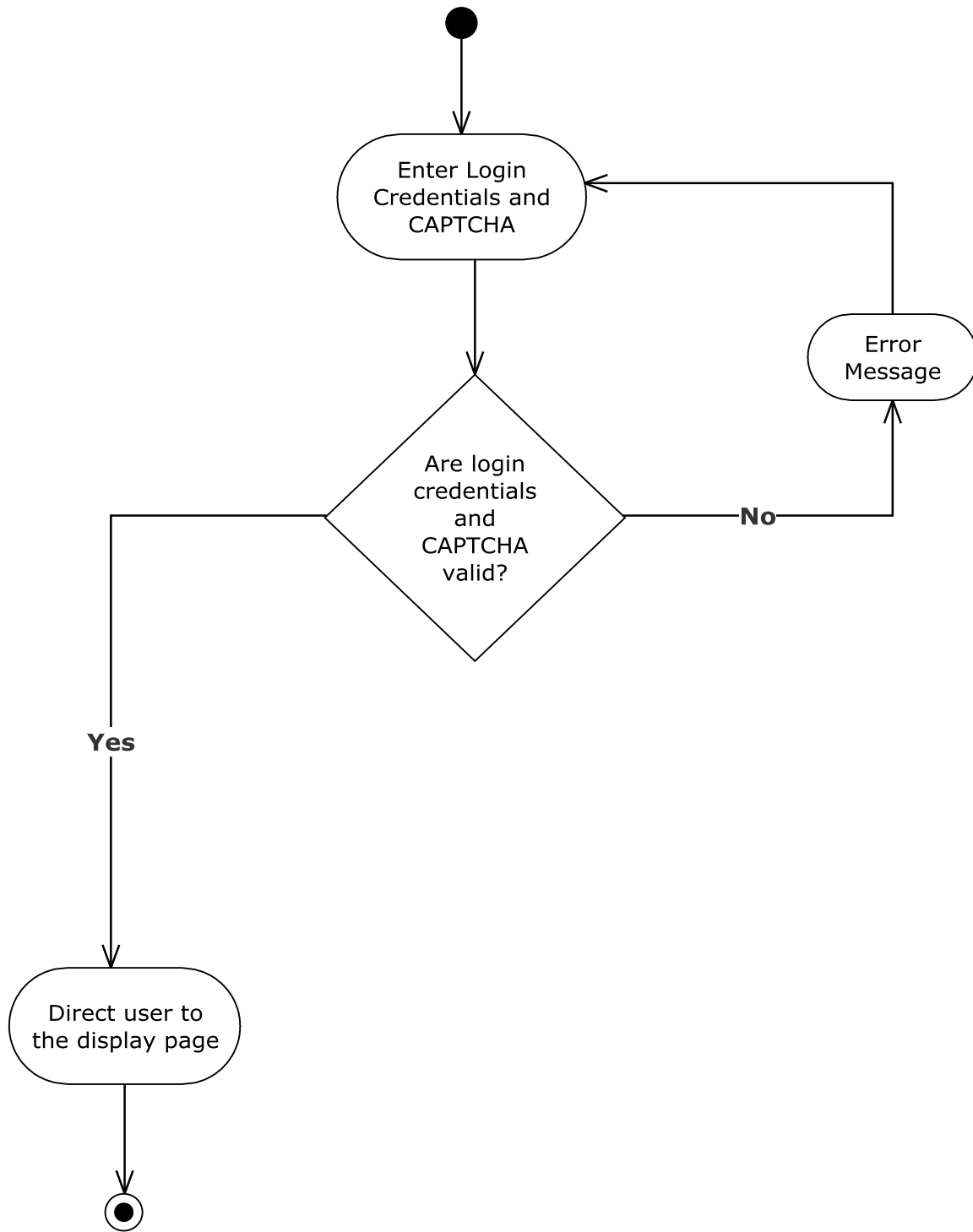


**Decision Node** - Takes an incoming edge and presents multiple outgoing edges based on the decision of the process. The decision is typically posed as a question.

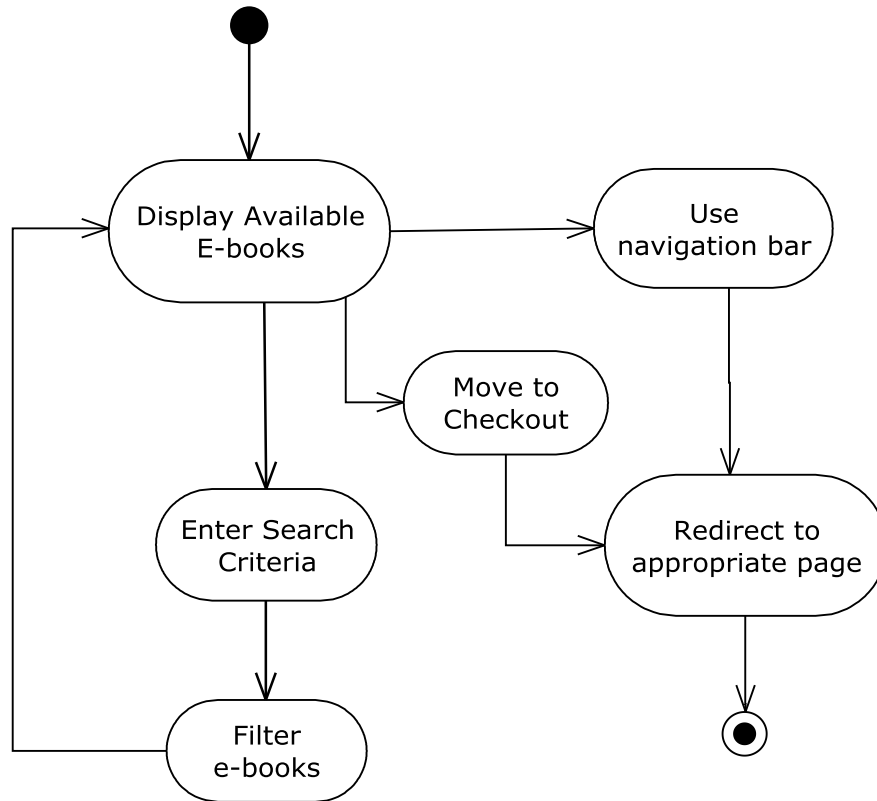


**Flow** - Shows the movement of action from one node to another.

### 5.2 Activity Diagram: Login

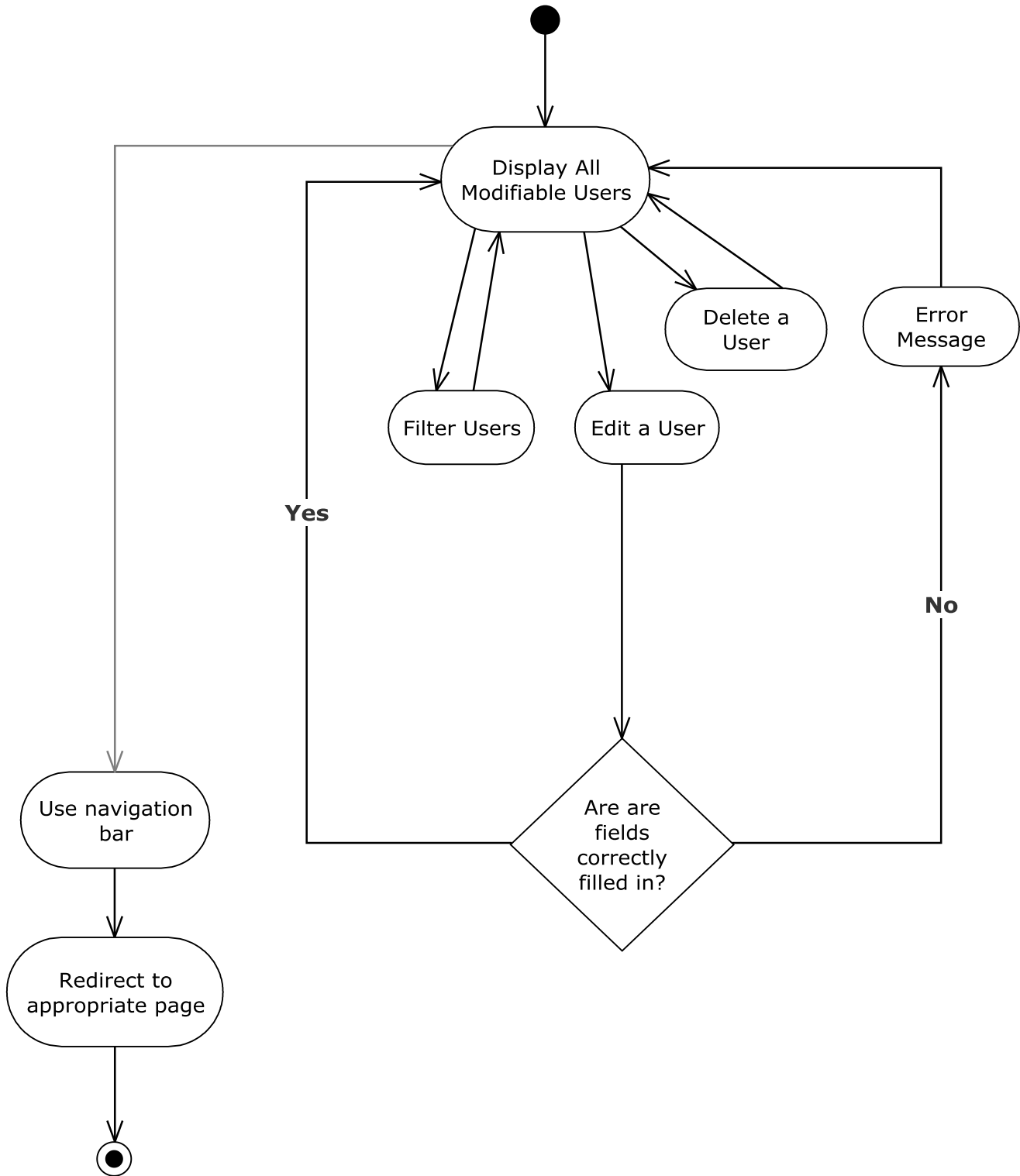


### 5.3 Activity Diagram: Display and Checkout

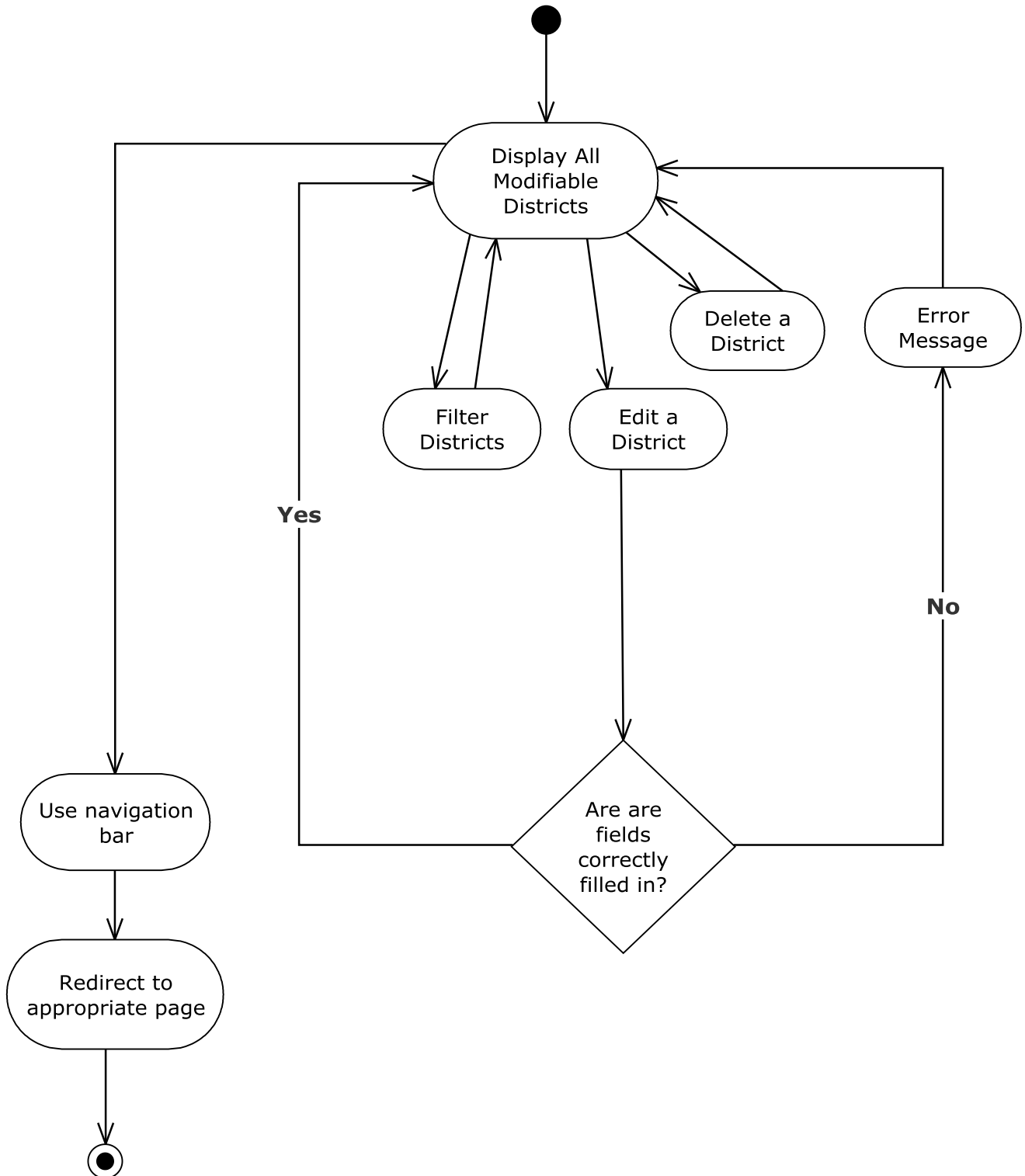




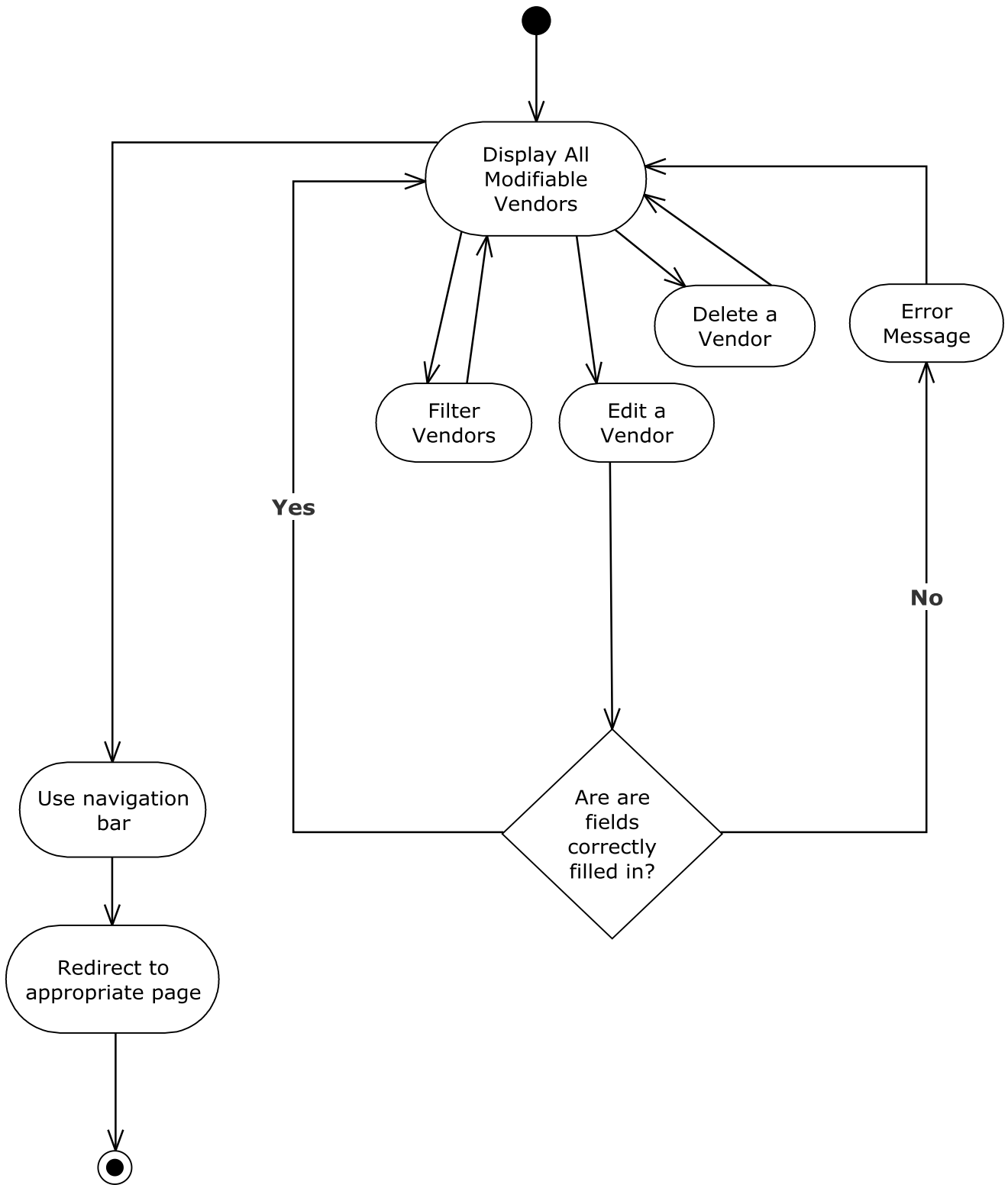
### 5.4 Activity Diagram: Modify Users



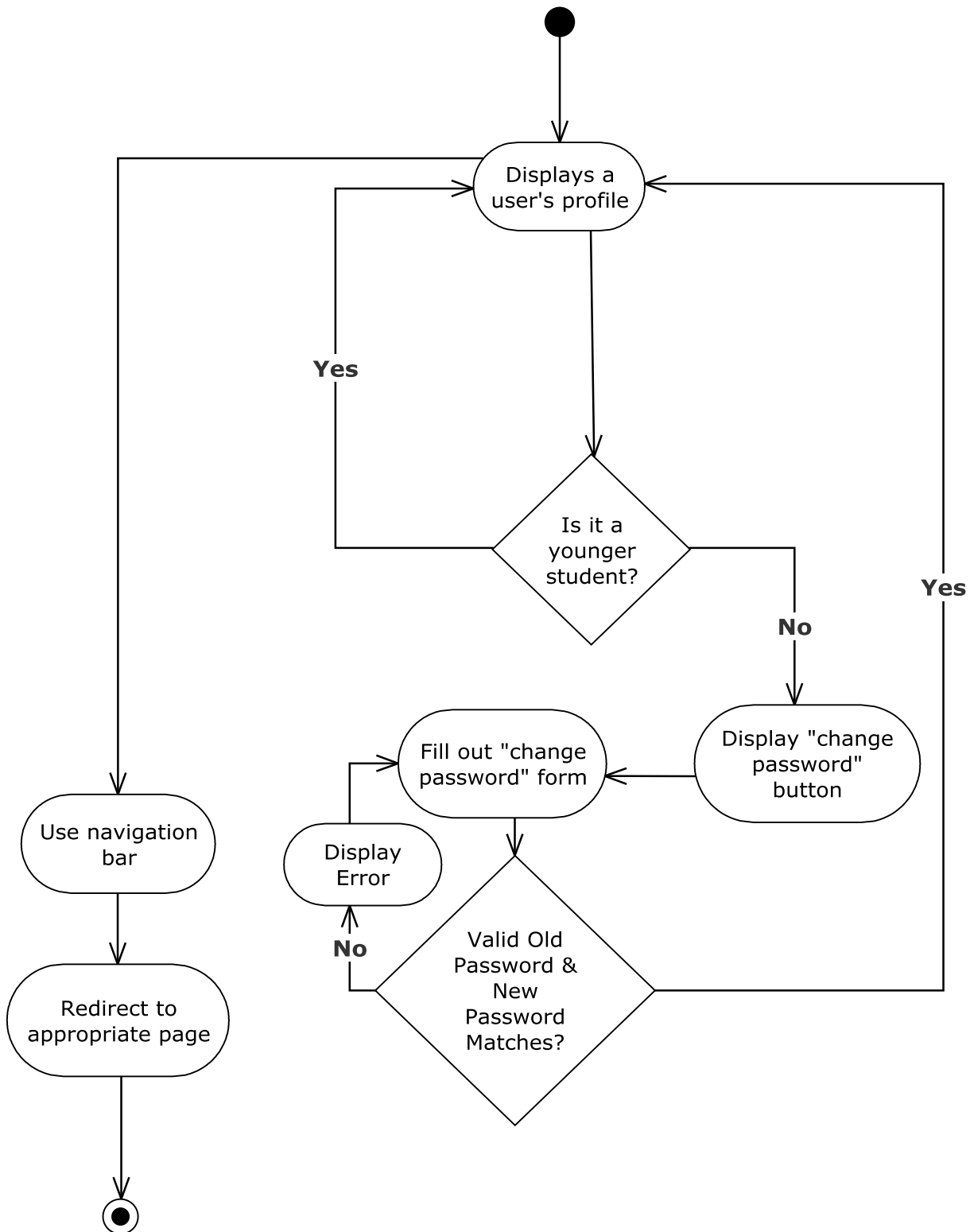
### 5.5 Activity Diagram: Modify Districts



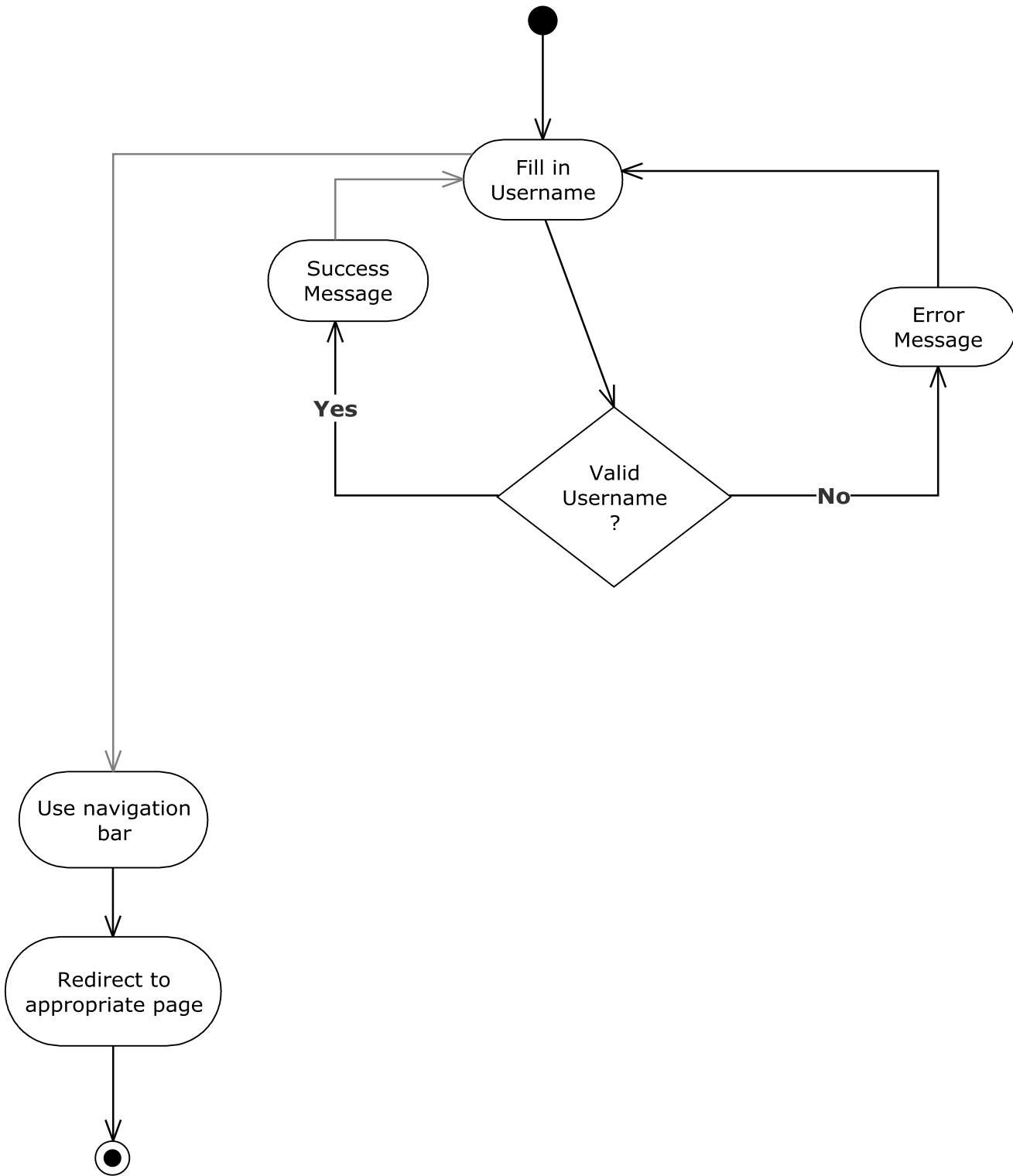
### 5.6 Activity Diagram: Modify Vendors



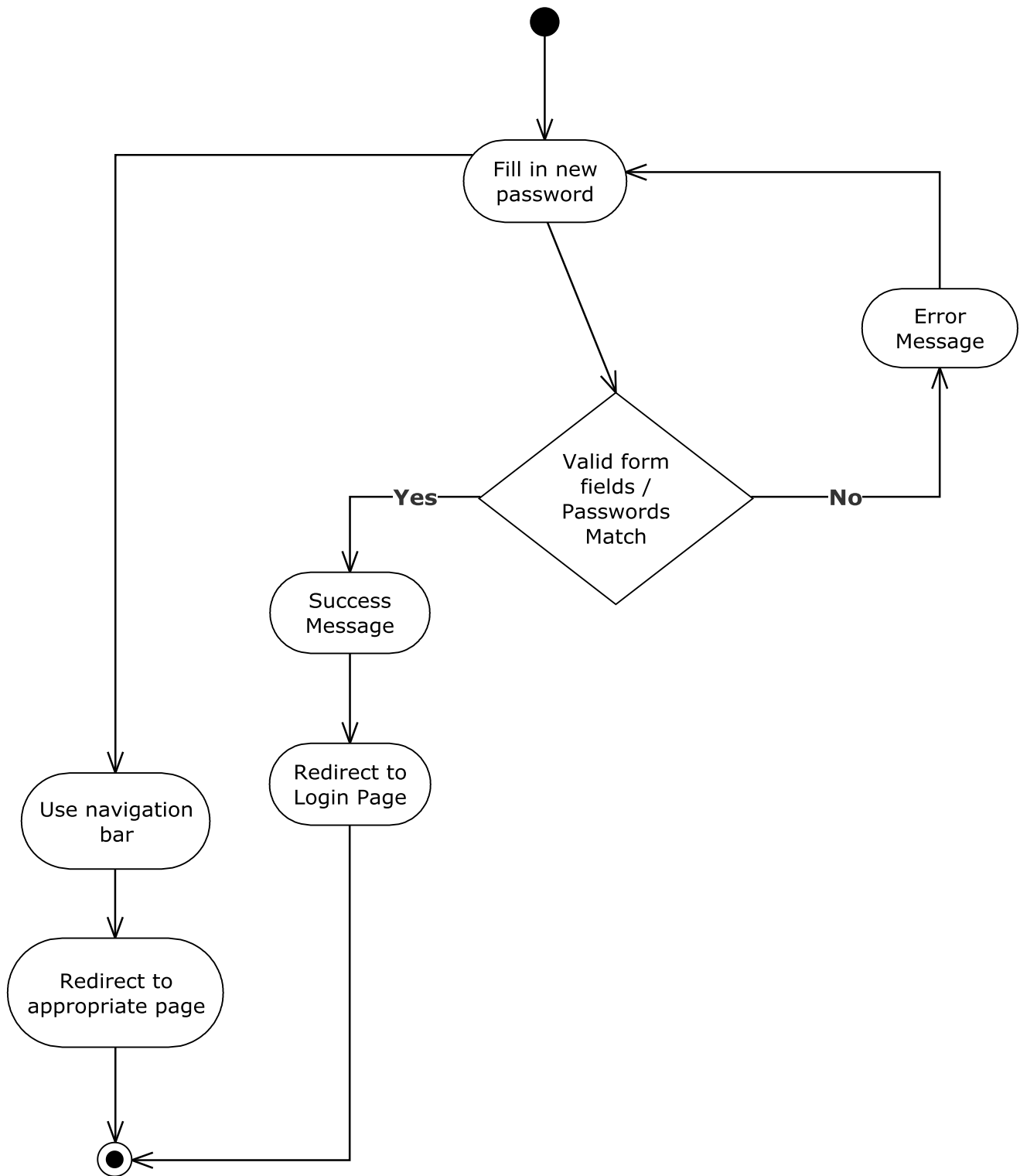
### 5.7 Activity Diagram: View Profile



### 5.8 Activity Diagram: Forgot Password



### 5.9 Activity Diagram: Reset Password



## 6. Website Map

### 6.1 Website Legend



**Home** - Represents the main page the user will see upon a successful login.



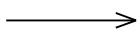
**Form** – Represents data fields which require user input.



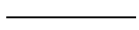
**Page** – Represents a web page within LEAP.



**Script** – Represents a script that is run.

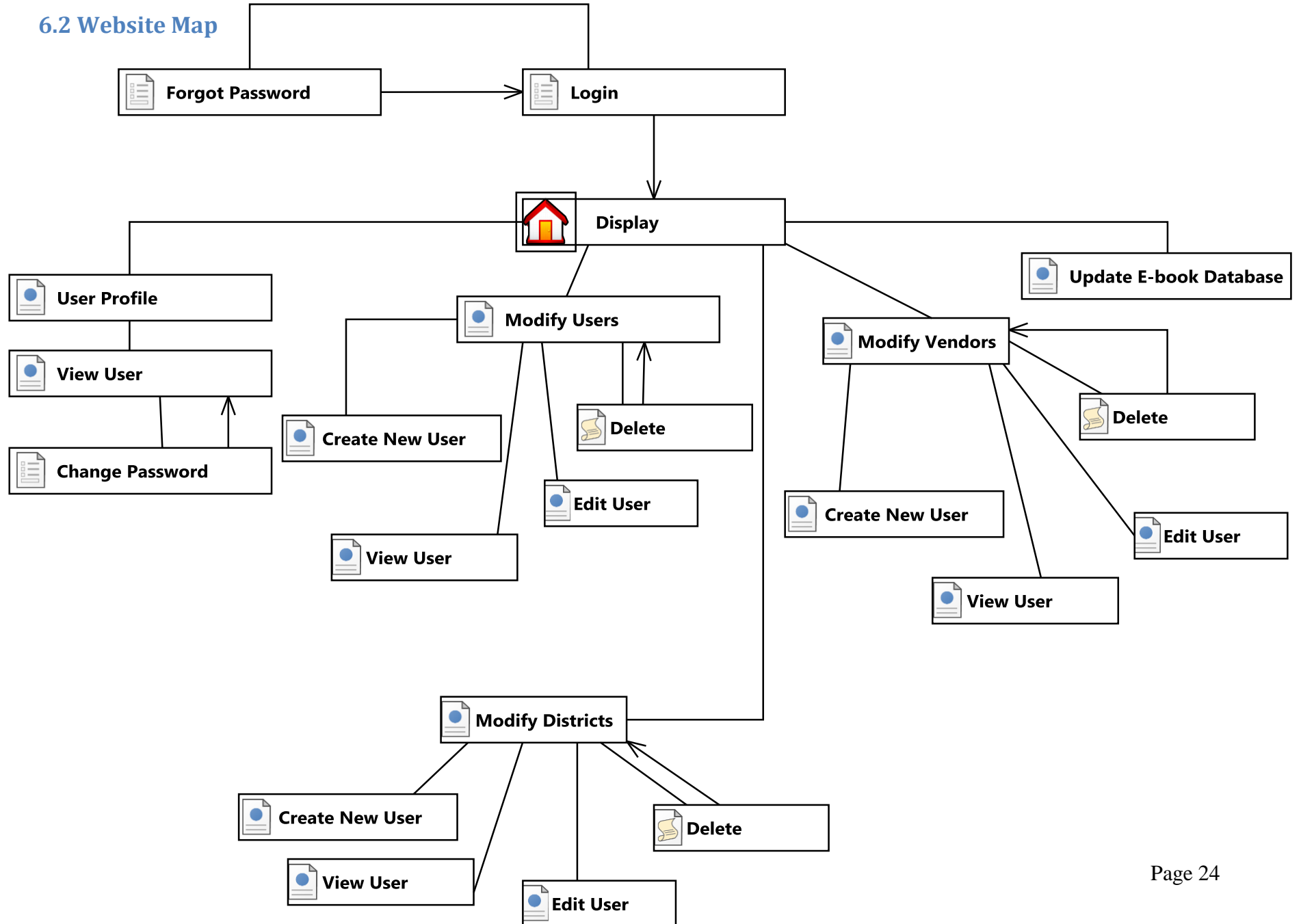


**Page Redirect** – represents a forced reroute to a new page depending on user interaction.



**Link** – Represents a page being accessible from another page.

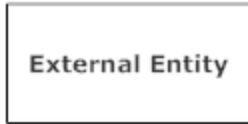
### 6.2 Website Map





## 7. Data Flow Diagrams

### 7.1 Data Flow Legend



**External entity** - Contributes data or information to the system and also receives data or information back from the system.



**Process** - Transforms or manipulates data.

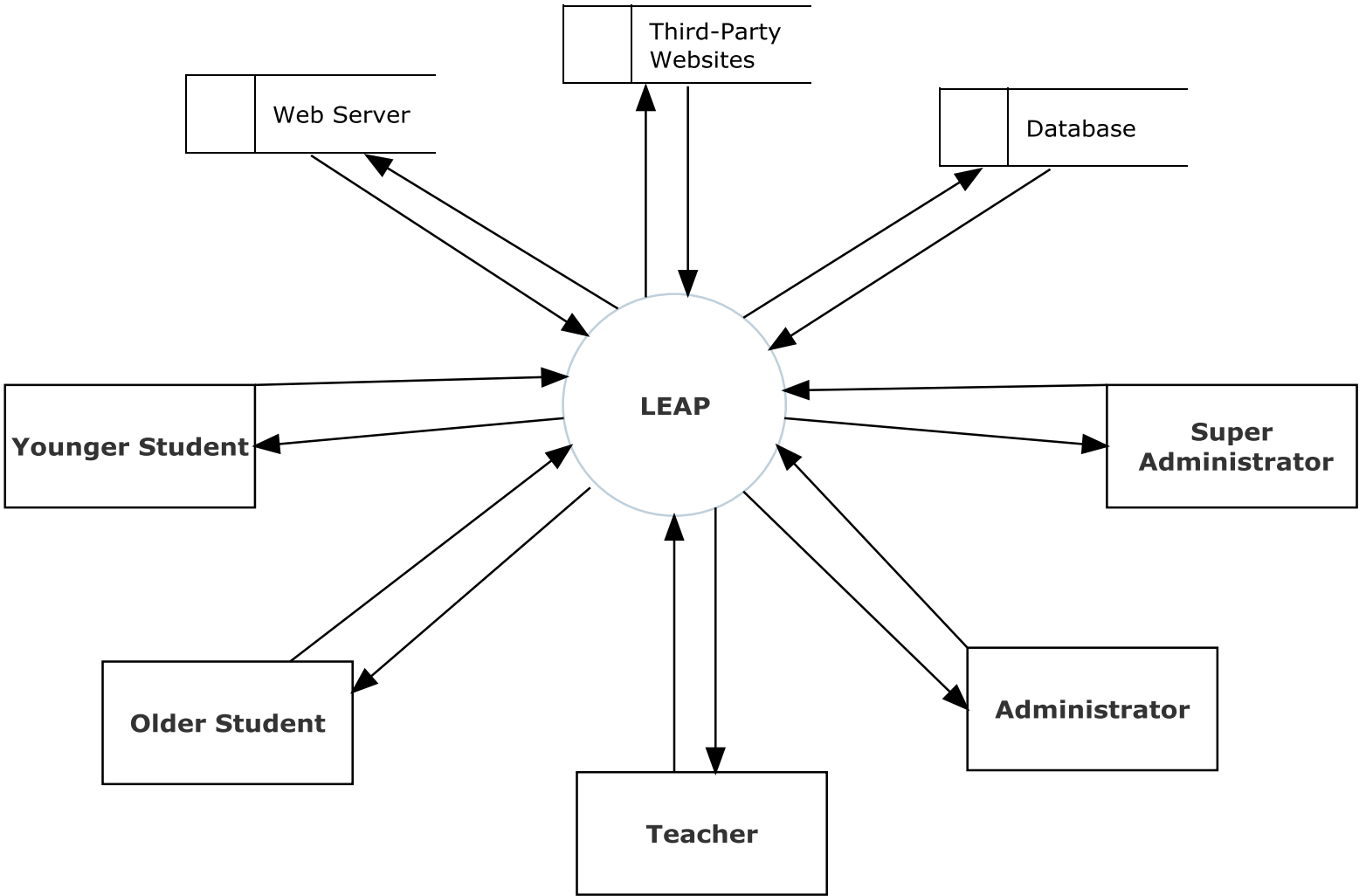


**Data Store** - Location where data is held temporarily or permanently.



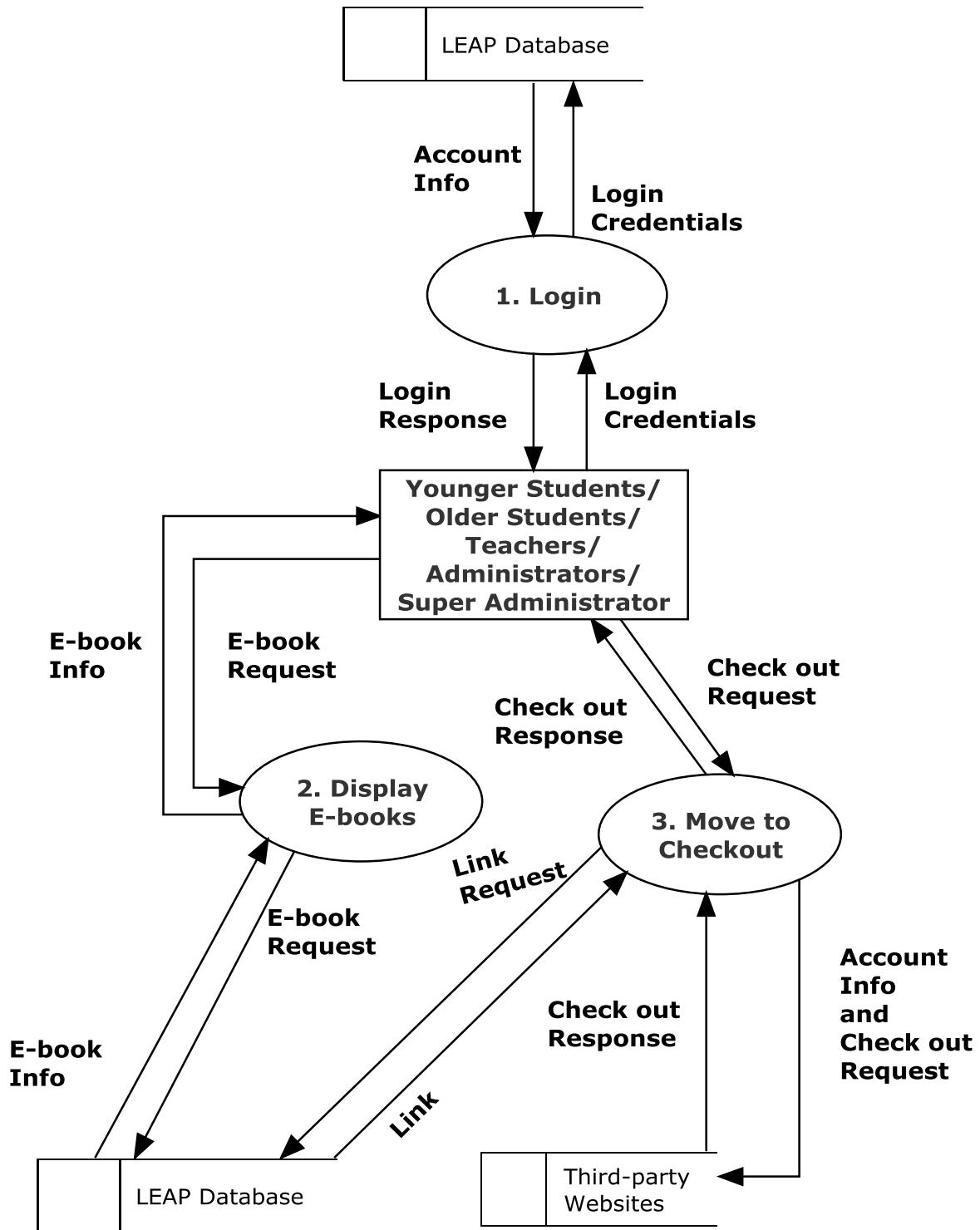
**Data Flow** - Data flowing to or from a process where X is the data.

### 7.2 Context Diagram

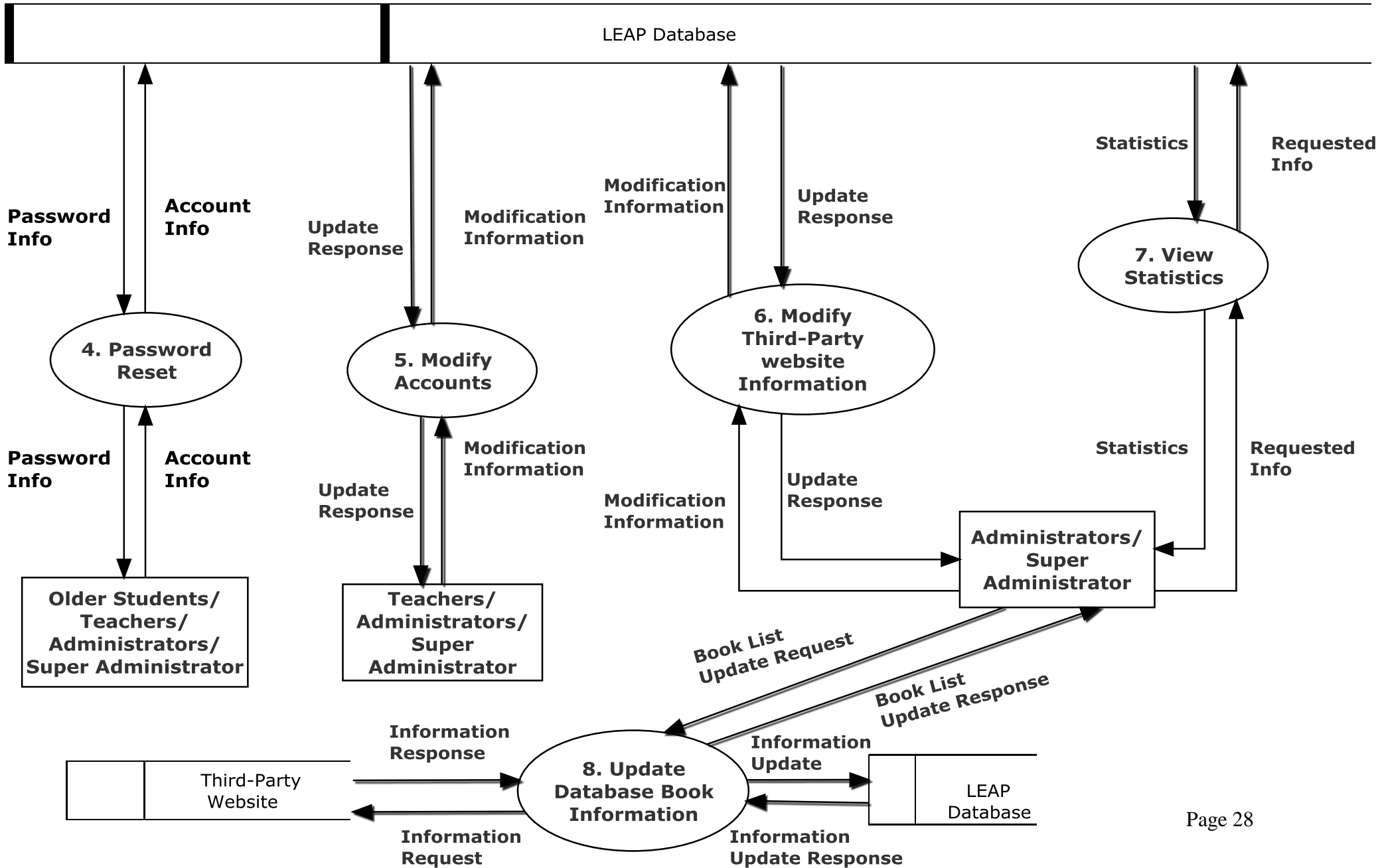


### 7.3 Level 0 Diagram

#### 7.3.1 Part 1 of the Level 0 Diagram

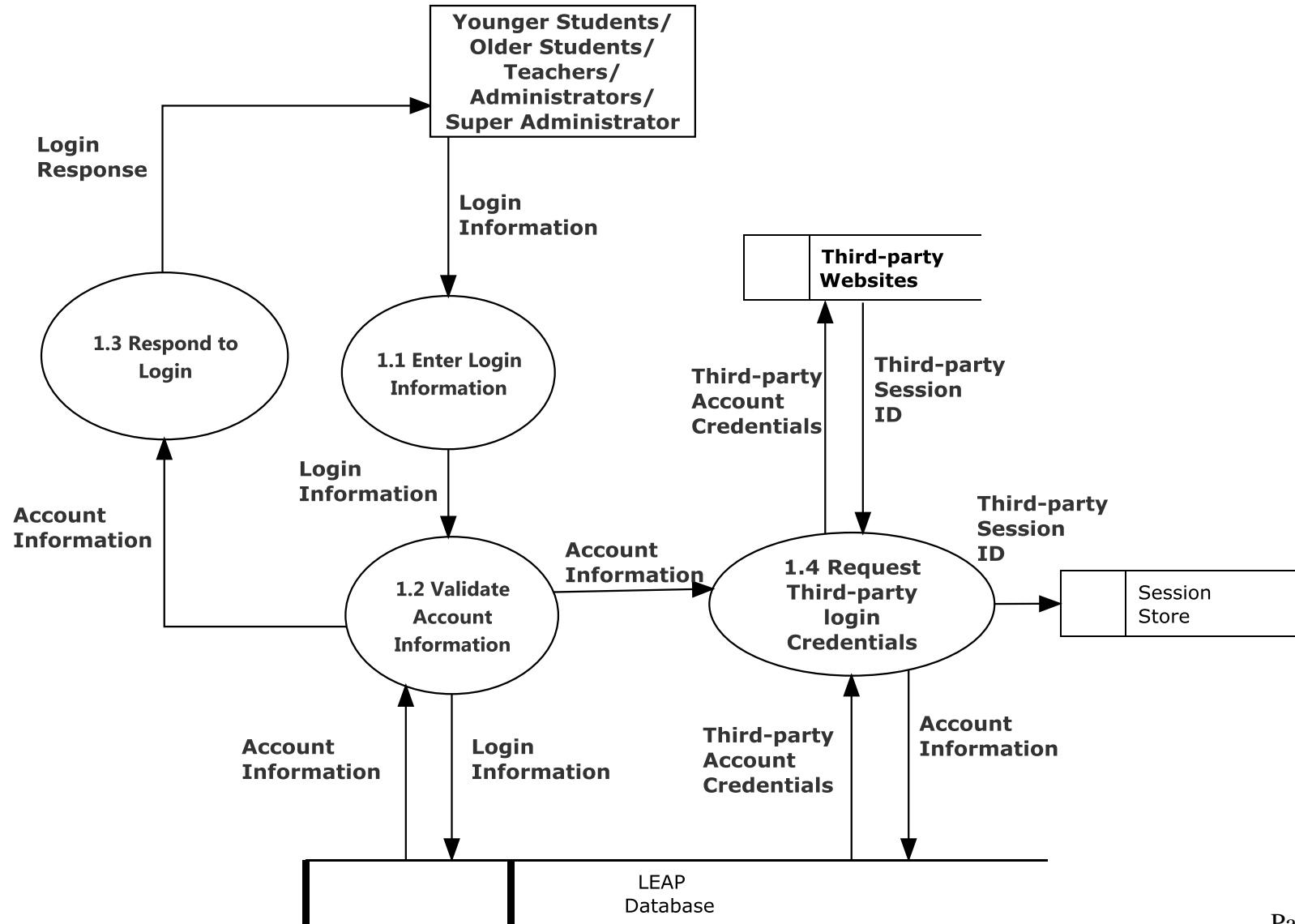


7.3.2 Part 2 of the Level 0 Diagram

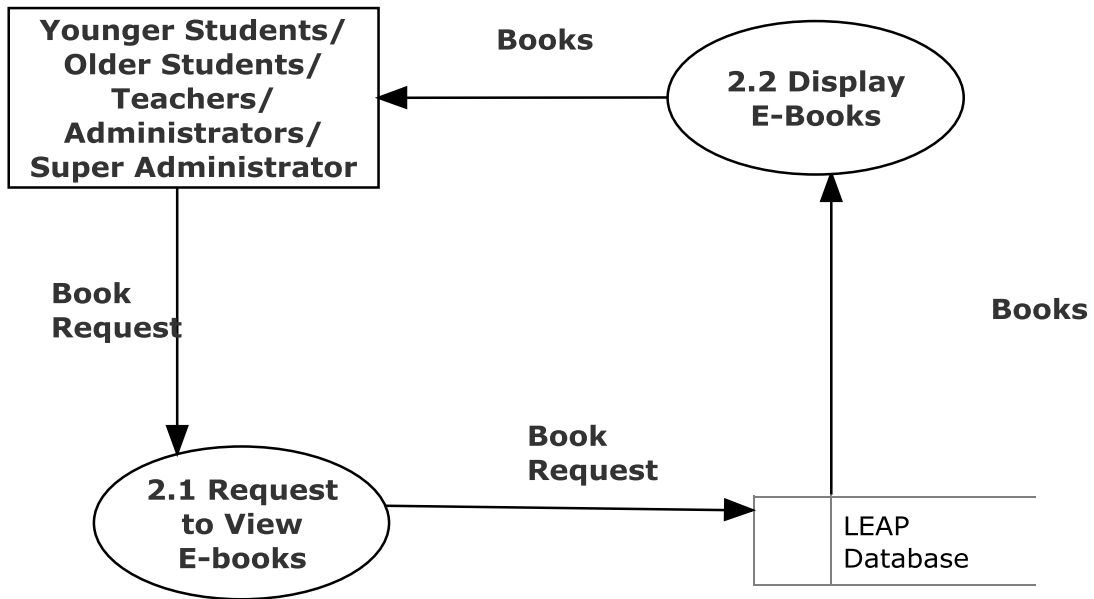


### 7.4 Level 1 Diagrams

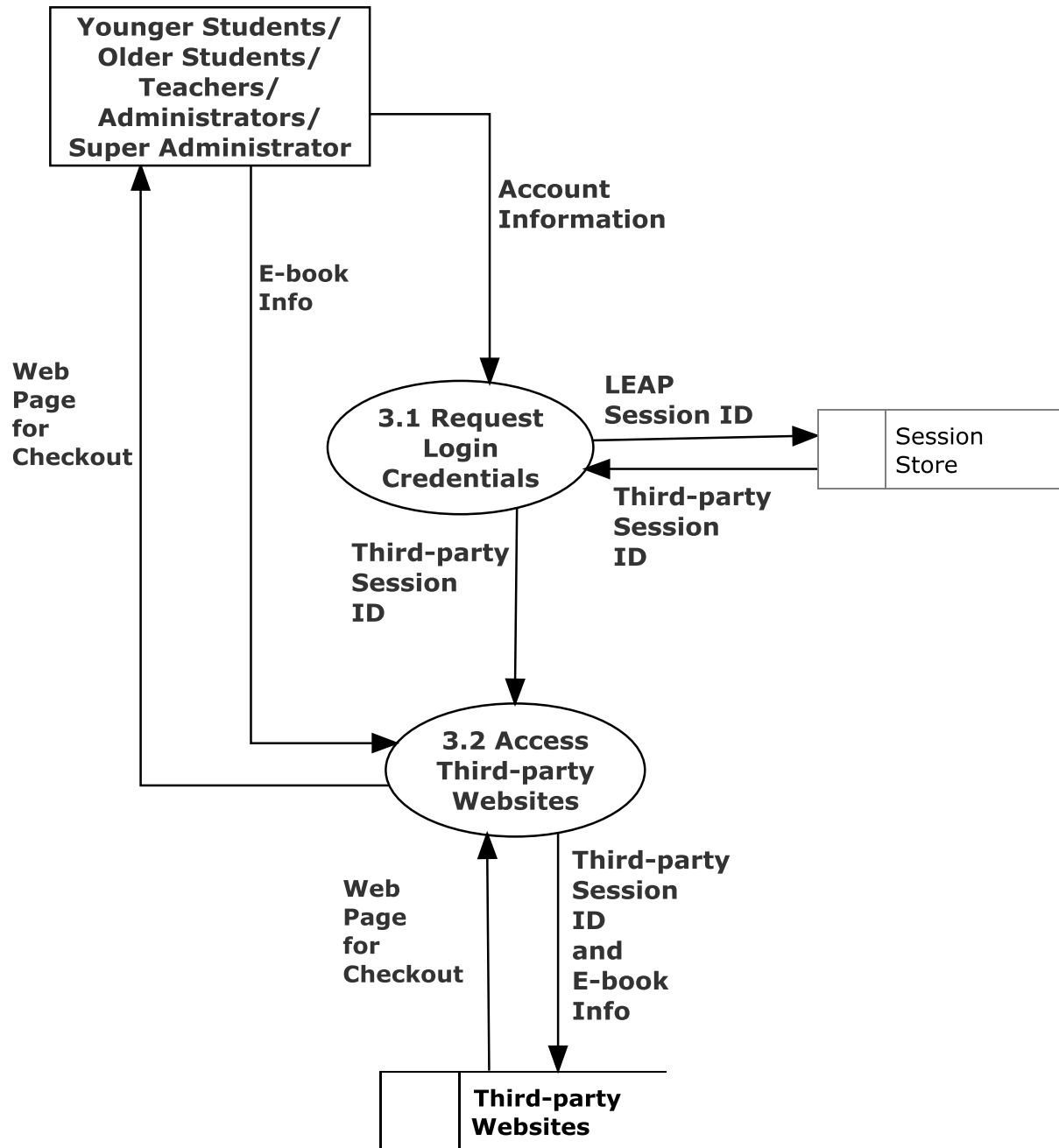
#### 7.4.1 Login



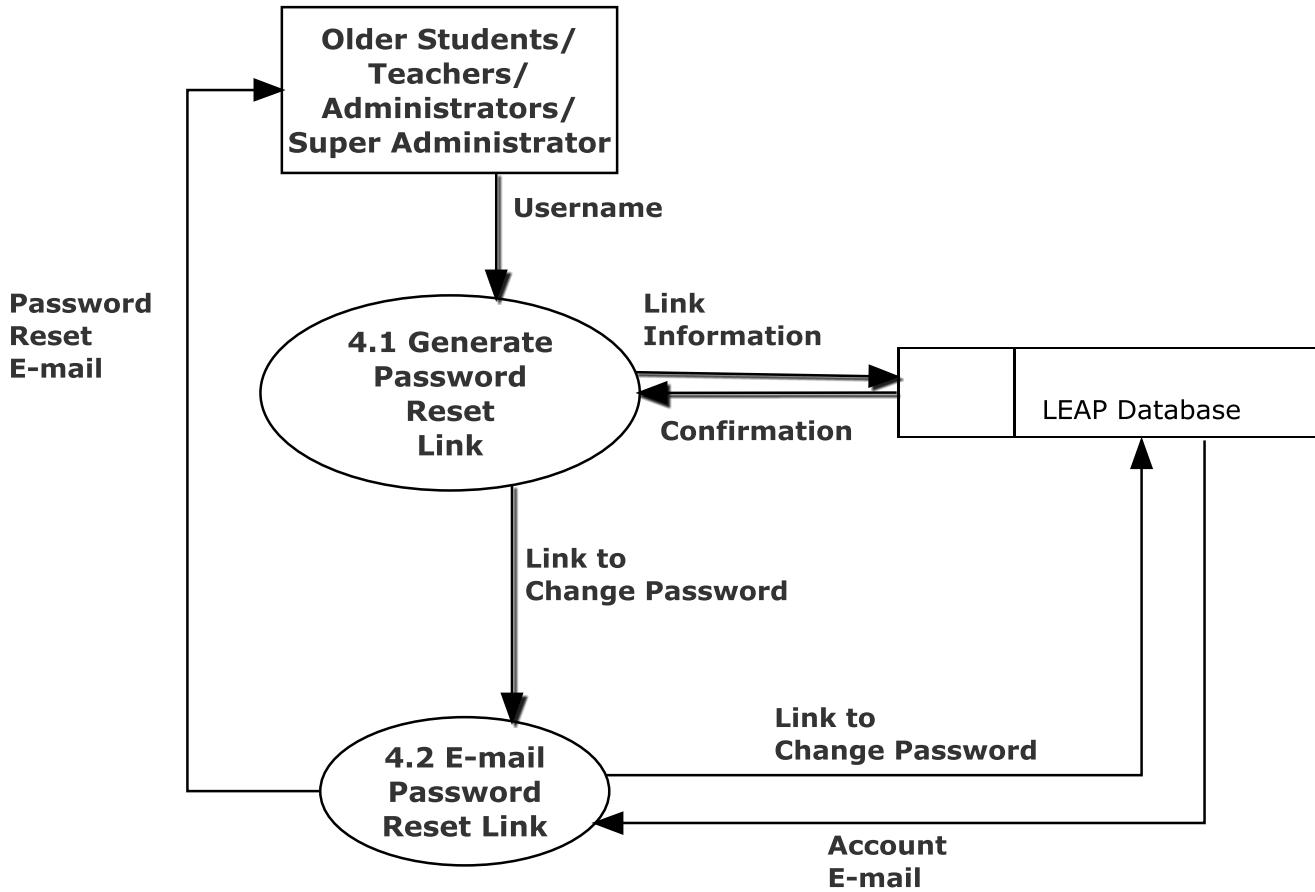
### 7.4.2 Display E-books



### 7.4.3 Move to Checkout

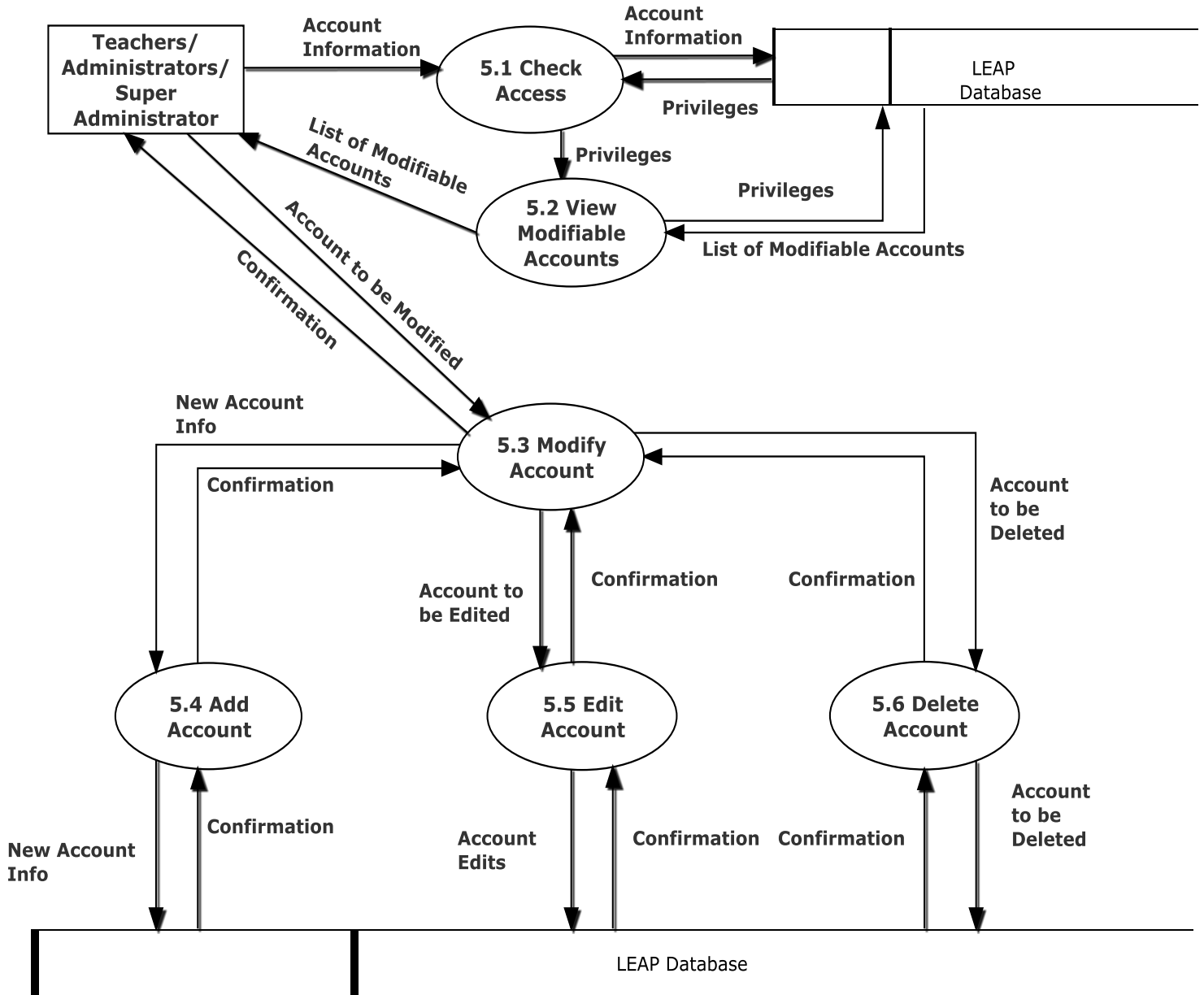


### 7.4.4 Password Reset

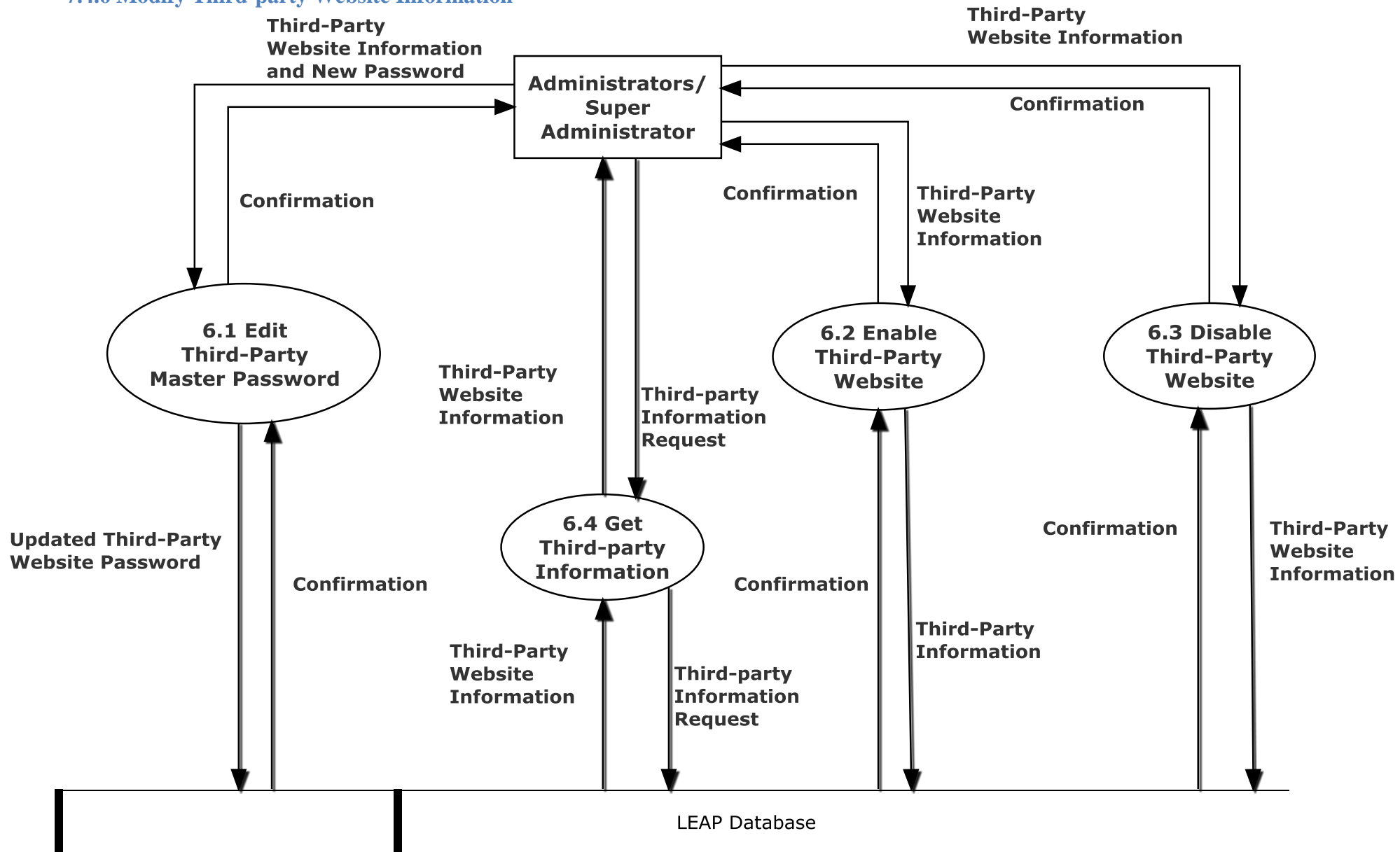




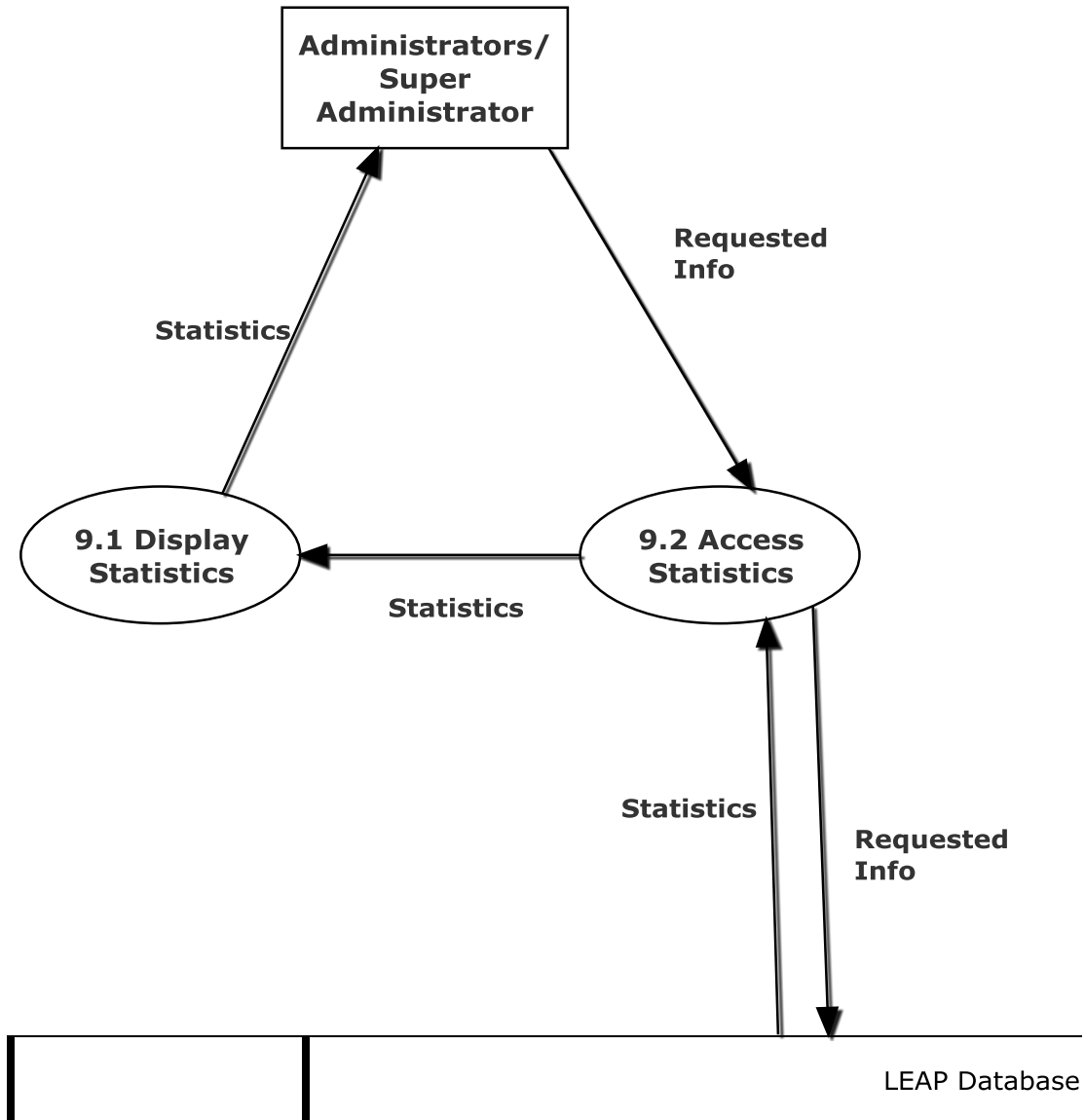
### 7.4.5 Modify Accounts



### 7.4.6 Modify Third-party Website Information

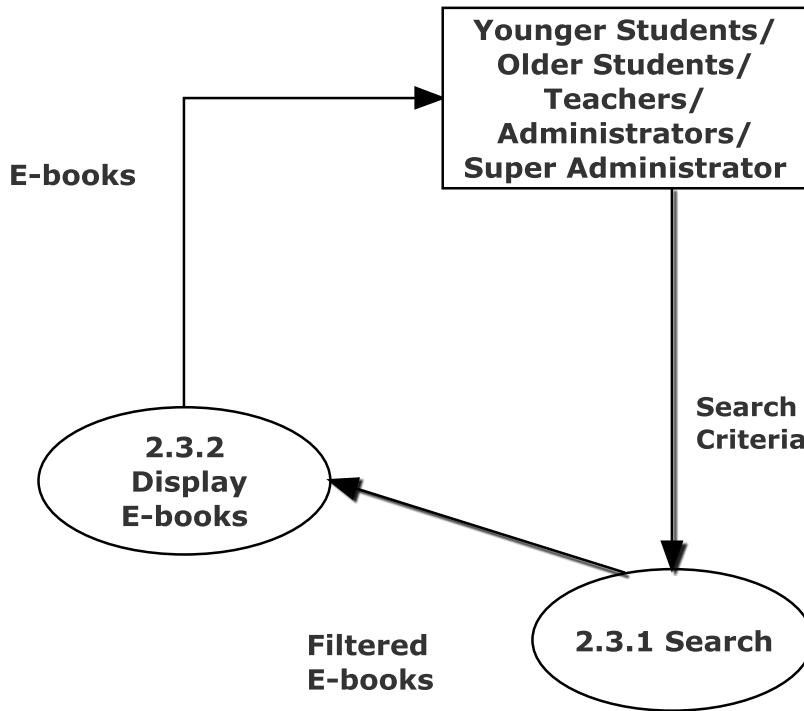


7.4.7 View Statistics

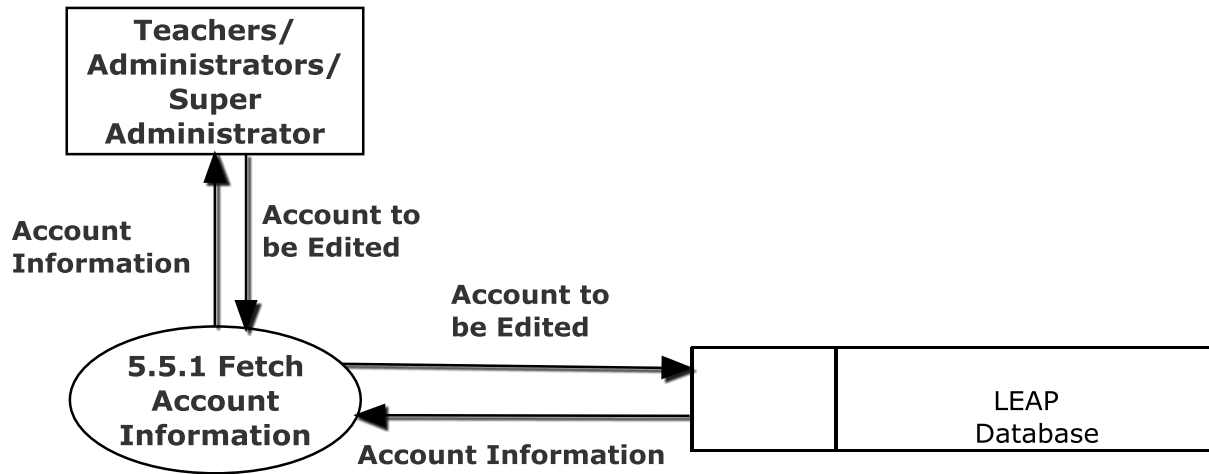


## 7.5 Level 2

### 7.5.1 Display E-books (2.3)



7.5.2 Edit Account (5.5)



## 8. Functional Requirements Inventory

The following list will detail the required functionality that LEAP will have once the system has been completely implemented. LEAP will be a web application viewable in all major internet browsers such as Internet Explorer, Mozilla Firefox, Google Chrome, and Safari. Compatibility with mobile devices is necessary.

### 8.1 Younger Students

- Will be able to login to the system
- Will be able to view e-books
- Will be able to filter e-books
- Will be able to search for e-books based on different criteria
- Will be brought to third-party websites to checkout e-books

### 8.2 Older Students

- Will be able to login to the system
  - They can also reset their passwords
- Will be able to view e-books
- Will be able to filter e-books
- Will be able to search for e-books based on different criteria
- Will be brought to third-party websites to checkout e-books

### 8.3 Teachers

- Will be able to login to the system
  - They can also reset their passwords
- Will be able to view e-books
  - They can view teacher specific e-books
- Will be able to filter e-books
- Will be able to search for e-books based on different criteria
- Will be brought to third-party websites to checkout e-books
- Will be able to modify student accounts
  - They can add, edit and delete student accounts

## 8.4 Administrators

- Will be able to login to the system
  - They can also reset their passwords
- Will be able to view e-books
  - They can view teacher specific e-books
- Will be able to filter e-books
- Will be able to search for e-books based on different criteria
- Will be brought to third-party websites to checkout e-books
- Will be able to modify student accounts
  - They can add, edit and delete student accounts
- Will be able to modify teacher accounts
  - They can add, edit, and delete teacher accounts
- Will be able to modify third-party websites
- Will be able to view statistics
- Will be able to modify scraper settings

## 8.5 Super Administrator

- Will be able to login to the system
  - They can also reset their passwords
- Will be able to view e-books
  - They can view teacher specific e-books
- Will be able to filter e-books
- Will be able to search for e-books based on different criteria
- Will be brought to third-party websites to checkout e-books
- Will be able to modify student accounts
  - They can add, edit and delete student accounts
- Will be able to modify teacher accounts
  - They can add, edit, and delete teacher accounts
- Will be able to modify third-party websites
- Will be able to view statistics
- Will be able to modify scraper settings
- Will be able to modify administrator accounts
  - They can add, edit, and delete administrator accounts

## **9. Non-Functional Requirements Inventory**

This list will detail the specific properties that will be implicitly defined in the LEAP software. This list does not specify explicit features of LEAP, but rather what LEAP is intended to do.

- LEAP will be designed to be efficient
- LEAP will be very user friendly, providing an easy to use and understand interface
- LEAP will be easy to access by all types of users
- LEAP will be have compatibility will multiple browsers, as well as a variety of mobile devices
- LEAP will be stable; meaning that all errors will be handled appropriately and we will work to ensure LEAP will not crash
- LEAP will be a secure platform



## 10. Logical Data Dictionary

### 10.1 Users Data Dictionary

Data Name	Data Type	Data Type Size	Description	Applicable to	Acceptable Input	Example	Comments
username	Varchar	1-32 characters	Username of member	log in	letters, numbers, and some special characters	Justin2good	
password	char	64 characters	password of member	log in	letters, numbers, and some special characters	2a3d2263156632 71bc93c5008e5129 faed75be1c1ae907 f820a50356577ccc86	SHA256 Hash of password
ID	int	1-11 digits max	Unique id of member	Look up	Int	1	ID one is super Admin
role	tiny int	4 bytes	Member role (younger Student)	Identify privileges	Int	2	1= Younger Student 2= Older Student 3= Teacher 4= Admin
email	Varchar	7-64 characters or null	e-mail of user	reseting password	Uppercase and lowercase English letters (a-z, A-Z) Digits 0 to 9 Characters ! # \$ % & ' * + - / = ? ^ _ ` {   } ~	<a href="mailto:j2good@yopmail.com">j2good@yopmail.com</a>	Character . (dot, period, full stop) provided that it is not the first or last character, and provided also that it does not appear two or more times consecutively.
firstname	varchar	1-32 characters	First name of member	Add users to system	ASCII char 32 (space), -, A-Z, a-z, ', ` , ASCII char 128 to ASCII char 165	Justin	
lastname	varchar	1-64 characters	Last name of member	Add users to system	ASCII char 32 (space), -, A-Z, a-z, ', ` , ASCII char 128 to ASCII char 165	Rousseau	
district	varchar	1-32 characters	School District	log in/ e-book access	Letters, space, and some special characters	South Colonie	looking into local districts
grade	tiny int	4 bytes or null	Grade level	identify role	null, 0-12	0	0 is Kindergarten, null is not student
od_username		1-32 characters or null	overdrive username	log in / e-book access	Letters, space, and some special characters or null	username	
od_password		1-32 characters or null	overdrive password	log in / e-book access	Letters, space, and some special characters or null	password	
od_auth_code		1-1024 characters or null	overdrive authorization code so we can log the user in	log in / e-book access	Letters, space, and some special characters or null	jhgeohge5246424rgoq	

### 10.2 Third Party websites Data Dictionary

Data Name	Data Type	Data Type Size	Description	Applicable to	Acceptable Input	Example	Comments
name	varchar	1-32 characters	The unique identifying name for a vendor	Grabbing books unique to a user's available vendors	string	Gale	
active	bit	1	Indicates whether or not a vendor is in the "active" state	If we are pulling books from this website or not	bit flag	0	
username	varchar	1-32 characters	Username for the given vendor	Logging into the website to pull books	string	g_username	can be null
password	varchar	1-128 characters	Password for the given vendor	Logging into the website to pull books	string	g_password	can be null; If there is "password" in the field, sql will use RIJNDAEL 256 encryption

### 10.3 E-books Data Dictionary

Data Name	Data Type	Data Type Size	Description	Applicable to	Acceptable Input	Example	Comments
ID	int	1-11 digits max	The unique identifying number for a book	Displaying E-Books	int	1	Book id 1 would be the first book added to the system
title	varchar	1 - 256 characters	The title of the book	E-Book display	Letters, Numbers, and Symbols	Big Java	
link	varchar	1 - 256 characters	Link to the E-Book on the vendor's site	E-Book display	A valid link	<a href="http://www.rosenlearningcenter.com/book/27384723">http://www.rosenlearningcenter.com/book/27384723</a>	
image	varchar	1 - 256 characters	An image of the book	E-Book display	A proper image		
subject	varchar	1 - 64 characters	The subject of the book	E-Book display	Letters, Numbers, and Symbols	Non-Fiction	Can be null
source	varchar	1 - 32 characters	Where the book came from	E-Book display	Letters, Numbers, and Symbols	Rosen Learning Center	
author	varchar	1 - 64 characters	Books author	E-Book display	Letters, Numbers, and Symbols	Josh MacDonald	Can be null
description	varchar	1 - 1024 characters	Description of the book	E-Book display	Letters, Numbers, and Symbols	Big Java teaches you java.	Can be null
od_ident	varchar	1 - 512 characters	Identify district in overdrive	E-Book display	Letters, Numbers, and Symbols	dfdsf324234	Can be null

## 10.4 E-books Data Dictionary

Data Name	Data Type	Data Type Size	Description	Applicable to	Acceptable Input	Example	Comments
name	varchar	1-32 characters	The unique identifying name for a district	Grabbing books unique to a user's district	string	Siena	
gale_username	varchar	1-32 characters	Username for the Gale reference library	Logging a user into Gale	string	g_username	can be null
gale_password	varchar	1-32 characters	Password for the Gale reference library	Logging a user into Gale	string	g_password	can be null
od_acct	varchar	1-4 characters	Overdrive Identifier	Logging a user into Overdrive	string	3215	can be null

## 11. ER Diagrams and Relational Schema

### 11.1 ER Diagram for Users Table



**Entity**

**Entity-** Represents a table in the database



**Attribute**

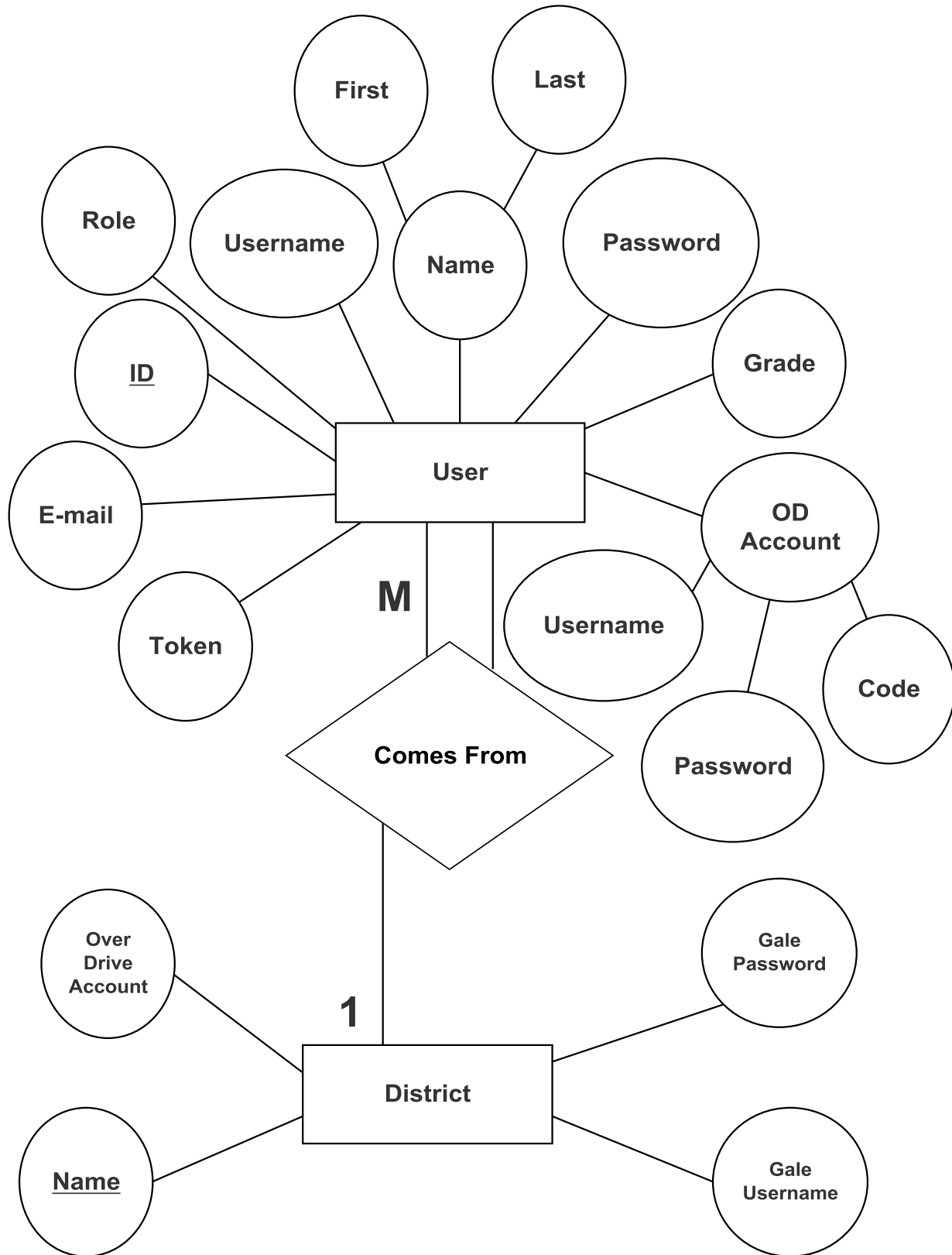
**Attribute-** Represents a field part of an entity or relationship



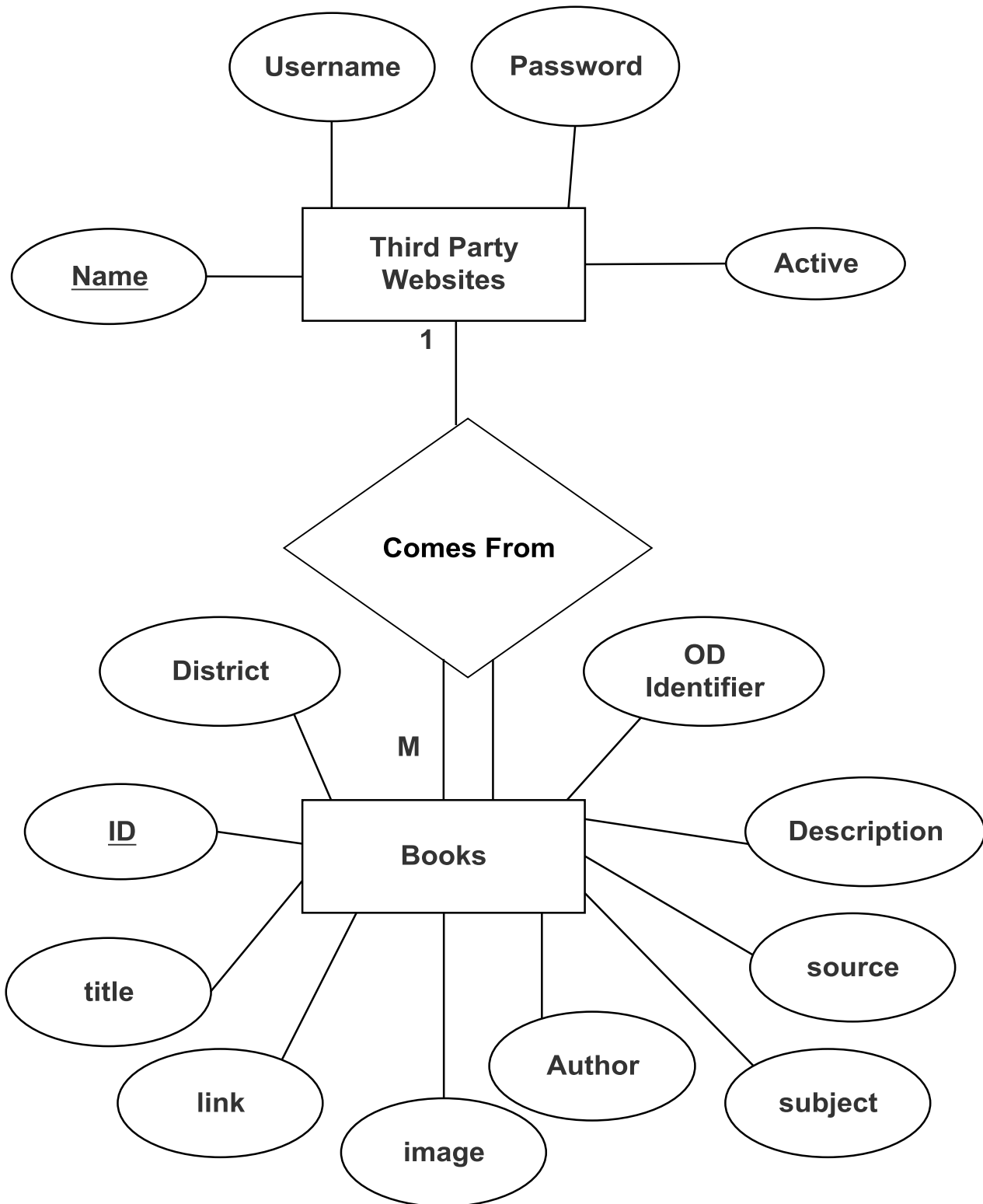
**Relationship**

**Relationship-** Represents an interaction between two entities. Relationships can be one to one, one to many, or many to many. This is indicated by either number 1 or letter usually m or n. In addition relationships can have either a single or double line connecting them which represents if they must participate in the relationship.

### 11.2 ER Diagram for Users Table

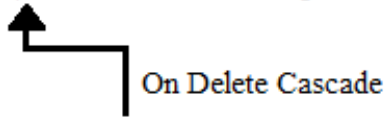


### 11.3 ER Diagram for Third Party Websites and Books Tables



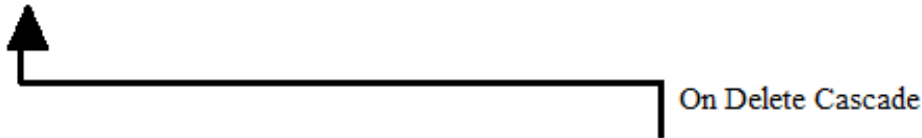
### 11.4 Relational Schema

Books(ID, title, author, link, image, description, subject, source, district, od\_ident)



Od\_format(book\_id, format\_id)

Districts(name, gale\_username, gale\_password, od\_acct)



Users(ID, username, password, role, email, firstname, lastname, district, grade, od\_username, od\_password, od\_auth\_code, token)

Vendors(name, active, username, password)




## 12. User Displays

### 12.1 Login

**Welcome To Leap**

**Username**

**Password**






**Welcome To Leap**

**Username**  
 ✖  
The Username is required

**Password**  
 ✖  
The password is required



✖  
Please enter a value




Username Does Not Exist

## Welcome To Leap

**Username**

**Password**





**Login To Leap: OK!**

IP Address: ::1

User Agent: Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36

Last Activity: 1416498012

**Login To Rosen: OK!**

Session ID: JSESSIONID=83975E411445562B1AF4F9C8666B640C; Path=/

**Login To Gale: OK!**

Session ID: JSESSIONID=1C09D623B0726490EB55D08ED6538800.omni1; Path=/auth; HttpOnly

**Login To Gale Professional: OK!**

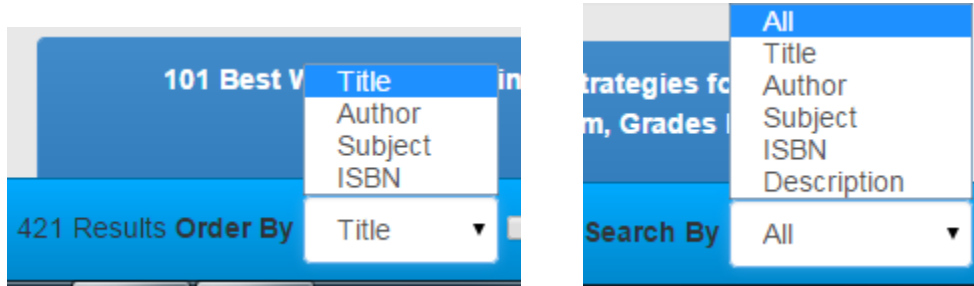
Session ID: JSESSIONID=EAD2BFAEE3EAA5D3359104B600E47C94.omni2; Path=/auth; HttpOnly

### User Information

- User\_ID: 2
- Username: student
- Password(SHA256): 264c8c381bf16c982a4e59b0dd4c6f7808c51a05f64c35db42cc78a2a72875bb
- Role: Young Student
- E-Mail: student@leap.com
- First Name: Young
- Last Name: Student
- District: Questar III
- Grade: 6



## 12.2 Display




Redirecting To Rosen Learning Center





Home Profile Admin Logout

**3 Jack Reacher Novellas (with bonus Jack Reacher's Rules)**

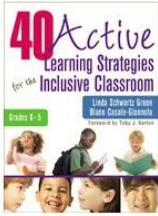


Author: Lee Child  
 Subject: Fiction  
 Description: ⓘ

**You have checked out this e-book**  
 Format: DRM free MP3 audiobook  
 Expires: 2015-04-24T22:45:00Z

[REDOWNLOAD](#) ☁

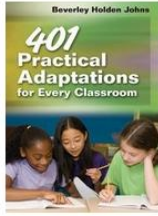
**40 Active Learning Strategies for the Inclusive Classroom, Grades K-5**



Author: Green  
 Subject: Education  
 Description: ⓘ

[View On GVRL](#) ☁


**401 Practical Adaptations for Every Classroom**



Author: Johns  
 Subject: Education  
 Description: ⓘ

[View On GVRL](#) ☁

**A Christmas Carol**

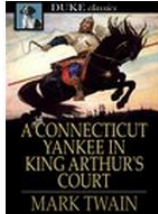


Author: Charles Dickens  
 Subject: Classic Literature  
 Description: ⓘ

Click a format to checkout from Overdrive  
 Available Formats

[Audio](#)

**A Connecticut Yankee in King Arthur's Court**




Author: Mark Twain  
 Subject: Classic Literature  
 Description: ⓘ

Click a format to checkout from Overdrive  
 Available Formats

[Adobe PDF](#) [Adobe EPUB](#)  
[Kindle](#) [Overdrive Read](#)

**A Game of Thrones**



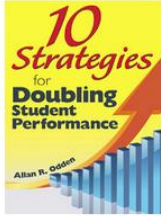

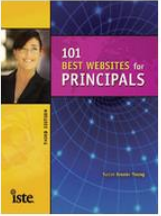



Author: George R.R. Martin  
 Subject: Fantasy  
 Description: ⓘ

Click a format to checkout from Overdrive  
 Available Formats

[Audio](#)

[Show More Results](#)



10 Strategies for Doubling Student Performance	100+ Ways to Recognize & Reward Your School Staff	101 Best Websites for Principals
		
Author: Odden	Author: Houck	Author: Brooks-Young
Subject: Education	Subject: Education	Subject: Education
Description: ⓘ	Description: ⓘ	Description: ⓘ
<a href="#">View On GVRL</a> 	<a href="#">View On GVRL</a> 	<a href="#">View On GVRL</a> 

Provides school administrators with practical, easy-to-use, and inexpensive ways to reward and recognize the efforts of their staff. More than 100 ideas are divided into three categories based on the amount of effort they require.

### 12.3 Modify Accounts

# Modify Accounts

Show **10** entries Search:

User Name	Role	Email	First Name	Last Name	Distirct	Grade	Actions
damian	Admin	dm21cris@siena.edu	Damian	Crisafulli	Hydrogen	Twelfth Grade	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
garrett	Admin	garrett@yopmail.com	garrett	allen	master		<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
joshm	Admin	jj21mcdo@siena.edu	josh	mcdonald	Hydrogen	Twelfth Grade	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
student	Older Student		sal	baisley	Hydrogen	Third Grade	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
student1	Older Student	student@yopmail.com	student	student	Hydrogen	Seventh Grade	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
student3	Younger Student	younger@yopmail.com	jim	matthews	Hydrogen	Kindergarten	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
teacher	Teacher		paul	barany	Hydrogen		<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
teacher2	Teacher	teacher@yopmail.com	mrs	teacher	Hydrogen		<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>

Displaying 1 to 8 of 8 items First Previous 1 Next Last

# Modify Accounts

**Add Record**

User Name\* :

Password\* :

Role\* :

Email :

First Name\* :

Last Name\* :

Distirct\* :

Grade :

Od username :

Od password :

# Modify Accounts

Edit Record	
User Name* :	<input type="text" value="joshm"/>
Password* :	<input type="password" value="....."/>
Role* :	<input type="text" value="Admin"/> x v
Email :	<input type="text" value="jj21mcdo@siena.edu"/>
First Name* :	<input type="text" value="josh"/>
Last Name* :	<input type="text" value="mcdonald"/>
Distirct* :	<input type="text" value="Hydrogen"/> x v
Grade :	<input type="text" value="Twelfth Grade"/> x v
Od username :	<input type="text"/>
Od password :	<input type="password"/>
<input type="button" value="Update changes"/> <input type="button" value="Update and go back to list"/> <input type="button" value="Cancel"/>	

# Modify Accounts

Record Record	
User Name :	joshm
Password :	Hidden!
Role :	4
Email :	jj21mcdo@siena.edu
First Name :	josh
Last Name :	mcdonald
Distirct :	Hydrogen
Grade :	12
Od username :	
Od password :	
Od auth code :	Hidden!
Token :	Hidden!
<input type="button" value="Back to list"/>	

### 12.4 Modify Vendors

# Modify Vendors

Show **10** entries Search:

Name	Active	User Name	Password	Actions
Gale	1	nysl_ca_capreg	*****	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
Overdrive	1		*****	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
Rosen	1	crbores	*****	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>

Search Name  Search Active  Search User Name  Search Password

Displaying 1 to 3 of 3 items   1

# Modify Vendors

## Add Record

Name\* :

Active\* :

User Name :

Password :

# Modify Vendors

## Edit Record

Name\* :

Active\* :

User Name :

Password :





The page at oraserv.cs.siena.edu says:

Are you sure that you want to delete this record?

Home Profile Admin Logout

# Modify Vendors

Show **10** entries Search:

Name	Active	User Name	Password	Actions
Gale	1	nysl_ca_capreg	*****	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
Overdrive	1		*****	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
Rosen	1	crbores	*****	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>

Search Name  Search Active  Search User Name  Search Password

Displaying 1 to 3 of 3 items First Previous 1 Next Last

## 12.5 Modify Districts

# Modify Districts

Show **10** entries Search:

Name	Gale Username	Gale Password	OD Account	Actions
Hydrogen	capreg_ascd	*****	4425	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
master	capreg_ascd	*****	4425	<input type="button" value="View"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>

Search Name  Search Gale Username  Search Gale Password  Search OD Account

Displaying 1 to 2 of 2 items First Previous 1 Next Last

# Modify Districts

**Add Record**

Name* :	<input type="text"/>
Gale Username :	<input type="text"/>
Gale Password :	<input type="text"/>
OD Account :	<input type="text"/>

# Modify Districts

**Edit Record**

Name* :	<input type="text" value="Hydrogen"/>
Gale Username :	<input type="text" value="capreg_ascd"/>
Gale Password :	<input type="text" value="*****"/>
OD Account :	<input type="text" value="4425"/>

## 12.6 Profile

# Profile

<b>Username</b>	damian
<b>E-mail</b>	dm21cris@siena.edu
<b>First Name:</b>	Damian
<b>Last Name:</b>	Crisafulli
<b>District:</b>	Hydrogen
<b>Grade</b>	12

[Change Password](#)

# Change

**Old Password**

**New Password**

**Re-enter New Password**

[Submit](#)

# Change

**Old Password**

 ✘  
Old password is required

**New Password**

 ✘  
New password is required

**Re-enter New Password**

 ✘  
Re-enter password is required

**Submit**

Incorrect Old Password!

# Change

**Old Password**

**New Password**

**Re-enter New Password**

**Submit**

## 12.7 Forgot

# Reset Password Form

Enter your username

Reset Password

Back

# Reset Password Form

Enter your username

Reset Password

Back

Please enter a valid username!

# Reset Password Form

Enter your username

Reset Password

Back

We have sent you an email containing the necessary steps to reset your password.



LEAP Administrator <leap-admin@siena.edu>

3:30 PM (2 m)

to me ▾

Dear joshm,  
Thank you for inquiring about resetting your password. You can find a link to reset your password here:

[http://oraserv.cs.siena.edu/~perm\\_omega/project/forgot/reset?tk=5RWzUIKmcxzNwLsbqtpK1kRh7fGvR4&usid=7](http://oraserv.cs.siena.edu/~perm_omega/project/forgot/reset?tk=5RWzUIKmcxzNwLsbqtpK1kRh7fGvR4&usid=7)

...

## Reset your password

Reset your password

## Reset your password

Reset your password

The given passwords did not match!

## Reset your password

Invalid length of password given, use between 6 and 64 characters.

You have successfully changed your password!

Click the button to go back

### 13. Testing Requirements

Each functional requirement will be tested according to our software development model; the agile scrum methodology. The tests will be conducted in different web browsers, such as Mozilla Firefox, Google Chrome, Internet Explorer, and Apple Safari. Additionally, tests will be conducted on mobile devices. Upon completion of an item, we will do unit testing or functional testing as needed. We will also conduct overall system testing and any necessary regression testing as more items are developed. Towards the end of our development cycle, we will be coordinating with our clients to achieve beta testing. This will include students that will use the system upon completion, enabling us to also receive feedback on any non-functional requirements.

## **14. Future Improvements**

As a result of the time constraint on our project, we were unable to complete the view statistics portion of our project. An improvement that could be made to LEAP would be to add statistic generating functionality to students and the e-books that they view.

Initially, we were intending to directly log users in to Overdrive using an API key provided by that company. However, our application for that API key was denied due to us not being a direct part of either Questar III or BOCES. As a result, users must log-in to Overdrive the first time they want to checkout a book and enter credentials that are displayed by LEAP on the same page. In addition, they must check a box that allows LEAP to remember that information. After that first attempt, the user will never have to do so again; they will instead be prompted to click login on an OverDrive page that was already filled out. With the API, however, this first log in would not be necessary, nor would any subsequent login clicks as the user would be directly logged in to OverDrive upon signing in to LEAP.



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## **15.2 Appendix B: Source of Information**

Our clients, J'aimé Pfeiffer and Jen Cannell will serve as our primary sources of information throughout the project. We will actively communicate with them to ensure that the project meets all of their requirements and specifications. Additionally, we will use our professors, Dr. Lim and Dr. Fryling as resources for information that cannot be provided by the client

### 15.3 Appendix C: Glossary of Terms

**Activity Diagram:** A flow chart to represent the flow from one activity to another activity. The activity can be described as an operation of the system.

**Administrators:** A user type of LEAP defined in the User Case Narrative

**BOCES:** Boards of Cooperative Educational Services

**Chrome:** A web browser created by Google Inc.

**Data Dictionary:** A set of information describing the contents, format, and structure of a database and the relationship between its elements, used to control access to and manipulation of the database.

**Data Flow Diagram:** A representation of how data will move and interact throughout a system.

**Firefox:** A web browser created by the Mozilla Foundation.

**GB:** Gigabyte

**GHz:** Gigahertz

**Internet Explorer:** A web browser created by Microsoft Inc.

**L.E.A.P:** Lightweight E-Book Access Platform, this software project.

**Safari:** A web browser created by Apple Inc.

**UML Deployment Diagram:** Used to visualize the topology of the physical components of a system where the software components are deployed.

**UML Use Case Diagram:** A diagram created to represent users' interactions with a system.

**Younger Students:** A user type of LEAP defined in the User Case Narrative

**Website Map:** Is a list of pages of a web site accessible to users.

### 15.4 Appendix D: Timeline

ID	Task Name	Start	Finish	Duration	Jan 2015			Feb 2015				Mar 2015				Apr 2015					
					1/11	1/18	1/25	2/1	2/8	2/15	2/22	3/1	3/8	3/15	3/22	3/29	4/5	4/12	4/19	4/26	
1	Detailed Design	1/12/2015	3/11/2015	43d																	
2	Detailed Design Documents Due	1/12/2015	3/6/2015	40d																	
3	Detailed Design Presentation	3/11/2015	3/11/2015	1d																	
4	Acceptance Test	3/12/2015	4/20/2015	28d																	
5	Acceptance Test Documents Due	4/20/2015	4/20/2015	1d																	
6	Acceptance Test Presentation	4/20/2015	4/20/2015	1d																	
7	Client Meetings	1/12/2015	4/20/2015	71d																	
8	Team Meetings	1/12/2015	4/27/2015	76d																	

### 15.5 Appendix E: Link for Code

In the interest of security, we have not included the code for LEAP in this document. However, the code is on GitHub and any interested parties can request permission to view the source at this link:

<https://github.com/SienaCollegeSoftwareEngineering/2014-15-Team-Documentation---Omega-Tech>

However, for those wishing to visit the LEAP website, it can be accessed at this link:

[http://oraserv.cs.siena.edu/~perm\\_omega/leap](http://oraserv.cs.siena.edu/~perm_omega/leap)

## **15.6 Appendix G: Test Cases**

Test cases can be found on Omega Tech's team's website: [http://oraserv.cs.siena.edu/~perm\\_omega/documents.php](http://oraserv.cs.siena.edu/~perm_omega/documents.php)