# Lightweight E-book Access Platform

# LEAP

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**12/2/2014**

# Agenda

**Introduction**

Problem Definition

Project Progression

Sprint 1

UML Diagrams and Website Map

Data Flow Diagrams

Requirements

Data Dictionary and ER Diagrams

Test Results

Demo and Questions

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# Welcome

- Clients
  - Jen Cannell

# Introduction

- Amar Mian - Team Leader
- Garrett Allen - Lead Programmer
- Damian Crisafulli - Webmaster
- Josh McDonald - Database Administrator
- Justin Rousseau - Web Developer

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# Problem Definition

- No central point of access
- Difficult for students to remember login information
- Inconsistent interfaces

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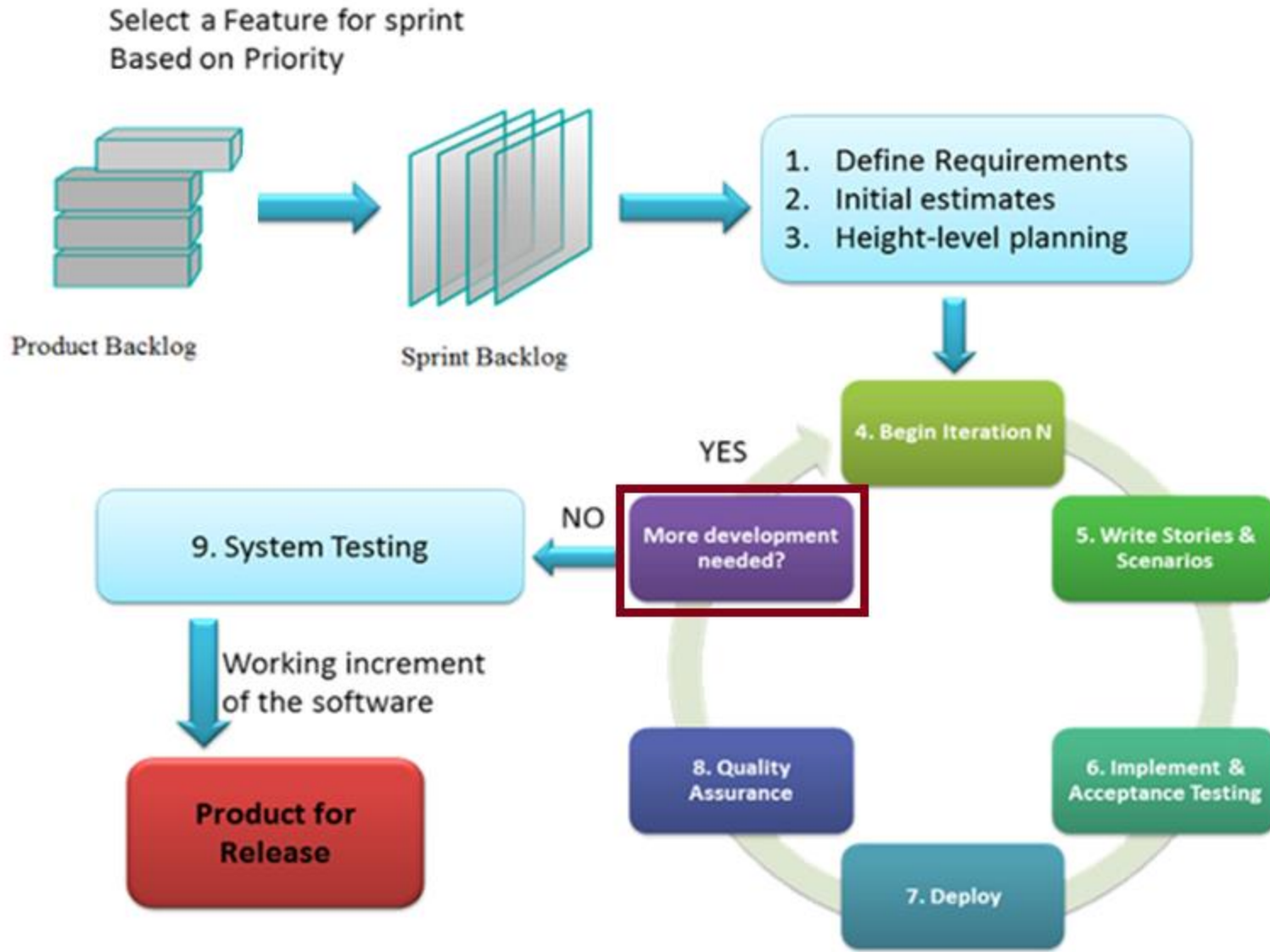
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Select a Feature for sprint
Based on Priority

Product Backlog

Sprint Backlog

1. Define Requirements
2. Initial estimates
3. Height-level planning

4. Begin Iteration N

YES

NO

More development needed?

9. System Testing

5. Write Stories & Scenarios

6. Implement & Acceptance Testing

7. Deploy

8. Quality Assurance

Working increment of the software

Product for Release

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# Sprint 1

- Log in

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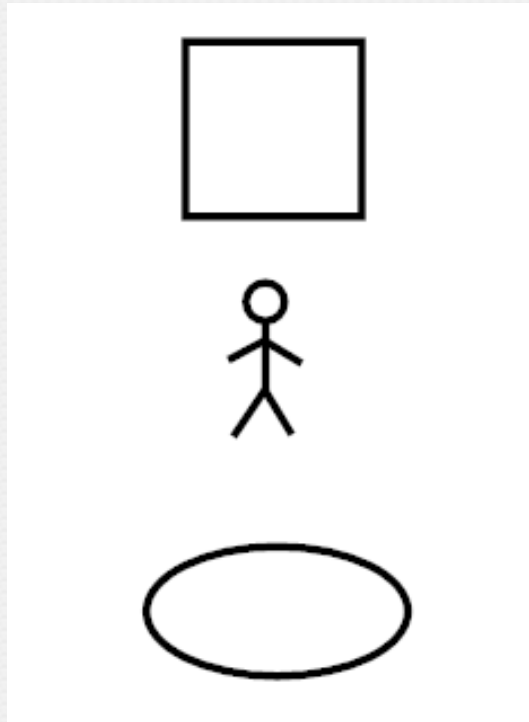Sprint 1

**UML Diagrams and Website Map**

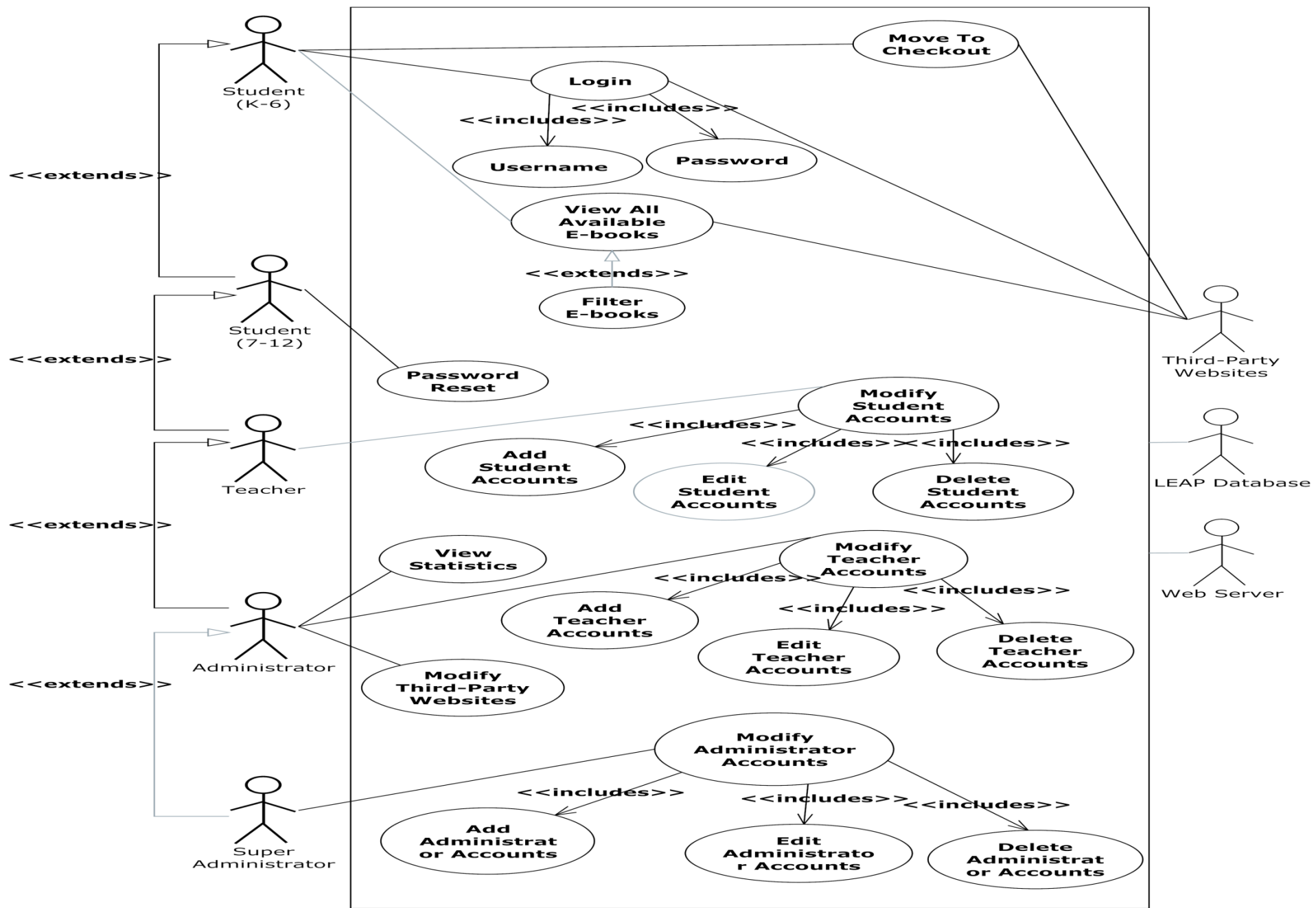Data Flow Diagrams

Requirements

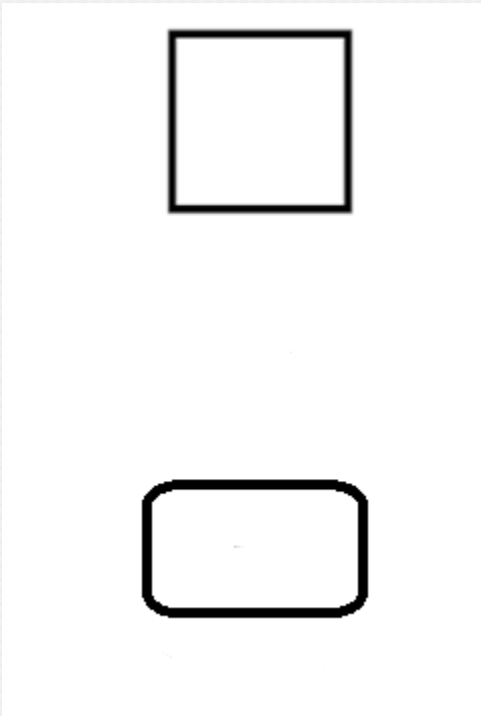Data Dictionary and ER Diagrams

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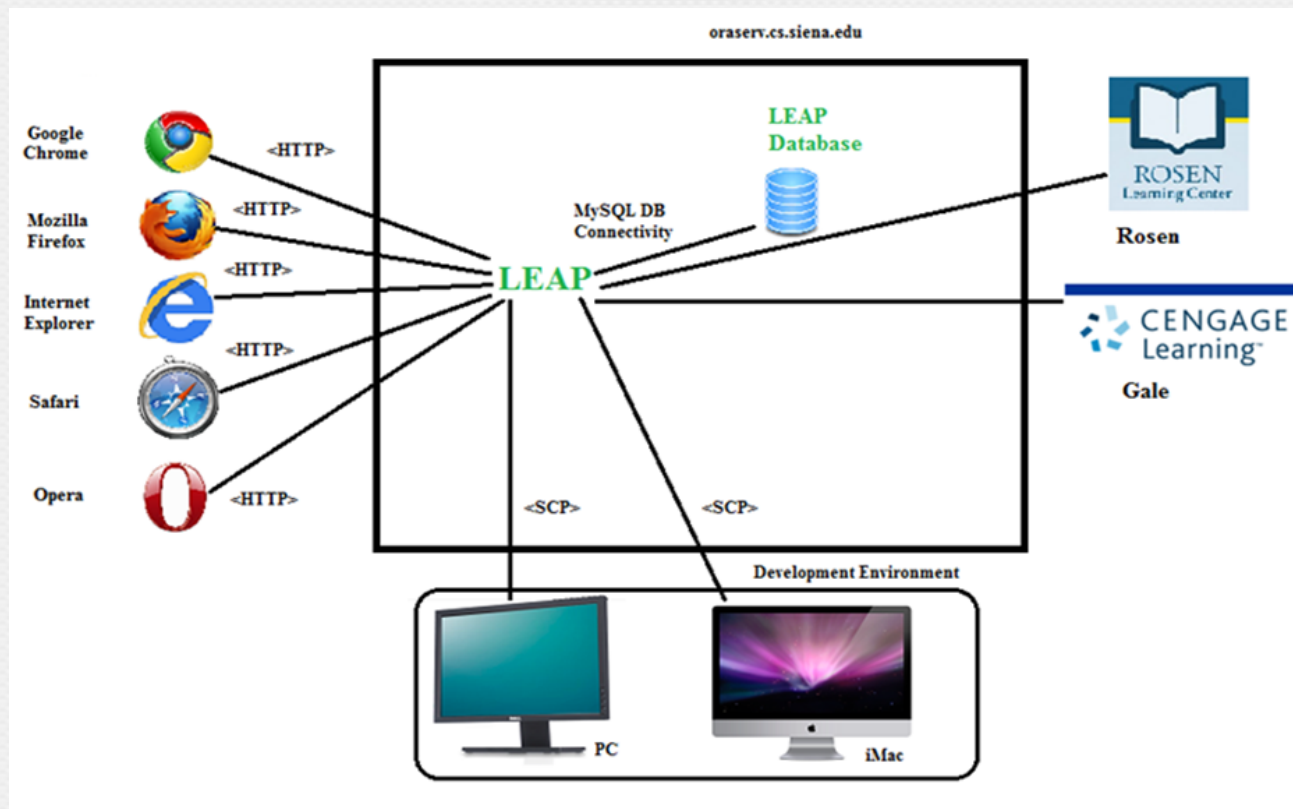
# UML Use Case Diagram Legend
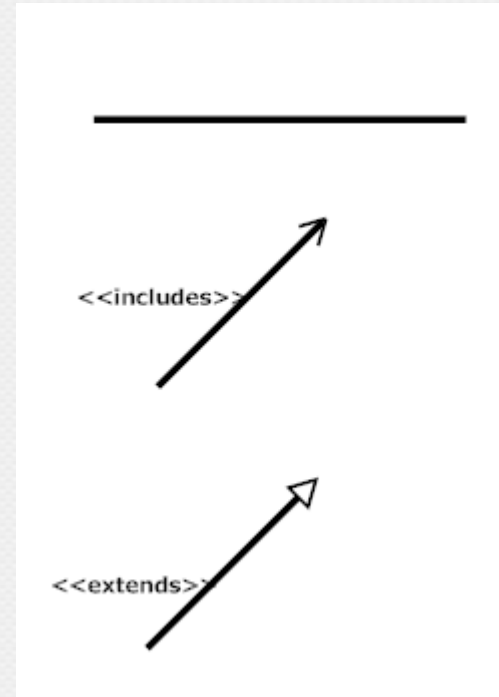
# UML Deployment Diagram Legend

# Deployment Diagram Legend

# 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.

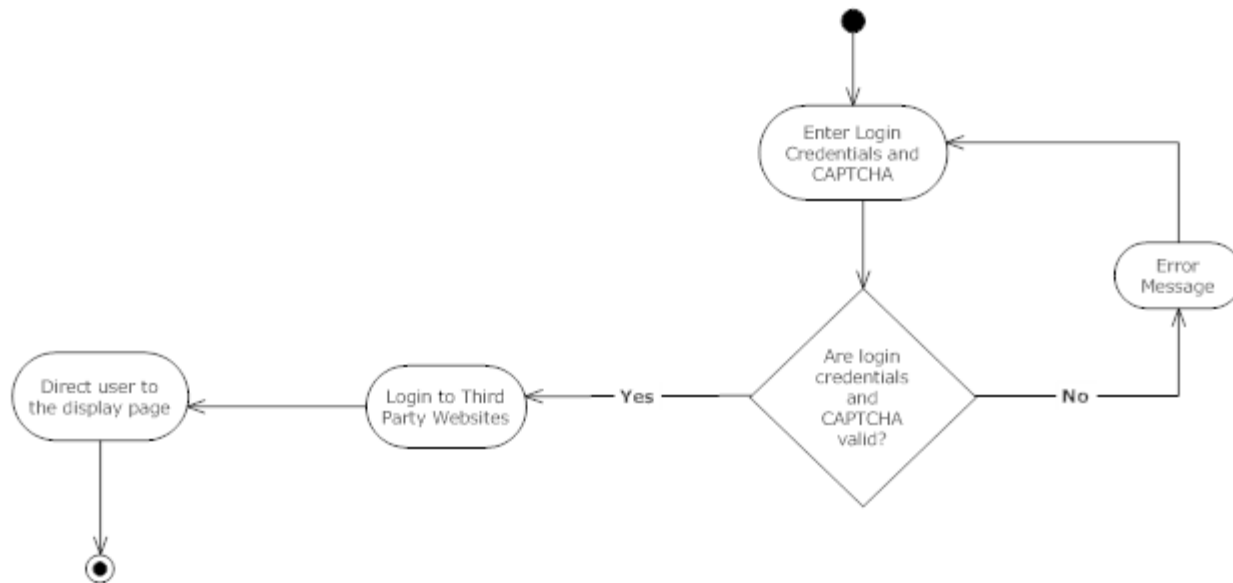**Activity Node** - Describes behaviors that will take place at this step, where activity is the behavior.

**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.

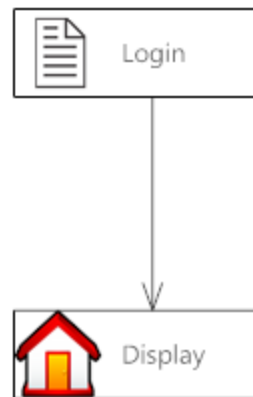# Activity Diagram

# Website Map



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

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

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# Data Flow Legend

**External entity:** Contributes data or information to the system or which receive data from it.

**Process:** Transforms or manipulates data

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

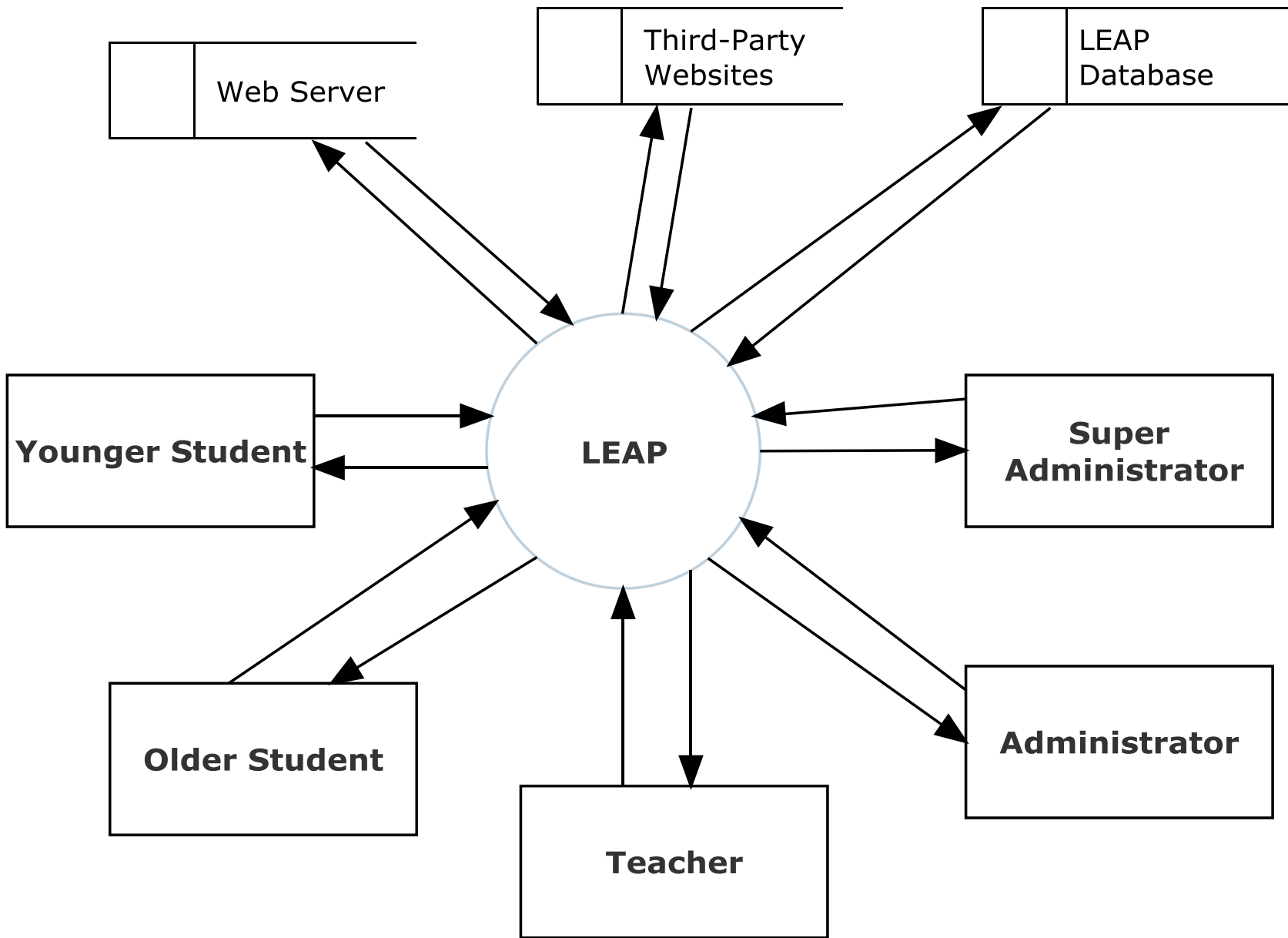**Data Flow:** Data flowing to or from a process where X is the data.

External Entity

Process

Data Store

X

# Data Flow Diagrams

**Context Diagram**

Level 0

Level 1: Login In

# Data Flow Diagrams

Context Diagram

**Level 0**

Level 1: Login In

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LEAP Database

Account Info

Login Credentials

1. Login

Login Response

Login Credentials

Younger Students/
Older Students/
Teachers/
Administrators/
Super Administrator

E-book Info

E-book Request

Check out Response

Check out Request

2. Display E-books

3. Move to Checkout

E-book Request

E-book Info

Check out Response

Account Info and Check out Request

Third-party Websites

LEAP Database

**Password Info**

**Account Info**

**Update Response**

**Modification Information**

**Modification Information**

**Update Response**

**Statistics**

**Info Request**

**7. View Statistics**

**4. Password Reset**

**5. Modify Accounts**

**6. Modify Third-Party Website Information**

**Password Info**

**Account Info**

**Update Response**

**Modification Information**

**Statistics**

**Info Request**

**Modification Information**

**Update Response**

**Older Students/ Teachers/ Administrators/ Super Administrator**

**Teachers/ Administrators/ Super Administrator**

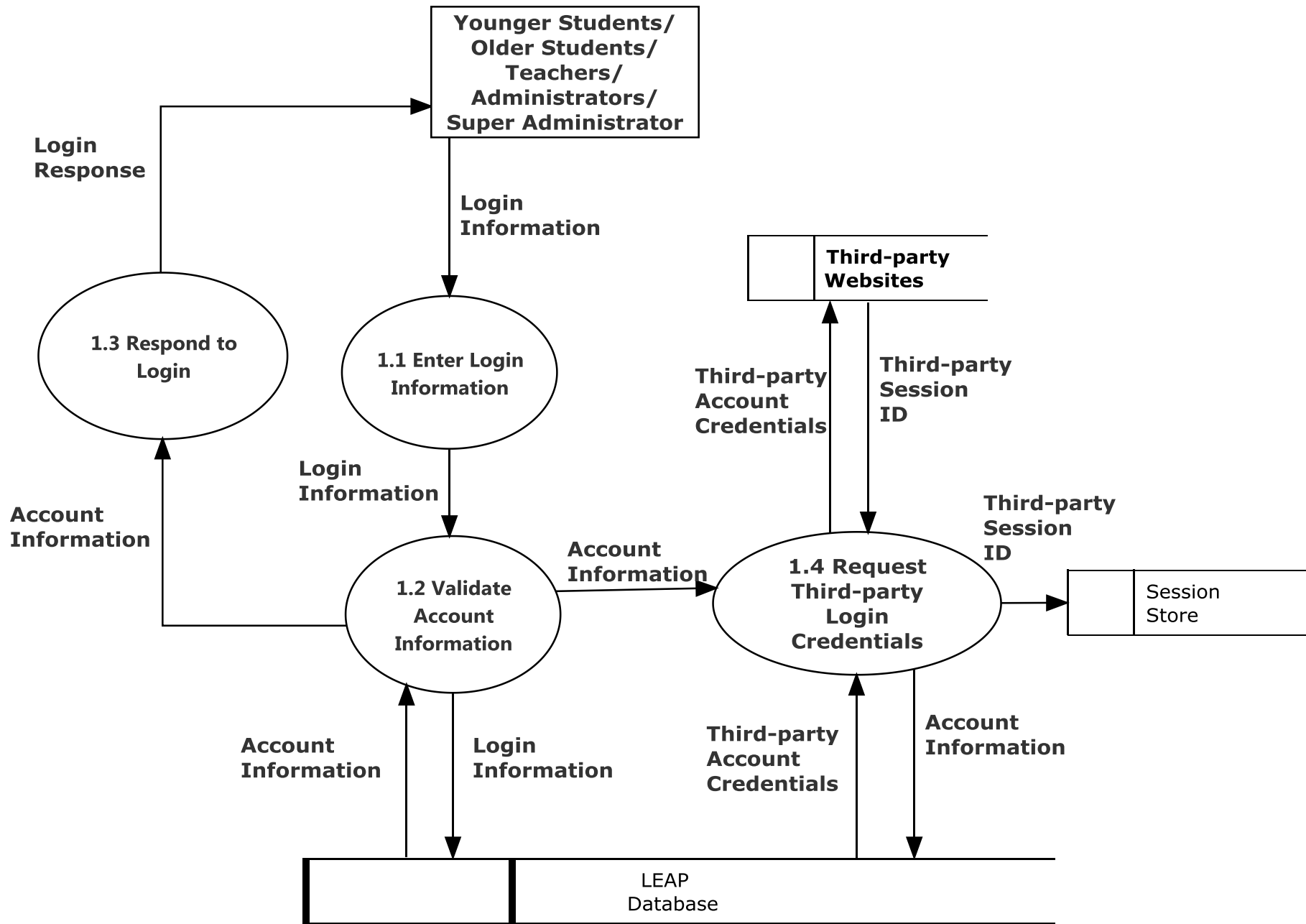**Administrators/ Super Administrator**

# Data Flow Diagrams

Context Diagram

Level 0

**Level 1: Login In**

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# Functional Requirements

- <span style="color:red">Log in</span>
- Display E-books
- Move to Check out
- Reset Password
- Modify Accounts
- Modify Third-party Websites
- View Statistics

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# Non-Functional Requirements

- Efficient
- User-friendly
- Compatible with Multiple Browsers
- Compatible with Mobile Devices
- Secure

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# Data Dictionary

| Data Name | Data Type | Data Type Size | Description | Applicaple to | Acceptable Input | Example | Comments |
|-----------|-----------|----------------|-------------|---------------|------------------|---------|----------|
| userName | Varchar | 5-32 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 | |
| userID | int | 1-32 bits | Unique id of member | Look up | Int | 1 | userID one is super Admin |
| Role | tiny int | 8 bits | Member role (younger Student) | Identify privileges | Int | 2 | 1= Younger Student 2= Older Student 3= Teacher 4= Admin |
| e-mail | 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 ! # $ % & ' * + - / = ? ^ _ ` { \| } ~ | j2good@yopmail.com | 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. |

# Data Dictionary

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| First Name | varchar | 1-30 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 | |
| Last Name | varchar | 1-60 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 | 8 bits | Grade level | identify role | null, 0-12 | 0 | 0 is Kindergarten, null is not student |

# Data Dictionary

| Data Name | Data Type | Data Type Size | Description | Applicaple to | Acceptable Input | Example | Comments |
|---|---|---|---|---|---|---|---|
| Third party website name | varchar | 1-32 characters? | third party website name | identify third party | letters and space | Rosen | looking into third party websites |
| Third party username | varchar | 1-32 characters? | third party user name | login into third party | letters, numbers, and special characters | justin2bad | |
| Third party password | varchar | 128 characters | third party password | login into third party | letters, numbers, and special characters | hahalamaDmIn | |
| Active | bit | 1 bit | 1 for in use 0 for not | log in to third party websites/ login process | 1 or 0 | 1 | |

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# ER Diagram: Users
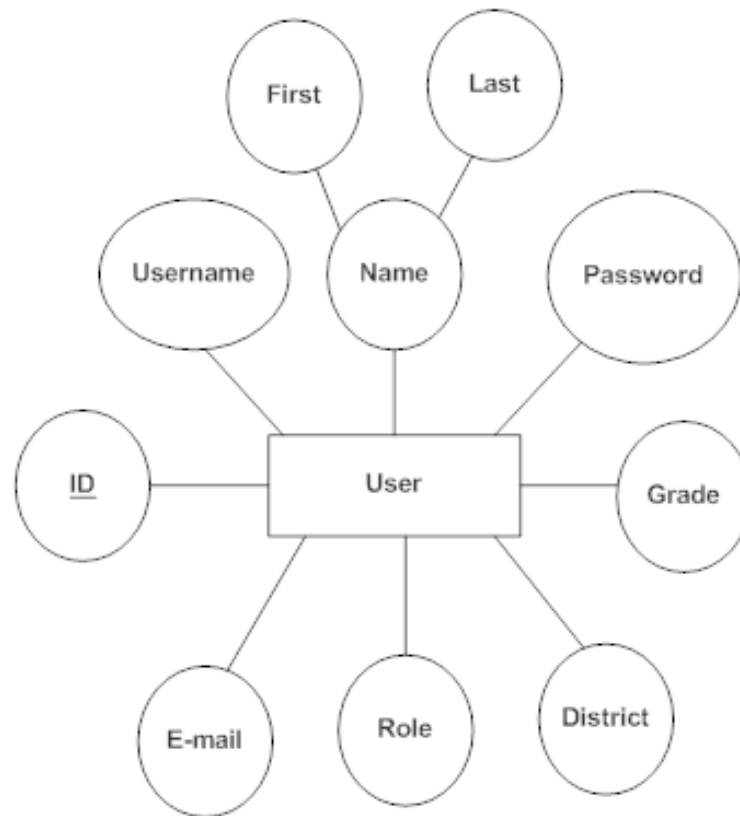
# ER Diagram: Third Party Websites
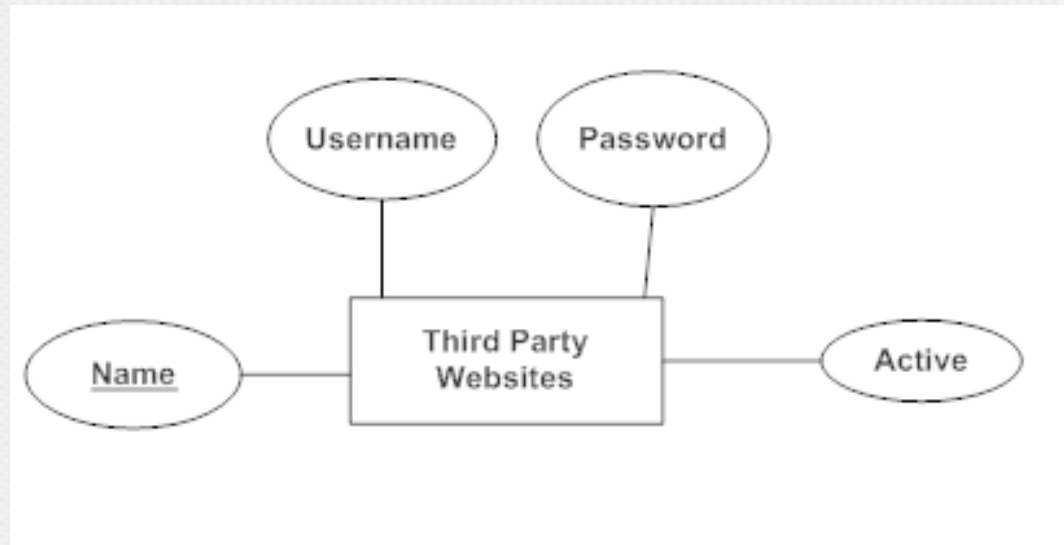
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# Sprint 1 Test Results

| | | 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 | 1.001 | Null everything | Leave everything Blank. | Press submit. | Empty Form. | Fill out username, password, and captcha | The user is notified that usename, password, and CAPTCHA are all required. | | Omega Tech | 11/24/2014 |
| P | 1.002 | Null Username Field | Leave username field blank. | Fill out the password, captcha and submit. | Empty Form. | Displays message "Please fill out username Field" | The user is notified that a username is required. | | Omega Tech | 11/24/14 |
| P | 1.003 | Null Password Field | Leave password field blank. | Fill out the username, captcha and submit. | Empty Form. | Displays message "Please fill out password field" | The user is notified that their password is required. | | Omega Tech | 11/24/14 |
| P | 1.004 | Null Username and Password Fields | Leave username and password field blank | Fill out captcha. Press submit. | Empty Form. | Diplays message "please fill out username Field." | The user is notified that their username and password is required. | | Omega Tech | 11/24/14 |
| P | 1.005 | Incorrect Password for given username. | Input incorrect Username and password combination. But correct captcha | Press submit. | Empty Form. | Displays message: Password does not match username.: | An error message is displayed at the top of the screen stating that password is incorrect. | | Omega Tech | 11/24/14 |

# Sprint 1 Test Results

| P | 1.006 | Non-existing username. | Input a username which does not exist. | Fill out an incorrect username and a password. | Empty Form. | Displays message: "Username does not exist, Contact your teacher." | An error message is displayed at the top of the screen stating that the username does not exist. | | Omega Tech | 11/24/14 |
|---|-------|------------------------|----------------------------------------|------------------------------------------------|-------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---|------------|----------|
| P | 1.007 | Correct Username and Password | Input the correct username and password. Also correct captcha | Fill out the correct username and password. | Empty Form. | No Error. Redirected to home page | The user is redirected to the home page. | | Omega Tech | 11/24/14 |
| P | 1.008 | Username length less than 5 characters. | Input a username less than 5 characters. | Fill out the correct password and CAPTCHA and press submit. | Empty Form. | Displays message: "Username must be between 5 and 50 characters." | The user is notified that the username must be between 5 and 50 characters. | | Omega Tech | 11/24/14 |
| P | 1.009 | Password length less than 5 characters. | Input a Password less than 5 characters. | Fill out the correct username and CAPTCHA and press submit. | Empty Form. | Displays message: "Password must be between 5 and 50 characters." | The user is notified that the Password must be between 5 and 50 characters. | | Omega Tech | 11/24/14 |
| P | 1.010 | Null Captcha Field | Leave CAPTCHA blank | Fill out everything except captcha | Empty Form. | Displays message:"captcha is incorrect" | The user is notfied that they should enter a value for the CAPTCHA | | Omega Tech | 11/24/14 |
| P | 1.011 | Incorrect Captcha Field | Input correct username and password, with incorrect CAPTCHA | Fill out the correct CAPTCHA | Empty Form. | Displays message:"captcha is incorrect" | An error message displayed saying: "CAPTCHA message is incorrect." | | Omega Tech | 11/24/14 |
| P | = Unit Summary | | 100% passing | 11 passed | | | | | Date of last test = | 11/24/14 |
| | 11 | tests | | 0 failed | | | | | | |

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# Demo

# Questions

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