CEN 4010 Principles of Software Engineering

Fall 2021

Milestone 4 Beta Launch and Reviews

LikU:

Group 7

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|  |  |
| --- | --- |
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| 1 | 9/28/2021 |
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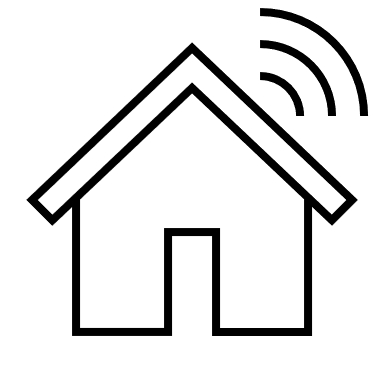
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**Product Summary**

Icon

Description automatically generated

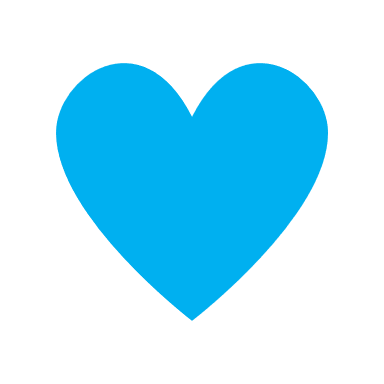
**LikeU’s Unique Features and Functions:**



**Main Activity Hub** – Our breathtaking and easily navigable Main Activity Hub allows browsing one’s personal feed an enjoyable experience.

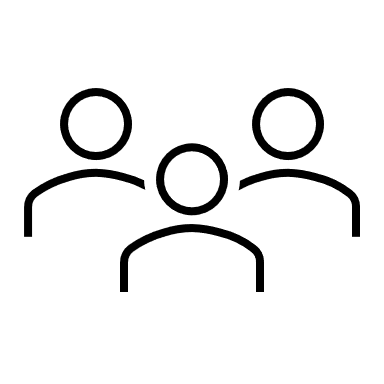
**About Us** – A page worth noting of great information about the creators of LikeU and the values this site stands for.

**Contact Us** – Giving the user the right to get in touch with us developers if need.



**3 Like System** – Exclusive to LikeU, that gives new meaning to responding to other users’ posts, through a tri-liking system formed to the user’s preference.

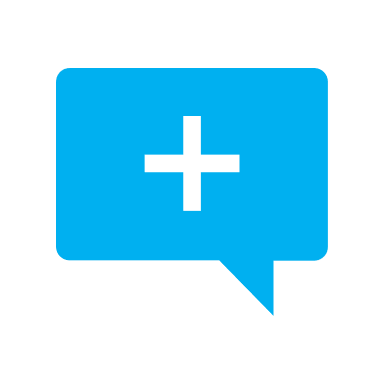
**Additional Functions:**

 **Account Creation** – A new guest signs up to create their own personal LikeU account.

**Sign In/ Sign Out** - Allows the user to sign in and sign out of their own personal profile.

**Profile Page/Editing** - A page where users can customize their bio to be displayed.

**Search for Users** – Permits oneself to search for another use through a search bar at the top of the Main Activity Hub Page.



**Upload posts and Captioning** – Authorizing the user to make post to the Main Activity Hub along with the option to add a caption if one pleases to.

**Commenting** – Offering users to add a comment under each post that will be displayed.

**URL LINK TO LikeU**: <https://lamp.cse.fau.edu/~cen4010_fa21_g07/>

**Usability Test Plan**

**Usability test objectives:**

* To determine design inconsistencies and usability problem areas within the user interface and search functionality. Potential sources of error may include:
* Search errors – failure to locate post and users, excessive keystrokes to complete a function, failure to follow recommended screen flow.
* Presentation errors – failure to locate and act upon searched information in screens and selection errors due to incorrect labeling.
* Control usage problems – improper search bar or input field usage.
* To use the search function under test conditions with representative users. Data will be used to evaluate whether usability goals regarding an effective and efficient search function have been achieved.
* To establish baseline user performance of the search function for future evaluation of its usability.

**Usability test plan:**

System setup: The setup for testing requires the website to have users, content, and the search bar. The search bar’s function is to filter and identify specific information entered.

Starting point: When users are introduced to the website, it will be from the main hub where they have access to most the feature the website provides. From the main hub, users can proceed to the search bar on the website. Once the user reaches the search bar, it will give the user the option to enter and look for specific post. Task to be accomplished: The task is to see if the search bar can search, and filter results out properly. The user goal is to test the functionality and difficulty of the search bar when interacting with the website. The accuracy of the search function and the results that come after the search is what is being accomplished. Having users test different types of inputs when using the search bar will show the versatility of the search function.

Intended user: The intended users of the search function are the people who post and guest who explore the website. People who are interacting and posting/uploading with the website content are the intended user. Completion criteria: In order to complete the criteria, the user needs to be able to reach specific data using the search bar. The criteria are complete when the user shows that they can indicate the completed task goal. After entering the information in the search bar, the accuracy of the output is what the testing is for. The scenarios that deviate from the correct results such as incorrect results or no change would be classified as errors. Users completing the criteria from the search bar when there are spelling mistakes and other foreign problems is the goal of the test.

URL of the system to be tested: lamp.cse.fau.edu/~cen4010\_fa21\_g07/

**Usability questionnaire form:**

**Was using the search bar easy?**

\_\_\_\_\_ Not Very Easy \_\_\_\_\_ Not Easy \_\_\_\_\_ Neutral \_\_\_\_\_ Easy \_\_\_\_\_ Very Easy

**How would you rate our product?**

\_\_\_\_\_ Very Bad \_\_\_\_\_ Bad \_\_\_\_\_ Neutral \_\_\_\_\_ Good \_\_\_\_\_ Very Good

**How useful was the search bar?**

\_\_\_\_\_ Not at All \_\_\_\_\_ A Little \_\_\_\_\_ Neutral \_\_\_\_\_ A Lot \_\_\_\_\_ A Great Deal

**How often do you use the search bar?**

\_\_\_\_\_ Not Very Often \_\_\_\_\_ Not Often \_\_\_\_\_ Neutral \_\_\_\_\_ Often \_\_\_\_\_ Very Often

# **QA Test Plan**

## **Test Objectives**

The objectives of this QA Test Plan is to ensure that all functionality meets the necessary requirements and to reveal any potential defects or issues with any feature. The QA Test also wants to ensure that using the application features will not cause any negative impact upon user usability. While user usability remains a focus, this test specifically tests if application use somehow affects or changes user usability not the overall usability level of the application. In order to achieve these objectives, the test will do the following:

* Using various types of input to catch potential defects
* Stress testing functionality by send multiple requests
* Repeating the same input and functionality to test functionality integrity

## **Hardware Setup**

The only hardware requirements needed to test the LikU system is any device that can access both Google Chrome and Mozilla Firefox and maintain a stable internet connection. This device can range from a desktop computer to a laptop to a hand held device like a smart phone or tablet.

## **Software Setup**

The only software setup required is to download Google Chrome and Mozilla Firefox if your testing device does not already have them. If your device does not have these two browsers installed, use any browser on your device to download and install them. From here, the software is testable through the group 7 LAMP server - <https://lamp.cse.fau.edu/~cen4010_fa21_g07/> . If for whatever reason this link is no longer working or if testing broke the application this link can be used as an emergency backup - <https://lamp.cse.fau.edu/~lschuknecht2016/>.

## **Features to Test**

This QA Test Plan tests four main features:

* Login/Register
* Posting
* 3 Like System
* Profile editing

In order to test Login and Register, multiple accounts will be created using various inputs for username, password, first name, last name. Using these newly created accounts, the tester will attempt to login. If this fails the tester can login using these credentials to test other features:

Username – TestUser

Password – Test1234

Posting involves selecting an image to upload then adding a caption to this image. The 3 like system has 3 components, 1st Like, 2nd Like, and 3rd Like. 1st liking a post gives it higher priority among posts posted within 24 hours. Meaning a higher liked post will appear first. It is important to note that currently there is no cap to how many times a single person can 1st Like any given image. A 2nd Like means that you wish to further prioritize a specific user’s posts. 2nd Liking an image means you will see that users posts before non-2nd Liked users’ posts. 2nd Liking an already liked user will un-2nd Like that user. 3rd Liking an image means you wish to repost that user’s image and caption. It is important to note that refreshing the main hub will cause your latest like to resend so instead of refreshing just reenter the current URL or travel to a different page and travel back. Profile editing involves going to your profile and changing your related account information.

## **Test Cases**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test # | Test Title | Test Description | Test Input | Expected Output | Test Results  (Chrome) | Test Results  (Firefox) |
| 1 | Account Creation | Register a new account using traditional account detail | First – Not Luke  Last – Schuknecht  Username – TestUser  Password – Test1234 | Account will be create with no issue. | Passed | Passed |
| 2 | Account Creation | Register a new account using number and special character | First – 1234]  Last - =-086  Username - /.\][‘1  Password – zasd23432 | Account will be create with no issue. | Passed | Passed |
| 3 | Posting a png | Post an .png | Image – png  Caption – PNG Test | Post will be added to feed | Passed | Passed |
| 4 | Posting a jpg | Post a .jpg | Image – jpg  Caption – JPG Test | Post will be added to feed | Passed | Passed |
| 5 | Repeating 1st Like | Continue to press the 1st like button on any image uploaded in the past 24 hours | User input | Post will be pushed to the top of the feed | Passed | Passed |
| 6 | 2nd Liking a User | Press the 2nd like button on any post | User input | User’s posts will appear above any non 2nd Liked user | Passed | Passed |
| 7 | 3rd Like a Post | Press the 3rd like button on any post | User input | The currently logged in user will post the same image and caption as the liked post | Passed | Passed |

**Code Review**

Our coding style is enforced by our code editor, but we also make sure that our code is indented, commented, and space out for ease of understanding.

<?php

*// Trang Leminh: Data base connection is clear to me although I think it would be good to have a separate database.php so that you can just include() every time you need it*

*// connecting to the DB*

session\_start();

$conn = new mysqli('localhost', 'root', 'root','cen4010\_fa21\_g07');

if ($conn->connect\_error) {

        die("Connection failed: " . $conn->connect\_error);

}

echo "Connected successfully";

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>LikU</title>

</head>

<body>

<?php

*// Trang Leminh: I believe when you session\_start() the session either starts/or resumes the current session. Session variables are also saved during this head. Good to set variables here*

echo $\_SESSION['id'];

echo "Session variables are set.";

$sql = "SELECT id, user\_id, caption,img FROM posts ";

$result = $conn->query($sql);

if(isset($\_POST["submit"])&& $\_POST['randcheck']==$\_SESSION['rand']){

        $name = $\_FILES['image']['name'];

        $imgData = addslashes(file\_get\_contents($\_FILES['image']['tmp\_name']));

        $upload = "INSERT INTO posts (user\_id, caption, img, like1, like2, like3, like\_total) VALUES('$\_SESSION[id]','$\_POST[caption]','$imgData ',0,0,0,0 )";

        $hope = $conn->query($upload);

        if($hope)

        {

                echo '<script type="text/javascript"> alert("Data Inserted Seccessfully!"); </script>';    *// alert message*

        }

        else

        {

                echo '<script type="text/javascript"> alert("Error Uploading Data!"); </script>';    *// when error occur*

        }

}

?>

// updating post!!

<?php

**function** test($conn){

        $sql1 = "UPDATE posts SET like1=like1 + 1 WHERE id = 1 ";

        $conn->query($sql1);

        if ($conn->query($sql1) === TRUE)

{

                echo "Record updated successfully";

        }

else

{

                echo "Error updating record: " . $conn->error;

        }

}

?>

<?php if ($result->num\_rows > 0) {?>

// output data of each row

<?php while($row = $result->fetch\_assoc()) {?>

*<!-- Trang Leminh: looks good; fetching every instance for users, displaying them with the following information -->*

                <br><a href="profile.php?name=<?php echo $row['user\_id'] ?>">user's profile page</a>

                <br><?php echo '<img src="data:image/jpeg;base64,'.base64\_encode( $row['img'] ).'"/>';?>

                <br><?php echo htmlspecialchars($row['caption']); ?>

                <br><button onclick = "">1st like</button>

                <button>2nd like</button>

                <button>3rd like</button>

        <?php }?>

<?php } else {?>

<?php echo "0 results";?>

<?php } ?>

<form method="post" enctype="multipart/form-data">

        <?php

        $rand=rand();

        $\_SESSION['rand']=$rand;?>

        <input type="hidden" value="<?php echo $rand; ?>" name="randcheck" />

*<!-- Trang Leminh: Clear table formatting and easy to understand the input fields and association with the backend code -->*

        <table>

                <tr>

                    <td>Select Image</td>

                    <td><input type="file" name="image" Required></td>

                </tr>

                <tr>

                <td>Enter Caption</td>

                    <td><input type="text" name="caption" placeholder="Enter Caption" Required></td>

                </tr>

                <tr>

                   <td colspan="2"><input type="submit" name="submit" value="Upload"></td>

                </tr>

        </table>

</form>

<br><a href="profile.php?name=<?php echo $\_SESSION['id'] ?>">view your profile</a>

<br><a href="logout.php">Logout</a>

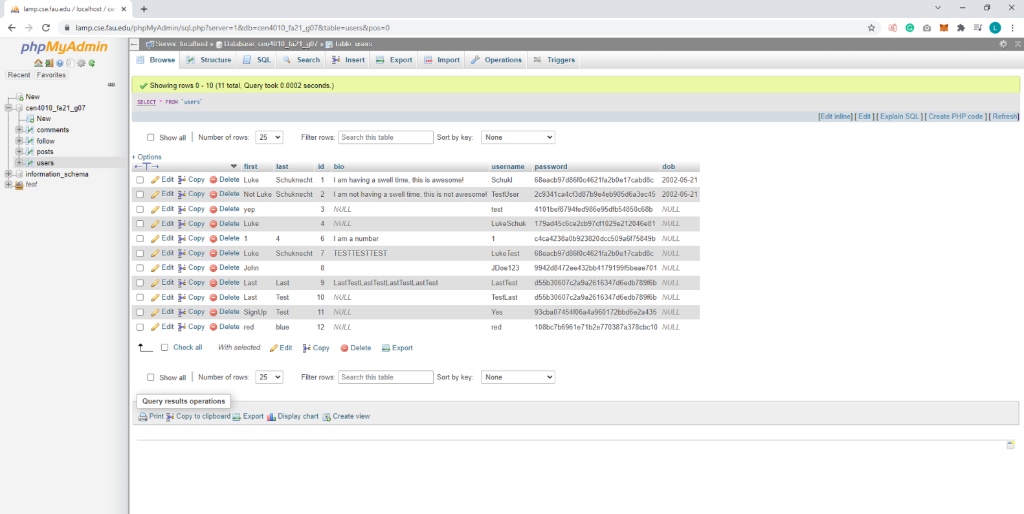
</body>

</html>

# **Self-Check on Best Practices for Security**

List of assets are password, first and last name, post, comments

Password is encrypted:



List of what is being validated: ‘select Image’ – required, ‘Enter Caption’ – required, validate data form with trim, htmlspecialchars, and striplashes

# **Self-Check: Adherence to Original Non-Functional Specs**

**Responsiveness**: DONE

**Response Time**: DONE

**Test Requirements:** DONE

**Training**: DONE

**Browser Compatibility**: DONE

**Computer and OS Compatibility**: DONE

**Login/Password System:** DONE

**Resource Utilization:** DONE

**Platform Compatibility:** DONE

**Coding Standards**: DONE

**Naming Conventions**: DONE

**Accessible Times:** DONE

**Downtime Impact**: DONE

**Rating:** DONE