CEN 4010 Principles of Software Engineering

Summer 2021

Milestone 4 Beta Launch and Reviews

Activity Connects (WORKING TITLE)

Team 4: Event Masters

Revision	Date
1	7/17/2021
2	7/20/2021
3	7/24/2021

Team:

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Product Summary:

Our application, Activity Connect (working title), which allows end-users to find and sort through events to go to with friends or acquaintances that are relatively Covid safe for the average end-user. More personalized experience for the end user to provide a recommended list of events that they can go to based on filters used during the search process. Providing live up-to-date weather for the events as well as a calendar to see upcoming events and the associated weather with them. Email notification once the end user has booked the event and then a notification the day before the said event.

To promote socialization/events through Covid friendly activities and beyond. As well as engage with local areas to create a sense of community.

Application URL: https://lamp.cse.fau.edu/~cen4010_su21_g04/

Functions:

1. Able to follow friends as buddies
2. Able to see the weather for the event (Using Open Weather API)
3. Share schedules with buddies
4. Adding the ability to have filters for the user to decide what would be best for them
5. Have a personalized User login to keep track of data through the Google Login API included with the ability to sync to the user's Google Calendar so they don't forget events they sign up for.

We hope to add more functions to give the user the best experience possible but with short time we will work hard to add more for the user and the community as a whole.

Usability Test Plan:

For testing the product we need to test something other than login or signup so we shall test the ability to search for events after the use of filters.

Test Objectives: We have chosen to test the ability to search for events using filters to find a particular event based on the title of the event. The user will go to the homepage of the site and then access the browse tab, where they will be greeted with a set of quick choices of activities to choose from. They then will scroll down to the bottom of the page and select custom, where they will be able to search/filter results based on their event title.

Test Plan:

Questionnaire Form:

https://docs.google.com/forms/d/e/1FAIpQLSebfGHmjxXBD3Q_8N-wcYAjaVZW9LqvR7cU7PcEnwAvxQJGpg/viewform?usp=sf_link

This is a Google Form created to help us understand how usable our site is to search for an event.

QA Test Plan:

Test Objectives: System will be tested in order to flesh out errors unannounced to the developers and make the website experience smoother. The tests will also serve the purpose of finding areas in the site to add messages informing the user of what type of information is required or how to use certain features to increase ease of use. An eye on the database will also be kept to make sure that all the data is being inputted correctly and in the desired format.

Hardware and Software Setup: Not much hardware was needed other than the physical server space for the project and lamp server. In terms of software, the lamp server is up and running as well and connected to the phpMyAdmin database manager to handle all SQL queries and keep user and event data saved. APIs such as the weather and map APIs are in the works as of the writing of this milestone but will be completed soon.

Feature To Be Tested: The Feature to be tested is the search function for looking up events. A user can look up events that have been posted publicly. The user can search by date or by the event name. Once the event name or date or both are entered, the database of events will be searched and bring back available information on what events meet the user criteria.

Test Cases:

-Black Box Test- Had a user with minimal information about the internal functioning of the product attempt to use the search feature to look up an event. The user was able to look up the events they wanted without issue although the user did note that a lack of error messages made the results confusing if no event was found that met their criteria.

-Unit Test- Testing of the interface as well as the local data structures was done to improve the stability of the system. Some data structures in-efficiency was found and corrected as well as some interface errors were corrected to present the user an easier experience.

-Performance Test- The performance test was done to great success. The UI handled all of the users data well and the SQL took all user data without losing anything. The site is responsive with quick load times and the data gets safely and quickly transferred and retrieved from the database.

Code Review:

Coding Style: Functional Programming which has multiple different functions that don't interact with each other. This emphasizes the evaluation of the expressions, not the execution of connected functions.

```php
<?php
$server = "localhost";
$username = "cen4010_su21_g04";
$password = "Eg1gNbkNpe";
$dbname = "cen4010_su21_g04";
$conn = mysqli_connect($server, $username, $password, $dbname);
// Every time search
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    //Grabs whatever is in search bar
    $item = $_POST['SearchF'];
    //Grabs all events from phpmyadmin
    $sql = "SELECT EN,EL,ESD,EED,ED  FROM Events";
    $resultA = $conn->query($sql);
    //Runs through each event if not empty
    if ($resultA->num_rows > 0) {
        while ($row = $resultA->fetch_assoc()) {
            //checks if start date is entered if not it allows any event
before current date
            if (!empty($_POST['sdate'])) {
                $ESD = $_POST['sdate'];
                $ESDBool = $ESD < $row['ESD'];
            } else {
                $ESDBool = true;
            }
            //checks if end date is entered if not it allows any event
after current data
            if (!empty($_POST['edate'])) {
                $EED = $_POST['edate'];
                $EEDBool = $EED > $row['EED'];
            } else {
                $EEDBool = true;
            }
```

```
            //checks if key word is entered then compares to event names
and descriptions
            if (!empty($_POST['SearchF'])) {
                $SearchFBool = substr_count(strtolower($row["EN"]),
strtolower($item)) || substr_count(strtolower($row["ED"]),
strtolower($item));
            } else {
                $SearchFBool = true;
            }
            //echos all events matching criteria
            if ($SearchFBool && $ESDBool && $EEDBool) {
                echo "<div id='FilterResultsInner' class = 'row'>";
                echo "<div id='FilterR' class = 'col-lg-4  col-sm-6'> " .
"<div id='FilterR'>" . $row["EN"]  . "</div></div>";
                echo "<div id='FilterR' class = 'col-lg-4  col-sm-6'>
Event Location: " . "<div id='FilterR'>" . $row["EL"]  . "</div></div>";
                echo "<div id='FilterR' class = 'col-lg-4  col-sm-6'>
Start: " . $row["ESD"] . "<br> End: " . $row["EED"]  . "</div>";
                echo "</div>";
            }
        }
    } else {
        echo "0 results";
    }
}
?>
```

Nathaniel Martin
to me

Got it, thanks! Will review and give feedback.
-Your Manager

Nathaniel Martin
to me

Checklist
Search working?
Events from PHP?
Have events from SQL?

All of these are working as expected of my wonderful development team! I would put a comment at the top stating what each definition is for someone who is not knowledgeable of what they are. Overall fantastic code don't forget to send me the next snippet so I can review that and fix any mistakes.

-Your Manager

Terrence Charitable <tcharitable2018@fau.edu>
to Nathaniel

You got it Mr.Manager.

Revisions:

Data Definition:

Users:

- UFN - name of user
- ULN - name of user
- UE - users current email
- UPW - users current password
- UUN - users current username
- UPN - users current phone number

User Activities:

- UP - user list of preferred activities
- UCA - list of current user activities
- UPA - list of planned user activities

Buddies:

- BN - name of Buddy
- BP - user list of preferred activities
- BCA - list of current user activities
- BPA - list of planned user activities
- BCID - chat id to connect user to his/her ongoing chats

Events:

- EN - name of event
- ED - activities being done

- ESD - start date/time
- EED - end date/time
- EBA - All the buddies attending
- EL - Location of the event
- ER - Rating

Database Org:

Users:

- UID(int)(8) - id of user
- UFN (string)(30) - name of user
- ULN (string)(30) - name of user
- UE(string)(30) - users current email
- UPW(string)(15) - users current password
- UUN (string)(15) - users current username
- UPN (int)(10) - users current phone number

User Activities:

- UAID (int)(8) - id of users activities
- UP (string)(50) - user list of preferred activities
- UCA (string)(50) - list of current user activities
- UPA (string)(50) - list of planned user activities

Buddies:

- BID (string)(8) - id of Buddy
- BN (string)(30) - name of Buddy
- BP (string)(10) - user list of preferred activities

- BCA (string)(5) - list of current user activities
- BPA (string)(5) - list of planned user activities
- BCID (int)(5) - chat id to connect user to his/her ongoing chats

Events:

- EID: (int)(5) - id of event
- EN: (string)(30) - name of event
- ED: (string)(5) - activities being done
- ESD: (int)(12) - start date/time
- EED: (int)(12) - end date/time
- EBA: (string)(3) - All the buddies attending
- EL :(string)(30) - Location of the event
- ER: (int)(5) - Rating

Self-Check (Security and Adherence to Non-Functional Specifications):

Private User Account

Private Calendar

Private Events created by User

Private Buddy list

Private Browsing

Password is confirmed encrypted by the Google

When testing the search bar if nothing is inputted then the user is given items they can choose. If the user wants to search they can use filters given such as price, date, and outdoors/indoor. These filters allow the user to distinguish between what event they would like to attend. Other than that the search works to perfection giving the user all the tools necessary to find and add events.

From M3 Document all Non-Functional Requirements, checking if we have completed these.
Non-Functional Requirements:

1. Security: **(ON TRACK)**
    a. Account information will be secure and only available to the user although it will be used to make recommendations on events they should attend
    b. User is capable of making both public and private events so that they are only seen by the intended audience
2. Accessibility: **(DONE)**
    a. User capable of connecting account through google instead of making an account from scratch
    b. Make sure works correctly on all mobile and other personal devices
    c. Works on any operating system
3. Performance **(DONE)**
    a. Site loads up as fast as possible
    b. Site doesn't cause crashes due to errors
4. Storage **(ON TRACK)**
    a. Stores info using sql database