Milestone 4

Spill

Spring 2018 SW Engineering CSC648/848

Section 01 Team 06

05/17/2018

Peter Mutch (peter2mutch@gmail.com)
Satjit Bola
Alaric Gonzales
Lorraine Goveas
Albert Fernandez Saucedo
Harpreet Singh

History Table:

1. Product Summary

Our website is called "Spill." Spill is a site for regular people to discover and report environmental issues in their neighborhood.

Spill allows users to:

- Search for issues by zip code, city, or location name
- Report an issue near them

Spill is unique in that it is designed specifically to crowdsource location-based environmental reporting, as opposed to sites like the EPA's.

Spill can be found at http://sfsuteam06spilldemo.dnsd.info/.

2. Usability Test Plan

Function to be tested: Search

Test Objective:

The objectives are to test how easy it is to use the search function. The search results page should display information relative to what the user searched.

Test Plan:

System Setup: Working Browser: Chrome or Safari Firefox

Starting Point: The home page of the website

Task: Search for a location to see what posts are in that area

Intended User: Any resident of that area

Completion Criteria: See posts for the area searched

URL to be tested: http://sfsuteam06spilldemo.dnsd.info/

Questionnaire:

1. Searching for posts was intuitive

1	2	3	4	(5)				
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree				
2. Search results were displayed in a well organized manner								
1	2	3	4	(5)				
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree				
G 100 100 100 100 100 100 100 100 100 10		0.0000000000000000000000000000000000000	_	Disagree				
Agree		0.0000000000000000000000000000000000000	_	Disagree				

3. QA Test Plan

Test Objectives:

The objectives are to test the accuracy of the search function. A correct search query should display the proper results. An incorrect search query should tell the user they could not find any matching results and display nearby, popular, or recent results instead. The security of the site will also be tested for sql injections.

Hardware and Software Setup:

Hardware: A computer running Mac OS, Linux, or Windows

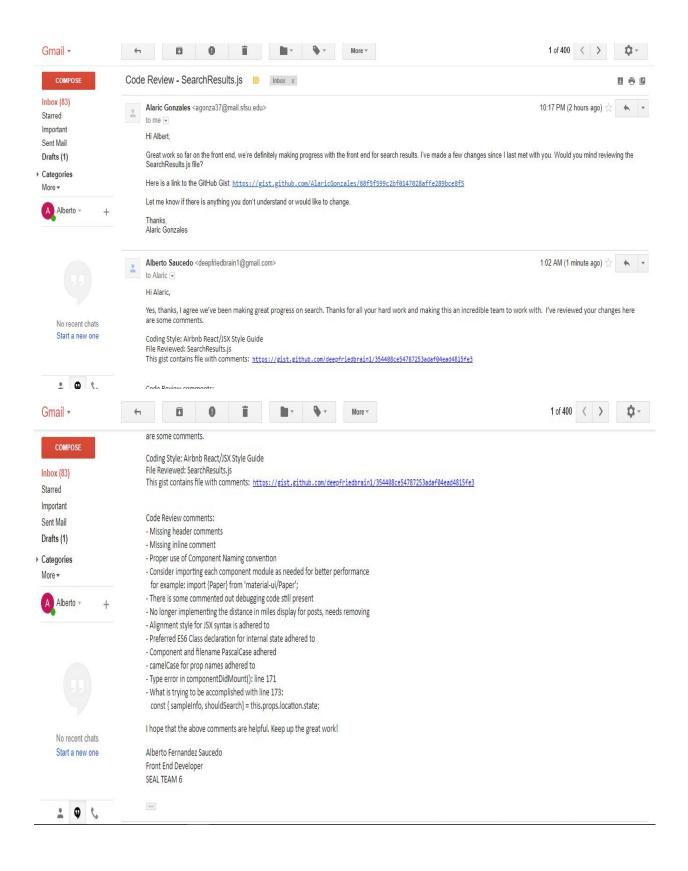
Software: Safari, Google Chrome, or Firefox

Features to be tested: Search

Test Cases:

Number	Title	Description	Input	Expected Output	Test Results(Pass/ Fail)
1	Correct Search Query	A correct search query which should display the appropriate results	Zion	1 search result Chemical Hazard at Zion National Park	
2	Incorrect Search Query	An incorrect search query should display a no results message and show similar results	Negative numbers, non-alphanum eric characters, etc	No results found, list of other reports	
3	SQL injection	A possible input from malicious users	Select * from hello;	Error message Other results should appear	

4. Code Review





```
○ SearchResult.js
                                                                                                                         Raw
      import React from 'react';
      import {Paper, Grid, Card, CardContent, Typography, Button} from 'material-ui';
      import { Map } from '../Map';
      import Tooltip from 'material-ui/Tooltip';
      Code Review comments:
        - Missing header comments
       - Missing inline comments
       - Proper use of Component Naming convention
        - Consider importing each component module as needed for better performance
         for example: import {Paper} from 'material-ui/Paper';
       - There is some commented out debugging code still present
       - No longer implementing the distance in miles display for posts, needs removing
        - Alignment style for JSX syntax is adhered to
       - Preferred ES6 Class declaration for internal state adhered to
       - Component and filename PascalCase adhered
        - camelCase for prop names adhered to
       - Type error in componentDidMount(): line 171
       - What is trying to be accomplished with line 173:
         const { sampleInfo, shouldSearch} = this.props.location.state;
      const styles = {
```

```
const styles = {
            ResultsPost: {
                   color: "black",
                   textAlign: "center",
            },
30
    };
    const SearchResult = (props) => {
            const ResultPreview = () => (
                   <Grid container spacing={8}>
                           <Grid item xs={12}>
36
                                   <Paper style={{padding: "10px"}}>
                                           <Typography variant="subheading" align="center">{props.title}</Typography>
                            </Grid>
                            <Grid item xs>
                                   <Paper style={{padding: "10px"}}>
                                           <Typography variant="caption" align="left">{props.previewContent}</Typography>
                                   </Paper>
44
                           </Grid>
                   </Grid>
            );
            const ResultButtons = () => (
                    <Grid container
                             spacing={8}
                              direction={"row"}
                             justify={"flex-end"}
                             alignItems={"center"}
                             style={{margin: "auto"}}
                           <Grid item xs={5}> {/*Empty Space*/} </Grid>
                            <Grid item xs>
                                   (Paper)
                                          <Button variant="flat" color="default">View Post</Button>
                                   </Paper>
```

```
152 class SearchResults extends React.Component{
             constructor(props){
                    super(props);
                    this.state = {
                            searchInput: '',
                            places: [],
                            searchKey: '',
                            category: '',
                            selectedPlaceLatitude: 37.3382,
                            selectedPlaceLng: -121.8863,
                            dropDownOpen: false,
                            shouldSearch: true,
164
                            didFetch: false,
                    }:
                     this.initiateSearch = this.initiateSearch.bind(this);
                    this.searchTextChanged = this.searchTextChanged.bind(this);
                     this.categoryTextChanged = this.categoryTextChanged.bind(this);
                     this.moveTheMap = this.moveTheMap.bind(this);
                     this.handleSearchFromHeader = this.handleSearchFromHeader.bind(this);
            }
            componentDidMount() {
                     // Boilerplate for receiving props via Link
                    const { sampleInfo, shouldSearch} = this.props.location.state;
                    // console.log("sampleInfo: " + sampleInfo);
                    this.setState({
                            searchInput: sampleInfo,
                            searchKey: sampleInfo,
                            shouldSearch: shouldSearch,
                    });
            }
```

```
componentDidUpdate(prevProps, prevState, snapshot) {
                   console.log("didUpdate()");
                    // console.log("Prev state: " + prevState.searchInput);
                    // console.log("Current input: " + this.props.location.state.sampleInfo);
                    // if (this.state.searchInput == '') {
                          console.log("Fetching all");
                    11
                   11
                         this.fetchAllResults()
294
                   // }
                   if (!(prevState.searchInput == this.props.location.state.sampleInfo)) {
                           this.setState({
                                   searchInput: this.props.location.state.sampleInfo,
                            });
                            // if (this.state.shouldSearch) {
                            this.initiateSearch()
                   }
            }
214
             handleSearchFromHeader() {
                    this.initiateSearch();
            moveTheMap(lat, lng) {
220
                    this.setState({
                           selectedPlaceLatitude: parseFloat(lat),
                            selectedPlaceLng: parseFloat(lng)
                   });
```

5. Self-check on best practices for security

The major assets that we are protecting include: Registered user information: first name , last name, email , username and password Posts: user id, address, location name, image

We are using Bcrypt to encrypt passwords in the database. We are not validating any data input yet.

6. Self-check for adherence to original non-functional spec

- 1. Application shall be developed, tested and deployed using tools and servers approved by Class CTO and as agreed in M0 (some may be provided in the class, some may be chosen by the student team but all tools and servers have to be approved by class CTO). -**DONE**
- 2. Application shall be optimized for standard desktop/laptop browsers e.g. must render correctly on the two latest versions of all major browsers: Mozilla, Safari, Chrome. -**DONE**
- 3. Application shall have responsive UI code so it can be adequately rendered on mobile devices but no mobile native app is to be developed-**DONE**
- 4. Data shall be stored in the team's chosen database technology on the team's deployment server. -**DONE**
- 5. Application shall be media rich (at minimum contain images and maps)-DONE
- 6. No more than 50 concurrent users shall be accessing the application at any time -ON TRACK
- 7. Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users. -**DONE**
- 8. The language used shall be English. -DONE
- 9. Application shall be very easy to use and intuitive. -DONE
- 10. Google analytics shall be added -ON TRACK
- 11. No e-mail clients shall be allowed -DONE
- 12. Pay functionality, if any (e.g. paying for goods and services) shall not be implemented nor simulated. -**DONE**
- 13. Site security: basic best practices shall be applied (as covered in the class) -ON TRACK
- 14. Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development -**DONE**
- 15. The website shall <u>prominently</u> display the following <u>exact</u> text on all pages "SFSU Software Engineering Project, Spring 2018. For Demonstration Only" at the top of the WWW page. (Important so as to not confuse this with a real application).

 -ON TRACK