

# **SW Engineering CSC648/848 Section 01 Spring 2018**

## **PARSE**

Pollution and Accident Reporting for a Safer Environment

### **Milestone 4**

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# Product Summary

PARSE is a web application that strives to be a simple to use listing platform for local environmental issues. With PARSE, people can easily check for environmental issue wherever they go in the city.

PARSE provides a simple and easy to use set of features:

- All guests can view environmental issues right from the PARSE home page
- Anyone can easily search for issues by typing in a zipcode or category in the search bar.
- Issues provide plentiful information and images with Google Maps integration.
- City managers have access to a simple to use dashboard making it simple to set the issue status.
- Explore the PARSE web application at: [csc648-team04.herokuapp.com](http://csc648-team04.herokuapp.com)

# **Usability Test Plan**

## **Test Objective**

- The objective of this test is to gauge the usability of the site's main function: Search.
- Expose flaws with the Search function by asking our testers to perform the search task with no prior instructions. The testers will need to intuit how to use the Search function in order to search for the targeted queries.

## **Test Plan**

### **System setup**

- Tester will log into a computer with access to the internet and access to the following accepted internet browsers: Google chrome or Firefox.

### **Starting point**

- Tester will begin at the site homepage wherein a search button will be present.

### **Task to be accomplished**

- Tester will attempt a search for listings in a city of their choosing.
- Tester will attempt a search for listings with a zip code of their choosing.

### **Intended Users**

- The targeted user is broad, as any person who is searching for a property is a potential customer.
- Users will be assumed to have no technical expertise and may be a complete novice to web browsing.

### **Completion criteria**

- Tester is satisfied that they have accomplished the search query they attempted. This is evaluated from a post test questionnaire.

## Usability Questionnaire

**I found the Search function easy to use (Check one)**

☐ Strongly Disagree ☐ Disagree ☐ Neither Agree or disagree ☐ Agree ☐ Strongly Agree

**I found the listings for the Category I was searching for (Check one)**

☐ Strongly Disagree ☐ Disagree ☐ Neither Agree or disagree ☐ Agree ☐ Strongly Agree

**I found the listings for the zip code I was searching for (Check one)**

☐ Strongly Disagree ☐ Disagree ☐ Neither Agree or disagree ☐ Agree ☐ Strongly Agree

**Comments:**

# **QA Test Plan**

## **Test Objective**

1. The objective of this test is to validate the functioning of one of the primary features of the website, i.e. Search.
2. The tester shall be given specific instructions to follow and the results shall be recorded as a PASS/FAIL in each of the individual cases.

## **Hardware and Software setup**

1. The tester should have access to a device that supports recent versions of two web browsers – Google Chrome and Mozilla Firefox.
2. The devices used should be connected to internet via Wi-Fi, Ethernet, Cellular, etc.
3. The internet connection speed should be adequate (at least 2.5MBps) for flawless browsing experience.
4. And finally, the user should open the following link on either of the prescribed browsers to begin the test.

## Features to be tested

This test will solely focus on the Search feature of the website. The Search feature shall be operated by inputting a query in the search field on the very top of the homepage of the website. The permitted inputs are names of cities or the zip-codes.

Test #	Test title	Description	Test input	Expected output	Result (Chrome)	Result (Firefox)
1.	Zip-code search	Tester shall input the prescribed zip-code number into the search bar and the results shall be validated through comparison with the expected output.	94112	1 result	PASS	PASS
2.	Category search	Tester shall input the prescribed name of city into the search bar and the results shall be validated through comparison with the expected output.	“Accident” category selected	3 results	PASS	PASS
3.	Zip-code and category search	Tester shall input the prescribed zip-code and issue category in the search bar and the results shall be validated through comparison with the expected output	94112 with “Pollution” category selected	1 result	PASS	PASS

# Code Review

A code review was conducted on the basic implementation the Node.js app entry point. Specifically, this code review shows the code to setup our MySQL connection to the database.

In order to ensure clear code, indentation styles is used with 4 spaces for indentation.

**Feature:** Database setup

**Submitted by:** Rodrigo Bell

11:22 AM **rodrigobell** The code looks good and functional, and you appear to be using all the recommended practices for setting up these API calls. My only notes are on formatting, ensuring comments are clear and concise in such a way that anyone can understand the code fully even without knowing the exact workings of the internals. Also, please avoid using extra line-break spacing unless it aids to readability of code.

+

Message @Rohan

@😊



/app.js

```
18 var app = express();
19
20 /* Database Connection Info */
21 var connection = require('express-myconnection');
22 var mysql = require('mysql');
23
24 // required for passport
25 app.use(session({
26   secret: 'vidyapathaisalwaysrunning',
27   resave: true,
28   saveUninitialized: true
29 })); // session secret
30 app.use(passport.initialize());
31 app.use(passport.session()); // persistent login sessions
32 app.use(flash());
33
34
35 app.use(
36   connection(mysql,{
37     host: "us-cdbr-iron-east-05.cleardb.net",
38     user: "b3220b75dccc0a",
39     password: "ddd8323b",
40     database: "heroku_d6fcf8fd2312a32",
41     multipleStatements: true
42   }, 'pool') //or single
43 );
44
45
46
47 );
48
49 // view engine setup
50 app.set('views', path.join(__dirname, 'views'));
51 app.set('view engine', 'ejs');
```

## Self-check: Security

### Major Assets Being Protected

- Name
- Username
- Password

### Passwords

Passwords are hashed, and no plain-text passwords are stored in the database.

```
// Field validation
req.checkBody('Name', 'Name field cannot be empty').notEmpty();
req.checkBody('username', 'Username cannot be empty').notEmpty();
req.checkBody('password', 'Password cannot be empty').notEmpty();
req.checkBody('password', 'Password must be at least 8 characters long').len(8, 100);
req.checkBody('password2', 'Password must be at least 8 characters long').len(8, 100);
req.checkBody('password2', 'Passwords do not match').equals(req.body.password);
```

## Self-check: Non-functional Requirements

1	Application shall be developed and deployed using SW stack approved by class CTO Anthony Souza.	DONE
2	Application shall be hosted and deployed on Heroku as approved by Anthony.	DONE
3	Application shall be optimized for standard desktop/laptop browsers, i.e., must render correctly on the latest versions of all major browsers: Chrome, Safari, Mozilla	DONE
4	Application shall have responsive UI code so it can be adequately rendered on mobile devices but no mobile app is to be developed.	DONE
5	Data shall be stored in the MySQL database on the server in the team's Heroku account.	DONE
6	Maps showing location of the environmental issue shall be provided.	DONE
7	No more than 50 concurrent users shall be accessing the application at any time.	DONE
8	Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.	ON-TRACK
9	The language used shall be English.	DONE
10	Application shall be very easy to use and intuitive. No prior training shall be required to use the website.	DONE
11	Google analytics shall be added.	DONE
12	Site security: basic best practices shall be applied (as covered in the class).	ON-TRACK
13	Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development.	DONE