COMPSCI 345

Assignment 1: Usability Evaluation

Worth 8% of your final grade
This assignment is due by 3:00pm on Friday 23 March 2018
This is an individual assignment

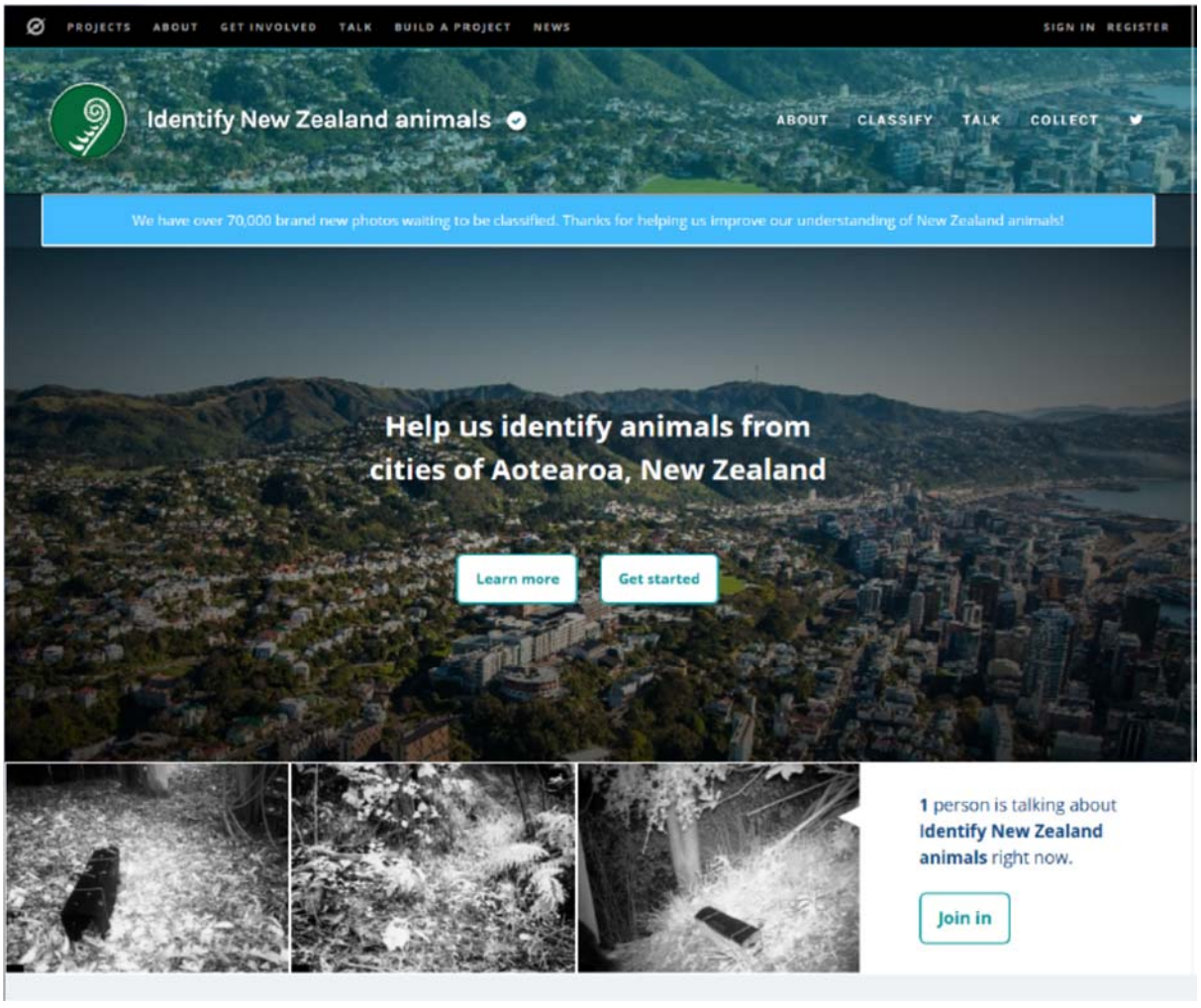
Aims

The aim of this project is to give you experience in performing a heuristic evaluation of a website and then planning a usability test for it.

Background

Your task is to evaluate **one** of the projects in the Zooniverse website (*Identify New Zealand animals*). Crowd sourced science has been a popular and successful mechanism to bring significant human intelligence to various (mostly classification) problems. We will look to gain experience with this style of system in this assignment.

https://www.zooniverse.org/projects/vykanton/identify-new-zealand-animals



There are two major parts to this assignment:

1. Evaluating the functionality and usability of the website. To do this you'll identify the functions offered by the system and perform a usability evaluation.
2. Planning (but not conducting) a usability study which could be used to understand how usable the target population finds the website.

Note

We expect this assignment to be presented to a high standard. You must use consistent formatting, good grammar and spelling, and a professional report style. We expect the assignment to be completed individually and we periodically check for plagiarism in this course.

Submit

An electronic copy of your report as a single pdf file to Canvas by 3:00pm on Friday 23 March. Please name your PDF document using your UPI (e.g., ramo001.pdf).

Questions

Direct questions about this assignment to the class piazza discussion for Assignment 1 (accessible via Canvas).

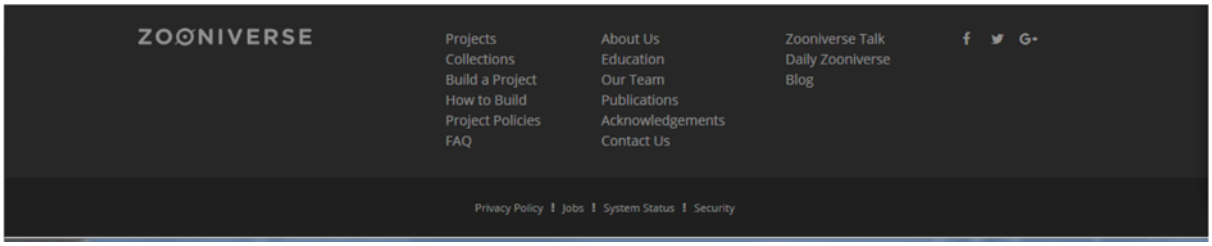
You should plan to spend 12 hours on this assignment.

Part One: Evaluating the website

To understand how the website works you should spend some time using the functions which are targeted towards identifying NZ animals. If you classify around 20 sets of three photos you'll quite likely have experienced the majority of difficulties in doing identification which will require you to explore other functionality in the system. Doing 20 sets of photos will also be beneficial for this research project when all 400 students have completed!

Do not evaluate any of the Zooniverse specific aspects of this website. This includes all the functions in the black banner at the top of the website:

And all of the functions in the black banner at the bottom of the website:



Also, you do not need to register as part of this evaluation, and hence do not need to evaluate the register functionality. You should also ignore the 'Talk', 'Collect' and Twitter sections in the *Identify New Zealand animals* project.

The two tasks you need to undertake for the website are as follows:

1. Investigate the functionality of the website. While its aim is to get users to identify mammals which are present in photos from remotely triggered cameras, what functions have been implemented to achieve this?
   List and clearly and succinctly describe all of the functions (to the level of granularity that you'd describe functional requirements of a system) of the in scope parts of the website e.g.,
   > Play sequence – flip through the 3 photo set four times in a row to help users identify the mammal present

2. Perform a heuristic evaluation using Nielsen's usability heuristics (see lecture 3 and https://www.nngroup.com/articles/ten-usability-heuristics/). Note that some heuristics may not be applicable for this website, note those as N/A. Don't write more than 1,000 words for this part, so one or two paragraphs are sufficient for each of the 10 heuristics. As described in lecture 3, for each issue we would like you to list the heuristic problem and how the heuristic is violated. You do not have to provide a solution to each of the heuristic problems.

Part Two: A Usability Test Plan

Write a usability test plan for the website using the template below for who you understand to be the target audience of the website. Choosing good test objectives is important and the remainder of the test plan should match these objectives.

There is no set word count for this, but a good test plan should come in at around 1,000 words. You are NOT to undertake this testing (that would require ethics approval!), you are ONLY preparing the plan.

Usability Test Plan Template

Product under test

Describe the website and its core functionality.

Test Objectives

Describe the objectives of the usability test.

Participants Required

Describe the number of participants to be recruited and the attributes of the participants you would like to recruit.

Tasks to Undertake

Describe the tasks you will ask participants to perform.

Data Collection

Describe specifically what data you want to collect about each participant and each task. If you choose to have a questionnaire, include it in this section.

Test Procedure

Provide the scripted step-by-step instructions for running the test (imagine someone else will be running the tests for you).

Analysis

Describe how the data collected will be analysed.

Results

Describe how the results will be reported.

Marking Schedule

<table>
<tr><th></th><th></th><th>Marks</th></tr>
<tr><td>Part 1: Evaluating the website</td><td></td><td>40</td></tr>
<tr><td>Functionality</td><td></td><td></td></tr>
<tr><td>Complete</td><td>Have all the major functions been identified?</td><td>10</td></tr>
<tr><td>Accurate</td><td>Is the scope of each function accurately described?</td><td>5</td></tr>
<tr><td>Heuristic evaluation</td><td>Have all 10 heuristics been considered and assessed where applicable? Is there a compelling description of how each heuristic is violated?</td><td>25</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td>Part 2: Usability test plan</td><td></td><td>40</td></tr>
<tr><td>Completeness</td><td>Will the test plan meet the objectives described and deliver a valid result?
<table>
<tr><td>Product under test
Clearly and succinctly described</td><td>2</td></tr>
<tr><td>Test objectives
The test objectives are well chosen and clearly communicated</td><td>5</td></tr>
<tr><td>Participants required
The participants required are clearly outlined and well-chosen in the context of the software being tested and test objectives</td><td>5</td></tr>
<tr><td>Tasks to undertake
The tasks are clearly explained and fit well with the scope of the test objectives</td><td>5</td></tr>
<tr><td>Data collection
The data to be collected is clearly explained and well-chosen within the context of the software being evaluated and test objectives</td><td>5</td></tr>
<tr><td>Test procedure
The test procedure is clearly outlined and fits well with the test objectives and data collection</td><td>5</td></tr>
<tr><td>Analysis
Clear and specific steps for analysing data have been described and use established data analysis techniques that fit well with the test objectives and procedure</td><td>5</td></tr>
<tr><td>Results
The reporting of results is detailed clearly and supports the test objectives</td><td>3</td></tr>
</table></td><td>35</td></tr>
<tr><td>Report quality</td><td>Is the report well presented, formatted nicely, and with correct spelling and grammar?</td><td>5</td></tr>
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