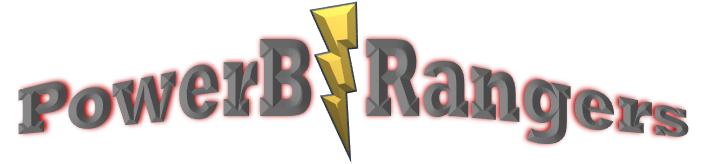
Test Plan

Interfuze Wine







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Document Version

|  |  |  |
| --- | --- | --- |
| Date | Version | Notes |
| 20/10/2022 | 1.0 | - Created Test Plan document, inserted headings for sections  - Added Introduction  - Added Functional Requirements Testing |
| 28/10/2022 | 1.1 | - Added Non-functional Requirements Testing for modules  - Added document & standard references under Reference Material & Appendix B |
| 30/10/2022 | 1.2 | - Added tests for UI module  - Added tests for Accounts Authentication module  - Added tests for UA testing |
| 1/11/2022 | 1.3 | - Added tests for UI module  - Added tests for Database module |
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| 5/11/2022 | 2.2 | - Added results of additional tests  - Added results of usability tests |
| 10/11/2022 | 2.3 | - Added security test module  - Added results of tests |
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# 

# Introduction

The Test Plan is designed to describe the objective, strategies, approach and resources of all testing activities for the project realwineratings.com under Quality Management as specified in the Project Management Plan (PMP). This document is accompanied by the Requirements & Analysis (R&A) document and the Design Document which will provide in-depth technical information on system operation and development.

## Project Overview

The purpose of this project is to develop a proof-of-concept informational web application that allows users to gather information on Australian wine. This information includes the rating of the said wine from one or multiple wine shows a calculated Quality-Price Ratio (QPR) that determines the best value-cost wines, along with other relevant details. The deliverables of this project include a web application realwineratings.com that displays the aforementioned details, a database populated with wine show data, account authentication, wine show data upload and compatibility with updated modern browsers on Personal Computers (PCs) or laptops.

# Objective of Test Plan

The purpose of this Test Plan document is to specify the scope, items to be tested, features to be tested, the types of testing to be performed, the team member responsible for testing, the resources used to complete testing, potential risks, mitigations, error/exception handling and/or additional comments. Below are the modules tested and accompanying short descriptions.

Modules:

* User Interface
* Search & Filter/Sort
* Account Authentication
* Database
* Upload

## Test Strategy

The objective of testing is to verify the functionality of modules within the realwineratings.com web application to ensure all items are working as intended. Below are the testing strategies used and a short description of items affected.

Testing strategies for functional requirements:

* Unit Testing: Individual components of software
* Integration Testing: Modules with combination/integration of software units
* System Testing: Entire completed & integrated system via a black-box testing approach
* User Acceptance Testing: Final handover product

Testing strategies for non-functional requirements:

* Compliance Testing: Standards & Requirements
* Interoperability Testing: System component interoperability
* Performance Testing: Load, Stress application testing
* Usability Testing: Usability/Intuitiveness of application

## Scope

Testing will be performed throughout all iterations of the product development life cycle. Due to the nature of certain features having module dependencies, testing will not be started on those specific features until development has created them. As a result, a continuous high-level testing approach for test strategies was adopted for this project.

Scheduled testing will occur after new updates are pushed live onto the system to reduce the variability introduced from scheduled code updates or ad-hoc bug fixes. In order to preserve version control, the test plan will be updated to only show results from the most recent version of the product only. Minor changes will raise the version number by a fraction of 0.1, whereas major overhauls will raise the version number to the next whole number.

Additional comments are added to describe issues in detail, potential solutions or minor changes required. The team member responsible and resources for a specific module test are described at the start of every section. An asterisk \* next to a result indicates that the test case has comments.

Two administrator accounts currently exist in the Accounts database and will be used for testing. They are CanDelete and CantDelete. CanDelete has all associated privileges of Create, Read, Update & Delete, whereas CantDelete does not have Delete privileges.

Data entry fields will sometimes require no input for testing. These fields are symbolised as *null* in italics. (e.g. in an input with 3 fields [name, description and weighting]; the Input(TestWineShow, *null*, 0.5) case refers to the description field having no input.)

## Reference Material

The following is a list of all documents and sources with short descriptions referenced in this version of the Test Plan. Refer to Appendix B for reference links to accompanying project documents and relevant standards.

Documents:

* Project Management Plan: How the project is managed throughout the development life cycle
* Requirements & Analysis Document: Functional & non-functional requirements of the project
* Design Document: Technical detail on a high and low-level perspective of the product system

Standards:

* WHATWG HTML Official Documentation: HTML coding standard
* PHP Official Documentation: PHP coding standard defined by PHP Foundation
* Project Management Book of Knowledge (PMBoK): Project management & document guidelines

# User Interface Element Module

User Interface (UI) testing refers to page elements, the display of website pages and wine results on the Home page. Basic functionality includes allowing the web user to interact with the web application for different purposes. All page elements should work as intended. This module is critical as it represents the information and operation link between the user and the product. Below is the brief on items to be tested.

Current pages within web application:

* Home/Landing page
* Login page
* Wine Show page
* Region page
* Producer page
* Upload page

Current Elements found commonly in the product’s web pages:

* Search bars (Search wine, Search producer)
* Dropdown menus
* Buttons (Edit/Delete/Add item)
* Raw Links (to More Details page)
* Header bar tabs
* Select page numbers

|  |  |
| --- | --- |
| Tester: | Grace C. (Main page),  Ken C. (Login, Wine Show, Region, Producer, Upload page) |
| Resources: | Laptop running Google Chrome,  Windows 10/11,  CanDelete/CantDelete account |
| Purpose: | Assess overall functionality of UI module to ensure they are working/formatted as intended when activated. |

## User Interface Element Functional Testing

Home/Landing page

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test viewing format on Home page display | Load website, default wine display should be on Landing page | Display shows result display with no errors in front-page formatting | Pass |
|  | Test activate Log In tab in header | Select Log In tab in website header on Home page | Log In tab can be selected | Pass |
|  | Test activate Wine Show tab in header | Select Wine Show tab in website header on Home page | Wine Show tab can be selected | Pass |
|  | Test activate Producer tab in header | Select Producer tab in website header on Home page | Producer tab can be selected | Pass |
|  | Test activate Region tab in header | Select Region tab in website header on Home page | Region tab can be selected | Pass |
|  | Test activate Upload tab in header | Select Upload tab in website header on Home page | Upload tab can be selected | Pass |
|  | Test activate Log Out tab in header | Select Log Out tab in website header on Home page | Log Out tab can be selected | Pass |
|  | Test activate Logo as Home button | Select website Logo in website header on Home page | Website Logo can be selected, default action will refresh the Home page | Pass |
|  | Test select Search Bar | Select Search bar | Search bar is selected and activated | Pass |
|  | Test selecting option in Wine Colour Filter dropdown | Select search bar in Filter dropdown menus on Home page | Search bar in Filter menus activated | Pass |
|  | Test selecting option in Grape Variety Filter dropdown | Select search bar in Filter dropdown menus on Home page | Search bar in Filter menus activated | Pass |
|  | Test selecting option in Region Filter dropdown | Select search bar in Filter dropdown menus on Home page | Search bar in Filter menus activated | Pass |
|  | Test selecting option in Producer Filter dropdown | Select search bar in Filter dropdown menus on Home page | Search bar in Filter menus activated | Pass |
|  | Test selecting option in Award Filter dropdown | Select search bar in Filter dropdown menus on Home page | Search bar in Filter menus activated | Pass |
|  | Test selecting Year dropdown | Select Year filter dropdown | Year range filter is revealed | Pass |
|  | Test selecting Cost dropdown | Select Cost filter dropdown | Cost range filter is revealed | Pass |
|  | Test selecting QPR dropdown | Select QPR filter dropdown | QPR range filter is revealed | Pass |
|  | Test selecting Average Score dropdown | Select Average Score filter dropdown | Average Score range filter is revealed | Pass |
|  | Test select dropdown menu for Sort results | Select Sort dropdown menus and select an option | Sort dropdown menu can be selected, options can be selected | Pass |
|  | Test selecting Filter button | Select ‘Filter’ button | Filter button can be selected | Pass |
|  | Test selecting Reset button | Select ‘Reset’ button | Reset button can be selected | Pass |
|  | Test selecting Edit button | Select ‘Edit ’ button for one wine | Edit button can be selected. Wine Edit page brought up | Pass |
|  | Test selecting Delete button | Select ‘Delete ’ button for one wine | Delete button can be selected. Notification pops-up asking for deletion confirmation | Pass |
|  | Test selecting page number | Select page number (5) | Page number activated. Page displays results from page 5 | Pass |
|  | Test selecting page Next button | Select page Next while on page 1 | Next button activated. Page displays results from page 2 | Pass |
|  | Test selecting page Previous button | Select page Prev while on page 2 | Prev button activated. Page displays results from page 1 | Pass |
|  | Test selecting page range (...) button | Select (...) on page range | (...) element activated. No effect happens. | Pass |
|  | Test remove filter by pressing X | Select Red, then select X | Filter removed | Pass |

More Wine Information page

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test viewing format on Wine Information page display | View Wine information page on a selected wine | Display shows result display with no errors in front-page formatting | Pass |
|  | Test select Back button | Select Back button | Page redirects to previous page (Home page) | Pass |

Login page

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test viewing format on Login page | View Login page | Log In display with no errors in front-page formatting | Pass |
|  | Test activating Username field | Select Username field | Username field activated | Pass |
|  | Test activating Password field | Select Password field | Password field activated | Pass |
|  | Test input Username field | Input alphanumeric characters into Username field (abc123) | Username field allows alphanumeric input | Pass |
|  | Test input Username field with symbols | Input symbol characters into Username field (!.?()’”) | Username field allows symbol input | Pass |
|  | Test input Password field | Input alphanumeric characters into Password field (abc123) | Username field allows alphanumeric input, displays as classified dots | Pass |
|  | Test input Password field with symbols | Input symbol characters into Password field (!.?()’”) | Username field allows symbol input, displays as classified dots | Pass |
|  | Test select captcha | Select Captcha box field | Captcha box activated, displays tick in box | Pass |

Upload page

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test viewing format Upload page | View Upload page | Upload page display with no errors in front-page formatting | Pass |
|  | Test select Choose file button | Select Choose file button | Button can be selected. | Pass |
|  | Test select Import button | Select Import button | Button can be selected. | Pass |
|  | Test select Back button | Select Back button | Button can be selected. Redirects user to Home page | Pass |
|  | Test select Back button, previous page as another tab | View Region page, then view Upload page. Select Back button | Redirects user to Home page | Pass |

Wine Show page & subpages

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test viewing format Wine Show page | View Wine Show page | Wine Show display with no errors in front-page formatting | Pass |
|  | Test Add Wine Show button | Select Add Wine Show button | Add Wine Show button activated. Page redirect to Add wine show page | Pass |
|  | Test alphanumeric input into Name field in Add Wine Show | Input alphanumeric input into name field (abc123) | Name field allows alphanumeric input | Pass |
|  | Test symbol input into Name field in Add Wine Show | Input symbol input into name field (.!?()’) | Name field allows symbol input | Pass |
|  | Test alphanumeric input into Location field in Add Wine Show | Input alphanumeric input into Add Wine Show on Location field (abc123) | Description field allows alphanumeric input | Pass |
|  | Test symbol input into Description field in Add Wine Show | Input alphanumeric input into Add Wine Show on Description field (.!?()’) | Description field allows symbol input | Pass |
|  | Test alphanumeric input into Weighting field in Add Wine Show | Input alphanumeric input into Weighting field (abc123) | Weighting field allows integer input | Pass |
|  | Test symbol input into Weighting field in Add Wine Show | Input alphanumeric input into Weighting field (.!?()’) | Weighting field does not allow symbol input except for (.) | Pass |
|  | Test decimal input into Weighting field in Add Wine Show | Input decimal into Weighting field (0.9) | Weighting field allows decimal input | Pass |
|  | Test selecting Edit button | Select ‘Edit ’ button for one wine show | Edit button can be selected. Wine Show Edit page brought up | Pass |
|  | Test alphanumeric input into Name field in Edit Wine Show | Input alphanumeric input into name field (abc123) | Name field allows alphanumeric input | Pass |
|  | Test symbol input into Name field in Edit Wine Show | Input alphanumeric input into name field (.!?()’) and | Name field allows symbol input | Pass |
|  | Test alphanumeric input into location field in Edit Wine Show | Input alphanumeric input into Edit Wine Show on location field (abc123) | Description field allows alphanumeric input | Pass |
|  | Test symbol input into Name field in Edit Wine Show | Input alphanumeric input into Edit Wine Show on Description field (.!?()’) | Description field allows symbol input | Pass |
|  | Test alphanumeric input into Weighting field in Edit Wine Show | Input alphanumeric input into Weighting field (abc123) | Weighting field allows integer input | Pass |
|  | Test symbol input into Weighting field in Edit Wine Show | Input alphanumeric input into Weighting field (.!?()’) | Weighting field does not allow symbol input except for (.) | Pass |
|  | Test decimal input into Weighting field in Edit Wine Show | Input decimal into Weighting field (0.9) | Weighting field allows decimal input | Pass |
|  | Test selecting Delete button | Select ‘Delete ’ button for one wine show | Delete button can be selected. Notification pops-up asking for deletion confirmation | Pass |
|  | Test “Add Wine Show” button on Add Wine Show subpage | Select Add Wine Show button (no fields entered) | Button can be selected. | Pass |
|  | Test Back button on Add Wine Show subpage | Select Back button | Button can be selected. Redirects user to previous page (Wine Show page) | Pass |

Producer page & subpages

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test viewing format Producer page | View Producer page | Producer display with no errors in front-page formatting | Pass |
|  | Test Add Producer button | Select Add Producer button | Add Producer button activated. Page redirects to Add Producer page | Pass |
|  | Test alphanumeric input into Name field in Add Producer | Input alphanumeric input into name field (abc123) | Name field allows alphanumeric input | Pass |
|  | Test symbol input into Name field in Add Producer | Input alphanumeric input into name field (.!?()’) | Name field allows symbol input | Pass |
|  | Test alphanumeric input into Description field in Add Producer | Input alphanumeric input into Add Producer on Description field (abc123) | Description field allows alphanumeric input | Pass |
|  | Test symbol input into Description field in Add Producer | Input alphanumeric input into Add Producer on Description field (.!?()’) | Description field allows symbol input | Pass |
|  | Test selecting Edit button | Select ‘Edit ’ button for one Region | Edit button can be selected. Region Edit page brought up | Pass |
|  | Test alphanumeric input into Name field in Add Producer | Input alphanumeric input into name field (abc123) | Name field allows alphanumeric input | Pass |
|  | Test symbol input into Name field in Add Producer | Input alphanumeric input into name field (.!?()’) | Name field allows symbol input | Pass |
|  | Test alphanumeric input into Description field in Add Producer | Input alphanumeric input into Add Producer on Description field (abc123) | Description field allows alphanumeric input | Pass |
|  | Test symbol input into Description field in Add Producer | Input alphanumeric input into Add Producer on Description field (.!?()’) | Description field allows symbol input | Pass |
|  | Test selecting Delete button | Select ‘Delete ’ button for one Region | Delete button can be selected. Notification pops-up asking for deletion confirmation | Pass |
|  | Test “Add Producer” button on Add Producer subpage, no fields | Select Add Producer button (no fields entered) | Button can be selected. Error displays | Pass |
|  | Test “Update Producer” button on Edit Producer subpage, no fields | Select Edit Producer button (no fields entered) | Button can be selected. Error displays | Pass |
|  | Test Back button on Add Producer subpage | Select Back button | Button can be selected. Redirects user to previous page (Region page) | Pass |

Region page & subpages

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test viewing format Region page | View Region page | Region display with no errors in front-page formatting | Pass |
|  | Test Add Region button | Select Add Region button | Add Region button activated. Page redirects to Add Region page | Pass |
|  | Test alphanumeric input into Name field in Add Region | Input alphanumeric input into name field (abc123) | Name field allows alphanumeric input | Pass |
|  | Test symbol input into Name field in Add Region | Input alphanumeric input into name field (.!?()’) and | Name field allows symbol input | Pass |
|  | Test alphanumeric input into Description field in Add Region | Input alphanumeric input into Add Region on Description field (abc123) | Description field allows alphanumeric input | Pass |
|  | Test symbol input into Description field in Add Region | Input alphanumeric input into Add Region on Description field (.!?()’) | Description field allows symbol input | Pass |
|  | Test alphanumeric input into State field in Add Region | Input alphanumeric input into State field (abc123) | State field allows integer input | Pass |
|  | Test symbol input into State field in Add Region | Input alphanumeric input into State field (.!?()’) | State field does not allow symbol input | Pass |
|  | Test selecting Edit button | Select ‘Edit ’ button for one Region | Edit button can be selected. Region Edit page brought up | Pass |
|  | Test alphanumeric input into Name field in Add Region | Input alphanumeric input into name field (abc123) | Name field allows alphanumeric input | Pass |
|  | Test symbol input into Name field in Add Region | Input alphanumeric input into name field (.!?()’) and | Name field allows symbol input | Pass |
|  | Test alphanumeric input into Description field in Add Region | Input alphanumeric input into Add Region on Description field (abc123) | Description field allows alphanumeric input | Pass |
|  | Test symbol input into Description field in Add Region | Input alphanumeric input into Add Region on Description field (.!?()’) | Description field allows symbol input | Pass |
|  | Test alphanumeric input into State field in Add Region | Input alphanumeric input into State field (abc123) | State field allows integer input | Pass |
|  | Test symbol input into State field in Add Region | Input alphanumeric input into State field (.!?()’) | State field does not allow symbol input | Pass |
|  | Test selecting Delete button | Select ‘Delete ’ button for one Region | Delete button can be selected. Notification pops-up asking for deletion confirmation | Pass |
|  | Test “Add Region” button on Add Region subpage | Select Add Region button (no fields entered) | Button can be selected. Error displays | Pass |
|  | Test “Update Region” button on Edit Region subpage | Select Update Region button (no fields entered) | Button can be selected. Error displays | Pass |
|  | Test Back button on Add Region subpage | Select Back button | Button can be selected. Redirects user to previous page (Region page) | Pass |

## User Interface Non-functional Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test load time of website home page, Pingdom test | Input website URL (realwinerating.com) into <https://tools.pingdom.com/>,  Test from Oceania | Website loads under 5 seconds | Pass – Avg load time 4.86s |
|  | Test load time of website home page, webpagetest.org test | Input website URL into <https://www.webpagetest.org/>,  Test default mobile connectivity from Virginia, US (Connectivity: 9000/9000 Kbps, 170ms Latency) | Website loads under 5 seconds | \*Fail – Speed index 6.259s |
|  | Test load time of website home page, webpagetest.org test | Input website URL into <https://www.webpagetest.org/>,  Test default desktop connectivity from Virginia, US (Connectivity: 9000/9000 Kbps, 170ms Latency) | Website loads under 5 seconds | Pass – Speed index 2.288s |

## Comments

|  |  |
| --- | --- |
| TestID/  Description | Comments |
| 99. | High latency will affect website loading times |

# Search & Filter/Sort Module

The Search functionality refers to website searches for a specific wine. Filter capability determines which conditions to filter results under, and Sort functionality determines the order in which display results are shown. Relates closely to the UI module and the Database module.

|  |  |
| --- | --- |
| Tester: | Ken C., Grace C. (sort functions - normal case) |
| Resources: | Laptop running Windows xx |
| Purpose: | Assess overall functionality of Search & Filter/Sort under common conditions to ensure they are working as intended. |

## Search & Filter/Sort Functional Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test input in Search Bar | Input alphanumeric characters into Search bar (abc123) | Search bar can accept alphanumeric characters | Pass |
|  | Test input search bar option in Wine Colour Filter dropdown | Input alphanumeric into Wine Colour search bar (Red) | Dropdown menu is filtered by option input (Red option displays) | Pass |
|  | Test multiple options Wine Colour | Input alphanumeric into Wine Colour search bar (Red). Select Red. Then search (White), Select white | Dropdown menu is filtered by option input | Pass |
|  | Test input search bar in Wine Colour filter, integer | Input integer into search bar (123) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar in Wine Colour filter, symbol | Input integer into search bar (.’!@()?) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar option in Grape Variety Filter dropdown | Input alphanumeric into Grape Variety search bar (Cabernet) | Dropdown menu is filtered by option input (Cabernet Sauvignon option displays) | Pass |
|  | Test multiple options Grape Variety | Select Cabernet. Then search Riesling, and select riesling | Dropdown menu is filtered by option input (Cabernet Sauvignon & Riesling options displays) | Pass |
|  | Test input search bar in Variety filter, integer | Input integer into search bar (123) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar in Variety filter, symbol | Input integer into search bar (.’!@?) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar option in Region Filter dropdown | Input alphanumeric into Region search bar (Canberra) | Dropdown menu is filtered by option input (Canberra District option displays) | Pass |
|  | Test multiple options Region | Select Canberra district, search Margaret river, select Margaret river | Dropdown menu is filtered by option input (Canberra District & Marg river options display) | Pass |
|  | Test input search bar in Region filter, integer | Input integer into search bar (123) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar in Region filter, symbol | Input integer into search bar (.’!@?) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar option in Producer Filter dropdown | Input alphanumeric into producer search bar (3Drops) | Dropdown menu is filtered by option input (3Drops option displays) | Pass |
|  | Test multiple options Producer | Select 3drops, search yalumba, select yalumba | Dropdown menu is filtered by option input | Pass |
|  | Test input search bar in Producer filter, integer | Input integer into search bar (123) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar in Producer filter, symbol | Input integer into search bar (.’!@?) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar option in Wine Show Filter dropdown | Input alphanumeric into producer search bar (ICC) | Dropdown menu is filtered by option input (ICC Sydney Wine Show option displays) | Pass |
|  | Test multiple options Wine Show | Select ICC Sydney Wine Awards, Search Melb. Select Melbourne Royal Wine awards | Dropdown menu is filtered by option input | Pass |
|  | Test input search bar in Wine Show filter, integer | Input integer into search bar (123) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar in Wine Show filter, symbol | Input integer into search bar (.’!@?) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar option in Award Filter dropdown | Input alphanumeric into Award search bar (Gold) | Dropdown menu is filtered by option input (Top Gold and Gold options display) | Pass |
|  | Test multiple options Award | Select Gold. Search Bronze. Select Bronze | Dropdown menu is filtered by option input | Pass |
|  | Test input search bar in Award filter, integer | Input integer into search bar (123) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input search bar in Award filter, symbol | Input integer into search bar (.’!@?) | Dropdown menu is filtered by option input (no results) | Pass |
|  | Test input into Year filter ranges with letters | Input alphanumeric characters into Year filter range. | Year filter range does not allow input of letters | Pass |
|  | Test input into Year filter ranges with integers, normal case | Input number characters into Year filter range. (2019-2022) Apply filter. | Year filter range accepts up to 4 places of integers, displays wines from 2019 to 2020 | Pass |
|  | Test input into Year filter ranges with number, upper limit in characters | Input number characters into Year filter range (202000000000-20200000000) & Apply filter. | Year filter range only accepts 4 places of integers, displays wines from 2020 | Pass |
|  | Test input into Year with lower limit, negative value | Input negative number characters into Year filter range. (-2022) & Apply filter. | Year filter range does not allow input of negative integers | Fail\* |
|  | Test input into Year with lower limit, decimal point | Input decimal number characters into Year filter range. (0.2022) & Apply filter. | Year filter range does not allow input of decimal integers | Fail\* |
|  | Test input into Year with lower limit, negative decimal point | Input negative decimal number characters into Year filter range. (-0.1) & Apply filter. | Year filter range does not allow input of negative decimal integers | Fail\* |
|  | Test input into Year filter ranges with symbols | Input symbol characters into Year filter range. | Year filter range does not allow input of symbol characters (!@#$%) | Pass |
|  | Test input into Cost filter ranges with letters | Input alphanumeric characters into Cost filter range. | Cost filter range does not allow input of letters | Pass |
|  | Test input into Cost filter ranges with symbols | Input symbol characters into Cost filter range. (!@#$%) | Cost filter range does not allow input of symbol characters | Pass |
|  | Test input into Cost filter ranges with integers, normal case | Input number characters into Cost filter range. (20-100) Apply Filter | Cost filter range accepts integers, displays wines in filter range | Pass |
|  | Test input into Cost filter ranges with number, excess digits | Input number characters into Cost filter range (10000000000) | Cost filter range accepts up to 6 places of integers, or 4 int places with 2 decimal points | Pass |
|  | Test input into Cost with lower limit, negative value | Input negative number characters into Cost filter range. (-1) | Cost filter range does not allow input of negative integers | Fail\* |
|  | Test input into Cost with lower limit, decimal point | Input decimal number characters into Cost filter range. ( 9999.50) | Cost filter range accepts 6 places of integers, with 2 decimal points | Pass |
|  | Test input into Cost with lower limit, negative decimal point\* | Input negative decimal number characters into Cost filter range. (-0.1) | Cost filter range does not allow input of negative decimal integers | Fail\* |
|  | Test input into QPR filter ranges with symbols | Input symbol characters into QPR filter range. (!@#$%) | QPR filter range does not allow input of symbols | Pass |
|  | Test input into QPR filter ranges with letters | Input alphanumeric characters into QPR filter range. | QPR filter range does not allow input of letters | Pass |
|  | Test input into QPR filter ranges with integers, normal case | Input number characters into QPR filter range. (50, 95) | QPR filter range accepts integers | Pass |
|  | Test input into QPR filter ranges with number, excess digits | Input number characters into QPR filter range (1111111111) | QPR filter range accepts up to 5 places of integers, with 2 decimal points and one . symbol | Pass |
|  | Test input into QPR with lower limit, negative value | Input negative number characters into QPR filter range. (-1) | QPR filter range does not allow input of negative integers | Fail\* |
|  | Test input into QPR with lower limit, decimal point | Input decimal number characters into QPR filter range. (11.1111) | QPR filter range accepts up to 5 places of integers, with 2 decimal points | Pass |
|  | Test input into QPR with lower limit, excess decimal point | Input decimal number characters into QPR filter range. (1.111111) | QPR filter range accepts up to 5 places of integers, with 2 decimal points | Fail\* |
|  | Test input into QPR with lower limit, negative decimal point\* | Input negative decimal number characters into QPR filter range. (-0.1) | QPR filter range does not allow input of negative decimal integers | Fail\* |
|  | Test input into Avg Score filter ranges with symbols | Input symbol characters into Avg Score filter range. (!@#$%) | Avg Score filter range does not allow input of symbols | Pass |
|  | Test input into Avg Score filter ranges with letters | Input alphanumeric characters into Avg Score filter range. (abc) | Avg Score filter range does not allow input of letters | Pass |
|  | Test input into Avg Score filter ranges with integers | Input number characters into filter range. (50 - 95) | Avg Score filter range accepts integers, displays wines within Avg Score range of 50 to 95 | Pass |
|  | Test input into Avg Score filter ranges with number, excess digits | Input number characters into Avg Score filter range (1111111) | Avg Score filter range accepts up to 4 places of integers | Pass |
|  | Test input into Avg Score with lower limit, negative value | Input negative number characters into Avg Score filter range. (-1) | Avg Score filter range does not allow input of negative integers | Fail\* |
|  | Test input into Avg Score with lower limit, decimal point | Input decimal number characters into Avg Score filter range. (1.111) | Avg Score filter range accepts 2 places of decimals | Pass |
|  | Test input in search bar in Filter dropdown menus on Home page | Input alphanumeric & accent characters into search bar in Filter menus | Search bar accepts of alphanumeric & accent character input | Pass |
|  | Test filter multiple options selected | Select multiple options for Wine Colour | Filter allows multiple options selected | Pass |
|  | Test sort default (no sorting applied) | View default results | Results sorted by points descending | Pass  Inserting image... |
|  | Test sort Name Ascending | Sort by Name A->Z | Display Sort by Name A->Z | Pass  Inserting image... |
|  | Test sort Name descending | Sort by Name Z->A | Display Sort by Name Z->A | Pass  Inserting image... |
|  | Test sort highest score | sort highest score | Display sort highest score | Pass  Inserting image... |
|  | Test sort lowest score | sort lowest score | Display sort lowest score | Pass  Inserting image... |
|  | Test sort most expensive | sort most expensive | Display sort most expensive | Pass  Inserting image... |
|  | Test sort least expensive | sort least expensive | Display sort least expensive | Pass  Inserting image... |
|  | Test sort highest QPR | sort highest QPR | Display sort highest QPR | Pass  Inserting image... |
|  | Test sort lowest QPR | sort lowest QPR | Display sort lowest QPR | Pass  Inserting image... |
|  | Test Filter multiple producer | Select multiple producers | Display wines from multiple producers | Pass |
|  | Test Filter combination (Colour & Variety) | Select Red & Cabernet Sauvignon | Results display based on combination (Cabernet Sauvignon wines) | Pass |
|  | Test Filter combination (Colour & Region) | Select Red & Margaret River | Results display based on combination (Red wines from Margaret River) | Pass |
|  | Test Filter combination (Colour & Producer) | Select Red & Yalumba Wines | Results display based on combination (Red wines produced by Yalumba) | Pass |
|  | Test Filter combination (Colour & Wine Show) | Select Red & ICC Sydney Wine Show | Results display based on combination (Red wines from ICC Sydney wine show) | Pass |
|  | Test Filter combination (Colour & Award) | Select Red & Top Gold | Results display based on combination (Top gold rated Red wines) | Pass |
|  | Test Filter combination (Variety & Region) | Select Cabernet Sauvignon & Margaret River | Results display based on combination (Cab Sauv wines from Margaret River) | Pass |
|  | Test Filter combination (Variety & Producer) | Select Cabernet Sauvignon & Yalumba wines | Results display based on combination (Cab Sauv wines made by Yalumba) | Pass |
|  | Test Filter combination (Variety & Wine Show) | Select Cabernet Sauvignon & ICC Sydney wine show | Results display based on combination (Cab Sauv wines featured in ICC Sydney wine show) | Pass |
|  | Test Filter combination (Variety & Award) | Select Cabernet Sauvignon & Gold | Results display based on combination (Cab Sauv wines rated Gold only) | Pass |
|  | Test Filter combination (Region & Producer) | Select Yalumba Wines & Coonawarra | Results display based on combination (Coonawarra wines produced by Yalumba) | Pass |
|  | Test Filter combination (Region & Wine Show) | Select Hunter Valley & ICC Sydney wine awards | Results display based on combination (Hunter valley wines featured in ICC) | Pass |
|  | Test Filter combination (Region & Award) | Select Margaret River & Silver | Results display based on combination (Silver rated wines made in Margaret River) | Pass |
|  | Test Filter combination (Producer & Wine Show) | Select Yalumba wines & Melbourne Royal Wine Awards | Results display based on combination (wines made by Yalumba featured in MRWA) | Pass |
|  | Test Filter combination (Producer & Award) | Select Yalumba wines & Gold | Results display based on combination (Gold rated wines made by Yalumba) | Pass |
|  | Test Filter combination (Wine Show & Award) | Select ICC Sydney Wine Awards & Top Gold | Results display based on combination (Top Gold wines featured in ICC Sydney Wine Awards) | Pass |
|  | Test Filter combination (Colour & Year) | Select Red & 2019-2022 Year | Results display based on combination (Red wines with 2019 to 2022 vintages) | Pass |
|  | Test Filter combination (Colour & Cost) | Select Red & 20-100 Cost | Results display based on combination (Red wines with 20 to 100 dollar price) | Pass |
|  | Test Filter combination (Colour & QPR) | Select Red & 70-90 QPR | Results display based on combination (Red wines with 70 to 90 QPR) | Pass |
|  | Test Filter combination (Colour & Average Score) | Select Red & 70-90 Avg Score | Results display based on combination (Red wines with 70-90 average score) | Pass |
|  | Test Filter combination (Colour & Variety & Year) | Red & Cabernet Sauvignon & 2019-2022 year | Results display based on combination (Red Cabernet Sauvignon wines with 2019 to 2022 vintages) | Pass |
|  | Test Filter combination (Colour & Variety & Year; Colour & variety mutual exclusive) | White & Cabernet Sauvignon & 2019-2022 year | Results display based on combination (no wines display) | Pass |
|  | Test Filter combination (Colour & Variety & Cost) | Red & Cabernet Sauvignon & 70-100 Cost | Results display based on combination (Cabernet Sauvignon wines costing 70 to 100 dollars) | Pass |
|  | Test Filter combination (Colour & Variety & Cost, lower limit on cost) | Red & Cabernet Sauvignon & 0-1 Cost | Results display based on combination (no wines display) | Fail\* |
|  | Test Filter combination (Colour & Variety & Cost, upper limit on cost) | Red & Cabernet Sauvignon & 999-1000 Cost | Results display based on combination (no wines should display, unless there is a Cabernet Sauvignon costing 999 dollars) | Pass |
|  | Test Filter combination (Colour & Variety & QPR) | Red & Cabernet Sauvignon & 70-100 QPR | Results display based on combination (Cab Sauv wines with 70 to 100 QPR) | Pass |
|  | Test Filter combination (Colour & Variety & Avg score) | Red & Cabernet Sauvignon & 70-100 Avg Score | Results display based on combination (Cab Sauv wines from 70 to 100 average score) | Pass |
|  | Test Filter combination (Year & Cost & QPR & Average Score) | Red & Cabernet Sauvignon & 70-100 QPR & 70-100 Average Score | Results display based on combination(Cab Sauv wines from 70 to 100 average score with 70 to 100 QPR) | Pass |
|  | Test Filter & Sort combination (Colour & Name A-> Z) | Red & Cab Sauv & Sort Name A->Z | Results display based on combination (Cab Sauv wines from numbers, symbols, A to Z) | Pass |
|  | Test Filter & Sort combination (Colour & Name Z->A) | Red & Cab Sauv & Sort Name Z->A | Results display based on combination (Cab Sauv wines from Z to A, symbols then numbers) | Pass |
|  | Test Filter & Sort combination (Colour & Highest score) | Red & Cab Sauv & Sort Highest Score | Results display based on combination (Cab Sauv wines sorted by score) | Pass |
|  | Test Filter & Sort combination (Colour & Lowest score) | Red & Cab Sauv & Sort Lowest score | Results display based on combination (Cab Sauv wines sorted by score) | Pass |
|  | Test Filter & Sort combination (Colour & Most Exp) | Red & Cab Sauv & Sort Most Exp | Results display based on combination (Cab Sauv wines sorted by price) | Pass |
|  | Test Filter & Sort combination (Colour & Least Exp) | Red & Cab Sauv & Sort Least Exp | Results display based on combination (Cab Sauv wines sorted by price) | Pass |
|  | Test Filter & Sort combination (Colour & Highest QPR) | Red & Cab Sauv & Sort Highest QPR | Results display based on combination (Cab Sauv wines sorted by QPR) | Pass |
|  | Test Filter & Sort combination (Colour & Lowest QPR) | Red & Cab Sauv & Sort Lowest QPR | Results display based on combination (Cab Sauv wines sorted by QPR) | Pass |
|  | Test Reset | Apply filter Red & Cabernet Sauvignon. Sort Wines by Most Expensive. Select Reset | Display reset, removes all filters and sorting | Pass |

## Comments

|  |  |
| --- | --- |
| TestID/  Description | Comments |
| 129, 130, 131 | Year range allows negative integers – and decimal numbers (However, select apply filter does not allow the user to filter by these forbidden types) |
| 137, 139 | Cost range allows negative integers (However, select apply filter does not allow the user to filter by these forbidden types) |
| 144, 146, 147 | QPR range accepts: negative ints, too many decimal points, negative decimals (However, select apply filter does not allow the user to filter by these forbidden types) |
| 152 | Avg Score range accepted negative input (However, select apply filter does not allow the user to filter by these forbidden types) |
| 188 | Wines with no price are represented as $0, so they still appear in Price range filters for $0 to $1 |

# Account Authentication Module

The accounts module refers to the administrative accounts and privileges associated once the user logs in with a specific account. Admin accounts allow the user to create, read, update and delete data depending on the account. Functionalities allowed with the admin account include Adding/Editing wine details, wine shows (and wine show weightings), producers, regions and uploading new data. Logging in will require the correct username, password and a filled captcha to prevent password brute-forcing.

|  |  |
| --- | --- |
| Tester: | Ken C. |
| Resources: | Laptop running Windows 10, CantDelete account |
| Purpose: | Assess overall functionality of Accounts Authentication module under common conditions to ensure they are working as intended. |

## Account Authentication Functional Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test log in with valid username, valid credentials and correct captcha | Input Username, Password & select captcha (Input (CantDelete, Password@2, captcha). Select Log In. | Log in successful, view updates to privileged view | Pass |
|  | Test log in with valid username, valid credentials and incorrect captcha | Input (CantDelete, CantDeletePw, false captcha). Select Log In. | Log in unsuccessful, error message displays (captcha needs to be filled correctly) | Pass  Inserting image... |
|  | Test log in with valid username, valid credentials and unfilled captcha | Input (CantDelete, CantDeletePw, *null*). Select Log In. | Log in unsuccessful, error message displays (captcha needs to be filled correctly) | Pass  Inserting image... |
|  | Test log in with valid username, invalid credentials and correct captcha | Input (CantDelete, false pw, captcha). Select Log In. | Log in unsuccessful, error message displays (captcha needs to be filled correctly, password is incorrect) | Pass  Inserting image... |
|  | Test log in with valid username, invalid credentials and incorrect captcha | Input (CantDelete, false pw, false captcha). Select Log In. | Log in unsuccessful, error message displays (captcha needs to be filled correctly, password is incorrect) | Pass |
|  | Test log in with valid username, invalid credentials and unfilled captcha | Input (CantDelete, false pw, *null*). Select Log In. | Log in unsuccessful, error message displays (captcha needs to be filled correctly, password is incorrect) | Pass |
|  | Test log in with invalid username, valid credentials and correct captcha | Input (false Account, CantDelete, captcha). Select Log In. | Log in unsuccessful, error message displays (username does not exist) | Pass  Inserting image... |
|  | Test log in with invalid username, valid credentials and incorrect captcha | Input (false Account, CantDeletePw, false captcha). Select Log In. | Log in unsuccessful, error message displays (username does not exist) | Pass  Inserting image... |
|  | Test log in with invalid username, valid credentials and unfilled captcha | Input (false Account, CantDeletePw, *null*). Select Log In. | Log in unsuccessful, error message displays (username does not exist) | Pass  Inserting image... |
|  | Test log in with unfilled username, valid credentials and filled captcha | Input (*null*, CantDeletePw, captcha). Select Log In. | Log in unsuccessful, error message displays (username does not exist) | Pass  Inserting image... |
|  | Test log out | Log In, then select Log Out | Log out successful | Pass |

## Account Authentication Non-Functional Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test Captcha online or offline | Logged out user selects log in page, selects captcha | Captcha is online and interactable | Pass |

## Comments

|  |  |
| --- | --- |
| TestID/  Description | Comments |
| N/A |  |

# Upload Module

The Upload module allows admin users to upload new wine show results in a structured .csv file (excepting .csv UTF-8 files). Data is read from these files and are inserted into the database. Regions, Producers and Wine shows in these .csv files must already exist within the database for the result to be added. Upon success, the database is updated.

|  |  |
| --- | --- |
| Tester: | Ken C. |
| Resources: | Laptop running Windows 10, CantDelete account |
| Purpose: | Assess overall functionality of Upload module under common conditions to ensure they are working as intended. |

## Upload Functional Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test upload feature on website connectivity to database | View wines added via upload on Home page | After searching, home page displays the added wines (database has been updated and website is reading new information) | Pass |
|  | Test upload fully structured csv, normal case | Upload csv with (Testwine, 2020, TestProducer, TestRegion, 90, Gold, Shiraz, TestWineShow, 2020, *null*) | Upload successful note displays. Database updated. Wine shows up in Home page search | Pass |
|  | Test upload fully structured csv UTF-8 | Upload UTF-8 csv with (Testwine, 2020, TestProducer, TestRegion, 90, Gold, Shiraz, TestWineShow, 2020, *null*) | Error displays (wrong file format) | Pass |
|  | Test upload fully structured xlsx | Upload xlsx with (Testwine, 2020, TestProducer, TestRegion, 90, Gold, Shiraz, TestWineShow, 2020, *null*) | Error displays (wrong file format) | Pass |
|  | Test upload null csv | Upload csv with all fields null | Error displays (wrong headers) | Pass |
|  | Test upload structured but null csv | Upload csv | Upload successful note displays. No changes to database | Pass |
|  | Test upload duplicate wine | Upload csv with duplicate wine names on all lines (approx. 5) | Upload successful note displays. Duplicates condensed into one wine name result | Pass |
|  | Test upload csv, no exhibit | Upload csv with (*null*, 2020, TestProducer, TestRegion, 90, Gold, Shiraz, TestWineShow, 2020, *null*) | Upload fails, shows error in relevant field | Pass |
|  | Test upload csv, no year | Upload csv with (Testwine, *null*, TestProducer, TestRegion, 90, Gold, Shiraz, TestWineShow, 2020, *null*) | Upload fails, shows error in relevant field | Pass |
|  | Test upload csv, no producer | Upload csv with (Testwine, 2020, *null*, TestRegion, 90, Gold, Shiraz, TestWineShow, 2020, *null*) | Upload fails, shows error in relevant field | Pass |
|  | Test upload csv, no region | Upload csv with (Testwine, 2020, TestProducer, *null*, 90, Gold, Shiraz, TestWineShow, 2020, *null*) | Upload succeeds | Pass |
|  | Test upload csv, no score | Upload csv with (Testwine, 2020, TestProducer, TestRegion, *null*, Gold, Shiraz, TestWineShow, 2020, *null*) | Upload successful note displays. Database updated. Wine shows up in Home page search | Pass\* |
|  | Test upload csv, no award | Upload csv with (Testwine, 2020, TestProducer, TestRegion, 90, *null*, Shiraz, TestWineShow, 2020, *null*) | Upload successful note displays. Database updated. Wine shows up in Home page search | Pass |
|  | Test upload csv, no category | Upload csv with (Testwine, 2020, TestProducer, TestRegion, 90, Gold, *null*, TestWineShow, 2020, *null*) | Upload fails, shows error in relevant field | Pass |
|  | Test upload csv, no wineshow | Upload csv with (Testwine, 2020, TestProducer, TestRegion, 90, Gold, Shiraz, *null*, 2020, *null*) | Upload fails, shows error in relevant field | Pass |
|  | Test upload csv, no wineshow year | Upload csv with (Testwine, 2020, TestProducer, TestRegion, 90, Gold, Shiraz, TestWineShow, *null*, *null*) | Upload fails, shows error in relevant field | Pass |
|  | Test upload csv, no award category | Upload csv with (Testwine, 2020, TestProducer, TestRegion, 90, Gold, Shiraz, TestWineShow, 2020, *null*) | Upload successful note displays. Database updated. Wine shows up in Home page search. Wine does not have category | Pass |

## Comments

|  |  |
| --- | --- |
| TestID/  Description | Comments |
| Test upload csv, no score | Wines with no score are set at 80 |
| Test upload csv, no region | File uploaded with result that has no region |

# Database Module

The database module serves as the foundation of the website’s wine result data. Wines, wine show, region, producer and other details are stored in the database and retrieved with queries from the front-end. Admin users once logged in can edit or delete this data via the front-end user interface. Relates with the Search/Sort/Filter, Accounts Authentication and Upload modules closely.

|  |  |
| --- | --- |
| Tester: | Ken C., Grace C. |
| Resources: | Laptop running Google Chrome,  Windows 10,  CanDelete account |
| Purpose: | Assess overall functionality of database module under common conditions to ensure they are working as intended. |

## Database Functional Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test connectivity website to database | View home page results | Website is connected to the database, view populated by wine results | Pass |
|  | Test QPR view | View QPR calculation for Penfolds Wines 2020 Reserve Bin A Chardonnay | QPR calculation view is correct | Pass |
|  | Test delete wine | Select Test Wine 1, Select delete | Wine is deleted from database | Pass  Inserting image... |
|  | Test delete wine show result, multiple wine show results | Select More Info of Test Wine 1, Delete wine show result | Wine result is deleted from database | Pass  Inserting image... |
|  | Test delete wine show result, only result | Delete wine show result | Wine result is deleted from database, Wine is deleted | Pass  Inserting image... |
|  | Test delete wine show | Delete wine show | Wine show deleted | Pass |
|  | Test delete producer | Delete producer | Producer deleted | Pass |
|  | Test delete region | Delete region | Region deleted | Pass |
|  | Test Edit wine name, alphanumeric & symbol | Change name of Test Wine 1 | Field changed, database updated | Pass  Inserting image...  Inserting image... |
|  | Test Edit wine vintage, normal case | Edit vintage to 2022 | Field changed, database updated | Pass |
|  | Test Edit wine vintage, decimal | Edit vintage to 0.2022 | Edit unsuccessful, error message displayed | Pass  Inserting image... |
|  | Test Edit wine vintage, lower limit negative value | Edit vintage to -1000 | Edit unsuccessful, error message displayed | Pass |
|  | Test Edit wine vintage, upper limit | Edit vintage to 9999 | Edit unsuccessful, error message displayed | Pass  Inserting image... |
|  | Test Edit wine Cost, normal case | Edit Cost to 99.50 | Field changed, database updated | Pass |
|  | Test Edit wine Cost, alphanumeric | Edit Cost to abc123 | Field only allows integers | Pass  Inserting image... |
|  | Test Edit wine Cost, lower limit negative value | Edit Cost to -99.50 | Edit unsuccessful, error message displayed | Pass\* |
|  | Test Edit wine Cost, upper limit | Edit Cost to 999999999 | Field only accepts up to 6 integer places | Pass |
|  | Test Edit wine Cost, excess decimal | Edit Cost to 99.999999 | Field only accepts up to 6 integer places, error message displays (only 2 decimal places allowed) | Pass |
|  | Test Edit wine Description | Edit Description to ‘TestDescription’ | Field changed, database updated | Pass |
|  | Test Edit wine Variety | Edit variety to Cabernet Sauvignon | Field changed, database updated | Pass |
|  | Test Edit wine Producer | Edit Producer to 3Drops | Field changed, database updated | Pass |
|  | Test Edit wine Region | Edit Region to Margaret River | Field changed, database updated | Pass |
|  | Test Edit wine show result | Edit wine show result | Field changed, database updated | Pass  Inserting image...  Inserting image... |
|  | Test Edit wine show result Points alphanumeric | Edit wine show result points with letters (abc) | Edit fails, input not allowed | Pass |
|  | Test Edit wine show result Points integers, normal case | Edit wine show result points with integers | Field changed, database updated | Pass |
|  | Test Edit wine show result Points integers, lower limit | Edit wine show result points with integers below 80 | Edit fails, error displays | Pass  Inserting image... |
|  | Test Edit wine show result Points integers, upper limit | Edit wine show result points with integers above 100 | Edit fails, error displays | Pass  Inserting image... |
|  | Test Edit wine show result year alphanumeric | Edit wine show result year with letters | Edit fails, error displays | Pass  Inserting image... |
|  | Test adding account Username & Password, normal case | Input (TestAccount, password) and Add account | TestAccount created with relevant fields | Fail\* This was never implemented |
|  | Test adding account Username & Password, null Username | Input (*null*, password) and Add account | Account not allowed to be created | Fail\* This was never implemented |
|  | Test adding account Username & Password, null Password | Input (TestAccount,*null*) and Add account | TestAccount created with relevant fields, no password | Fail\* this was never implemented |
|  | Test Add Wine Show, normal case | Input (TestWineShow, WA, 0.8) then Add Wine Show | TestWineShow added with relevant fields | Pass |
|  | Test Add Wine Show duplicate | Insert wine show with same name and details | Warning displays. Details not added. | Pass |
|  | Test Add Wine Show, lower limit on weighting | Input (TestWineShow, WA, 0.001) then Add Wine Show | Wine Show weighting input does not allow weighting smaller than 0.00.The field shows 0.00, adding will create the wine show. | Pass |
|  | Test Add Wine Show, upper limit on weighting | Input (TestWineShow, WA, 100) then Add Wine Show | Wine Show is not allowed to be added. | Pass |
|  | Test Add Wine Show, lower limit on weighting (with negative value) | Input (TestWineShow, WA, -0.1) then Add Wine Show | Wine Show is not allowed to be added. | Pass |
|  | Test Add Wine Show, null in name | Input (*null*, WA, 0.5) then Add Wine Show | Wine Show is not allowed to be added. | Pass |
|  | Test Add Wine Show, null in Location | Input (TestWineShow, *null*, 0.8) then Add Wine Show | TestWineShow added with relevant fields, no description | Pass |
|  | Test Add Wine Show, null in Weighting | Input (TestWineShow, WA, *null*) then Add Wine Show | Wine Show is not allowed to be added. | Pass |
|  | Test Add Wine Show, lower limit in characters & fields | Input (a, a, 0) then Add Wine Show | Wine Show added with relevant fields | Pass |
|  | Test Add Region, normal case | Input (TestRegion, testRegionDescription, WA) then Add Region | TestRegion added with relevant fields | Pass |
|  | Test Add Region duplicate | Insert region with same details | Warning displays. Details not added. | Pass |
|  | Test Add Region, null in name | Input (*null*, testRegionDescription, WA) then Add Region | Region is not allowed to be added. | Pass |
|  | Test Add Region, null in description | Input (TestRegion, *null*, WA) then Add Region | TestRegion added with relevant fields, no description | Pass |
|  | Test Add Region, null in State | Input (TestRegion, testRegionDescription, *null*) then Add Region | Region is not allowed to be added. | Fail\* |
|  | Test Add Region, lower limit in characters | Input (a, a, a) then Add Region | Region added with relevant fields | Pass |
|  | Test Add Region, upper limit in characters | Input (aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa, aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa, aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa) then Add Region | TestRegion added with relevant fields | Pass |
|  | Test Add Producer, normal case | Input (TestProducer, TestProducerDescription) then Add Producer | TestProducer added with relevant fields | Pass |
|  | Test Add Producer duplicate | Insert producer with same details | Warning displays. Details not added. | Pass |
|  | Test Add Producer, null in name | Input (*null*, TestProducerDescription) then Add Producer | Producer is not allowed to be added. | Pass |
|  | Test Add Producer, null in description | Input (TestProducer, *null*) then Add Producer | TestProducer added with relevant fields | Pass |
|  | Test Add Producer, lower limit in characters | Input (a, a) then Add Producer | Producer added with relevant fields | Pass |
|  | Test Add Producer, upper limit in characters | Input (aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa, aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa, aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa) then Add Producer | TestProducer added with relevant fields | Pass |

## Comments

|  |  |
| --- | --- |
| TestID/  Description | Comments |
| Create Account | Functionality (Create Account) not developed, out-of-scope |
| Test Edit wine Cost, lower limit negative value | Error message for negative cost input should mention the cost must only be positive |
| Test Add Region, null in State | Region should not be allowed to be added when State is empty |

# User Acceptance Testing

User Acceptance Testing (UAT) is a type of testing performed by the end user or the client to verify/accept the software system before moving the software application to the production environment. UAT is done in the final phase of testing after functional, integration and system testing is done. Major parts of UAT testing for this project include Security, Browser and Device testing.

|  |  |
| --- | --- |
| Tester: | Ken C., Belinda J. (Safari on iPhone), Callum (Security) |
| Resources: | Google Chrome, Microsoft Edge, Opera, Safari browsers  PC/Laptop, Mobile Android, iPhone, MacBook |
| Purpose: | Assess multiple UAT modules – security, accessibility and connectivity on Browsers and Devices |

## Security Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test SQL injection in user login fields | ‘or1=1;-- | “No user found matching those details please try again” | Pass |
|  | HTML injection stored variable | No boxes or questionnaires on page reflect comments – such as search and login bars, no statements are loaded and displayed back to the site | No vulnerable text boxes | Pass |
|  | Cookie Re-usable attack | Cookie field was unable to be manipulated | - | Pass |
|  | Server exhaustion | Server overloaded by insanely large data tables and information dump | Fail – A logged in administrator user could upload dense excel tables with an exhausting amount of data to crash our server – limitation needs to be put in place. | Fail\* |
|  | Data secured from other users | Is ALL data accessible from a user login? | Fail – All current data can be manipulated by a singular admin user. | Fail\* |
| 6. | NMAP test | N-MAP scan of our domain | Firewall blocks all unverified traffic and scouting. | Pass |

## Browser Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test website loading on Google Chrome v107.0.5304.87 on PC/Laptop | Load website on browser | Browser & device connects to website, web application loads | Pass |
|  | Test website loading on Microsoft Edge v107.0.1418.24 on PC/Laptop | Load website on browser | Browser & device connects to website, web application loads | Pass |
|  | Test Opera Web Browser v92.0.4561.21 PC/Laptop | Load website on browser | Browser & device connects to website, web application loads | Pass |
|  | Test website loading on Safari v15 on MacBook | Load website on browser | Browser & device connects to website, web application loads | Untested\* |

## Device Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Input/Data Call | Expected Result | Pass/  Fail |
|  | Test website loading on Google Chrome v107.0.5304.87 on PC | Load website on medium | Browser & device connects to website, web application loads | Pass |
|  | Test website loading on Google Chrome v107.0.5304.87 on Laptop | Load website on medium | Browser & device connects to website, web application loads | Pass |
|  | Test website loading on Google Chrome v107.0.5304.87 on Phone, Android 10 | Load website on medium | Browser & device connects to website, web application loads | Pass |
|  | Test website loading on Safari v15, MacBook with MacOS 13 | Load website on medium | Browser & device connects to website, web application loads | Untested\* |
|  | Test website loading on Safari v15, iPhone with iOS 16.1 | Load website on medium | Browser & device connects to website, web application loads | Pass |

## Usability Testing

Usability testing refers to the User Experience part of the web application and user’s perception of different features. A closed survey was conducted to measure the extent of user satisfaction with interaction of different features. Voluntary student participants from Murdoch University were chosen to complete the survey.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Description | Tested Metric | Acceptable Metric | Pass/  Fail |
|  | Test Intuitive UI home page | 1-10 Likert scale (Not usable at all to Very understandable), “Do you feel that the Home Page is easily usable” | Average of 6 and above | Pass\* |
|  | Test Intuitive upload page | 1-10 Likert scale (Don’t understand at all to Clearly Explained), “Do you, the user, understand the structure of the CSV file to be uploaded” | Average of 6 and above | Pass |
|  | Test Intuitive more details page | 1-10 Likert scale (Extremely dissatisfied to Very satisfied), “Do you feel that the More Details page provides good relevant information” | Average of 6 and above | Pass |
|  | Test Intuitive log in page | 1-10 Likert scale (Extremely dissatisfied to Very satisfied), “Do you, the user, feel that the log in page can be easily used” | Average of 6 and above | Pass |
|  | Test Intuitive log in page | 1-10 Likert scale (Extremely dissatisfied to Very satisfied), “Do you, the user, feel that logging out is easy” | Average of 6 and above | Pass |
|  | Test Intuitive edit wine details/results | 1-10 Likert scale (Extremely dissatisfied to Very satisfied), “Do you, the user, feel that it is easy to edit wine details or wine show results” | Average of 6 and above | Pass |
|  | Test Intuitive search | 1-10 Likert scale (Extremely dissatisfied to Very satisfied), “Do you, the user, feel that searching for a wine is easy” | Average of 6 and above | Pass |
|  | Test Intuitive sort & filter results | 1-10 Likert scale (Extremely dissatisfied to Very satisfied), “Do you, the user, feel that sorting and filtering is easily done” | Average of 6 and above | Pass\* |
|  | Test Intuitive log out | 1-10 Likert scale (Extremely dissatisfied to Very satisfied), “Do you, the user, feel that logging out is easy and makes sense” | Average of 6 and above | Pass |
|  | Test Intuitive deletion | 1-10 Likert scale (Extremely dissatisfied to Very satisfied), “Do you, the user, feel that deleting a result is easy” | Average of 6 and above | Fail\* |

## Comments

|  |  |
| --- | --- |
| TestID/  Description | Comments |
| Safari/Macbook testing | Unable to procure resources (Macbook) |
| Deletion | Survey scope did not cover deletion (testers may have made unintended database changes) |
| Filter & Sort | Lowest score, users did not know what average score or QPR was until it was explained. They did not know what numbers to put in the ranges for filtering. One user mentioned a feature to sort by number of wine shows was needed. |
| Home page | 2nd Lowest score, Users mentioned its overwhelming with details that basic users don’t know about (especially if they are novices in wine understanding) |
| Server exhaustion | A logged in administrator user could upload dense excel tables with an exhausting amount of data to crash our server – limitation needs to be put in place. |
| Data secured from other users | All current data can be manipulated by a singular admin user. Need more specialised admin users (such as Producer admin user can only manipulate Producer data) |

# Appendix

## Definitions and Acronyms

**Actor** – A model element, usually a user, that interacts with a system

**Apache** – A free open source cross-platform web server.

**Authorised user** – A user which has been authorised and given the privileges to perform more actions than a standard user.

**CSV** – Comma-separated value file, commonly used with Excel, which uses commas to separate values.

**Database** – An organised collection of structured data usually in stored in a computer system.

**Entity** - A real-world object that can be distinguished from other objects

**ERD Diagram –** An entity relationship diagram which illustrates how entities interrelate with each other.

**Event** – a significant occurrence in the system at a specific point in time

**GitHub** - A version control platform for tracking and updating programming code versions

I**nterface –** The point where the users interact with the website.

**JS –** JavaScript, a programming language used to create dynamic and interactive content.

**MySQL** - An open-sourced relational database

**NBN12 –** The lowest speed tier of national broadband network.

**Object** – Elements that represent instances of a class or of classes in a certain moment of time

**PHP** - General purpose scripting language for web development

**PhpMyAdmin** – A free software, internet-based, tool using PHP language to control MySQL databases.

**Proxy browsers –** Intermediary server which separates the end user from the websites they visit.

**QPV** – Quality Price Ratio, a calculation made based on the quality of the wine and the cost of the wine

**Scalability** – The ability for the website to be changed in size when needed

**SQL** – Programming language used for managing data in a relational database.

**Varchar** – Used in SQL to describe data that can have varying characters.

**Version Control** – A method of tracking and managing changes to software, documents, and other collections of information.

**Web host service:** Provides a platform for people to host one or more services.

**Web Service** – A server running on a computer device that is listening for request at a particular port over a network.

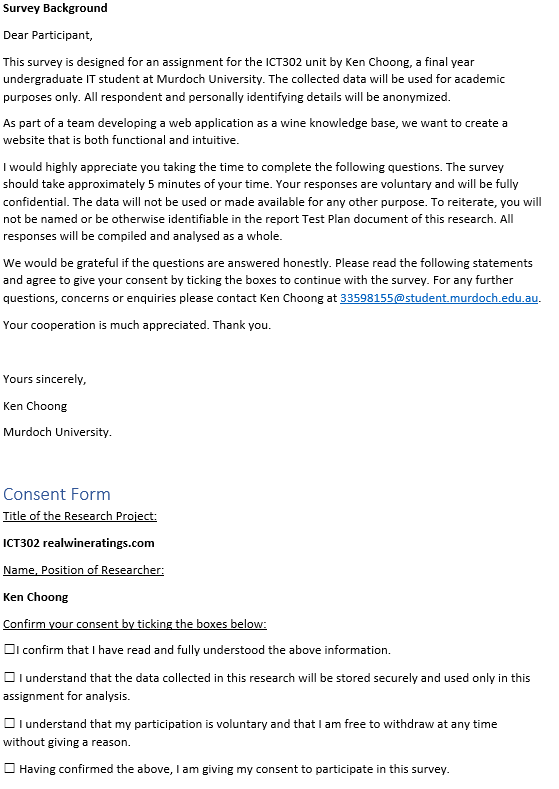
**XAMPP** – A cross-platform web server solution stack package.

## Accompanying Documents, Standards and Links

|  |  |
| --- | --- |
| Document/Reference | URL |
| WHATWG HTML Official Documentation | <https://html.spec.whatwg.org/multipage/> |
| PHP Official Documentation | https://www.php.net/docs.php |
| Project Management Book of Knowledge (PMBoK) | https://www.projectengineer.net/the-pmboks-project-management-documents/ |
| Project Management Plan (PMP) | OneDrive submission folder Project Team 9 |
| Requirements & Analysis (R&A) | OneDrive submission folder Project Team 9 |
| Design Document (DD) | OneDrive submission folder Project Team 9 |
| Pingdom loading test | <https://tools.pingdom.com/> |
| Webpagetest.org loading test | <https://www.webpagetest.org/> |

## Usability Study results

**Consent Form**



**Results**

