



USABILITY TESTING

Blue Dog Café Rostering System

ABSTRACT

The following document reports on the results of the Blue Dog Café Rostering System usability testing including observations and survey and interview results.

Jules Carboni

VCE Software Development

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1. OVERVIEW

1.1 USER DESCRIPTION

The Blue Dog Café Rostering System is a program that allows the owner (and managers/chefs) of the business to create rosters and automatically send them to their employees. The Blue Dog Café Rostering System will eliminate the need to manually create and distribute rosters, allowing employees to access their shifts and submit their availability with greater ease.

Feedback is being requested so that minor changes can be made to improve the program which reflect the requirements of the client and the program's users. By observing how business owners and managers/chefs use the system and by collecting feedback, the Rostering System can be tailored to the workflow of the users, improving overall efficiency.

Tests were carried out by the software developer with one student, one adult, and the owner of the Blue Dog Café. Data was collected via observation on many aspects of the usability and functionality of the program (including how long it took to locate and execute specific functions). Data was also collected by handout survey and an interview with the tester (post-testing) focussing on the limitations and difficulties of the program. Notes were made on the subject's feedback and their satisfaction rating. All tests were conducted in the presence of the software developer.

The testing users have limited technical experience. The primary test subject, the owner of The Blue Dog Café, is middle-aged and has extremely limited experience with computers running the Windows desktop environment. The second test subject is also middle-aged and not skilled in operating the Windows desktop environment, however, this subject has been using windows-based CAD software for many years. The final test subject is a year eleven student at Aquinas College who has ample experience using the Windows desktop environment and shows fair levels of technical skill.

1.2 CRITERIA BEING TESTED

The criteria being tested included:

Evaluation Criteria	Area	Factor	Requirement
Can employee data be added/edited/removed?	Functionality	Efficiency	Functional
Can the times of the shift-blocks be edited?	Functionality	Efficiency	Functional
Can last/this week's roster be copied for use as a template?	Functionality	Efficiency	Functional
Can rosters be generated/created and saved as PDF?	Functionality	Efficiency	Functional
Can rosters be suggested to the owner user-group?	Functionality	Efficiency	Functional
Are rosters sent to employees via email?	Cost of File Manipulation	Efficiency	Functional
Can archived rosters be searched (by employee name)?	Functionality	Efficiency	Functional
Are the forms easy to navigate (buttons in logical places)?	Usability	Effectiveness	Non-Functional
Do the buttons accurately describe their functions?	Usability	Effectiveness	Non-Functional
Are useful error messages provided?	Robustness/Completeness	Effectiveness	Functional

Is the UI basic (not graphics intensive, few visual elements)?	Accessibility	Effectiveness	Non-Functional
Does the UI follow the macOS design language (in terms of button positions and functionality)?	Ease of Use/ Accessibility	Efficiency/ Effectiveness	Non-Functional
Are the UI elements big (with ample whitespace)?	Accessibility	Effectiveness	Non-Functional
Is it possible to send a roster within three clicks (not including generation)?	Speed of Processing/ Timeliness	Efficiency/ Effectiveness	Non-Functional

1.3 TESTING METHODS

The testing methods being utilised in this round of usability tests are:

- Observation (including thinking aloud).
- Questionnaire.
- Interview (as a follow-up).

1.4 SCENARIOS TO WORK THROUGH

The testing will begin with an observation of the testing subject completing a series of tasks using the software. These tasks are listed in [part 2.3](#) of this document. They will not be assisted during this phase though they are free to talk. Any thoughts/frustrations they voice will be recorded by the supervisor alongside any difficulties they experience/notable decisions they make.

Once all these tasks are completed, the tester will be given and will fill out a questionnaire. Each of the questions will be related to the tests they just attempted or will the software they used.

Following up the questionnaire will be a short interview conducted by the supervisor. The interview will cover the questions answered in the questionnaire and will allow the tester and supervisor to go into further depth. These results will be recorded alongside the results of the questionnaire.

2. OBSERVATION

2.1 SUMMARY

An observation of users interacting with the system is conducted to understand how users will actually use the system, how much trouble they have in doing so, and what questions may arise during regular use.

It is estimated that this portion of the usability testing will take up to 60 minutes.

2.2 GOAL

To determine the efficiency, effectiveness and confidence of users when adding employee data, adding new shifts, and creating, saving, loading and sending rosters.

2.3 CRITERIA BEING EVALUATED

Evaluation Criteria	Area	Factor	Requirement
Can employee data be added/edited/removed?	Functionality	Efficiency	Functional
Can the times of the shift-blocks be edited?	Functionality	Efficiency	Functional
Can last/this week's roster be copied for use as a template?	Functionality	Efficiency	Functional
Can rosters be generated/created and saved as PDF?	Functionality	Efficiency	Functional
Can rosters be suggested to the owner user-group?	Functionality	Efficiency	Functional
Are rosters sent to employees via email?	Cost of File Manipulation	Efficiency	Functional
Can archived rosters be searched (by employee name)?	Functionality	Efficiency	Functional
Are the forms easy to navigate (buttons in logical places)?	Usability	Effectiveness	Non-Functional
Is it possible to send a roster within three clicks (not including generation)?	Speed of Processing/ Timeliness	Efficiency/ Effectiveness	Non-Functional

2.4 DESCRIPTION

The observation will be conducted in person. The supervisor's computer will be used by the client to test the Blue Dog Café Rostering System. The tester and the computer's display will be observed by the supervisor. Any notable decisions or difficulties/frustrations experienced will be recorded on paper or on another computer.

2.5 TASK DETAILS

The testing user will be required to complete the following tasks.

- 1) Log-on to the system as 'Owner', registering a new email address and PIN (see data below).
Email address: *owner@test.com*

Email password: *password*

PIN: *1234*

- 2) Add a new employee's data into the system (see data below).
First name: *James*
Last name: *Charles*
Phone number: *98765432*
Email address: *james@test.com*
Can close shop: *True*
Colour code: *Red*
- 3) Add the new employee's availability into the system (see data below), then save the changes you have made.
Thursday: Start: *7:00 am*, Finish: *8:00 pm*
Friday: Start: *8:00 am*, Finish: *7:00 pm*
Saturday: Start: *9:00 am*, Finish: *6:00 pm*
Sunday: Start: *10:00 am*, Finish: *Close*
Monday: Start: *9:00 am*, Finish: *Close*
Tuesday: Start: *8:00 am*, Finish: *5:00 pm*
Wednesday: Start: *7:00 am*, Finish: *4:00 pm*
- 4) Add two new shift-blocks (see data below), then save the changes you have made.
Shift one: Start: *10:00 am* Finish: *2:00 pm*
Shift two: Start: *12:00 pm* Finish: *7:00 pm*
- 5) Send a roster to your employee's in which *James Charles* is working from *10:00 am* to *2:00 pm* on *Thursday*. Do not close the program when prompted.
- 6) Remove *James'* shift from *Wednesday*.
- 7) Search the archived rosters for all the shifts that *James Charles* was worked. Save the results of this search to a file (use default file name and directory).
- 8) Close the program. Re-open the program.
- 9) Log-on to the as 'Chef/Manager', registering a new PIN (see data below).
PIN: *5678*
- 10) Suggest a roster in which *James Charles* is working from *10:00 am* to *2:00 pm* on *Sunday*.
- 11) Close the program. Re-open the program. Log-on to the system as 'Owner'.
- 12A) Load the suggested roster to use a template for your next roster.
- 12B) Roster *James* on from *10:00 am* to *2:00 pm* on *Wednesday*. (Do not send the roster yet.)
- 13A) Copy last week's (the most recently sent) roster to use a template for your next roster.
- 13B) Roster *James* on from *12:00 pm* to *7:00 pm* on *Friday*, then send the new roster. When prompted, close the program.

2.6 RECORDED RESULTS

In addition to the observations listed below; it was noted that the users were able to complete tasks with greater confidence and user frustration levels were lower as their experience with the program increased.

Task 1	User A	User B	User C
Able to select user profile	Found drop down, selected correctly	Found drop down, selected correctly	Found drop down, selected correctly
Able to enter data correctly	Entered correct email and PIN	Entered correct email and PIN	Entered incorrect email but correct PIN
Entered data into correct objects	Entered PIN into text box, then correctly	Entered PIN into text box, then correctly	Entered PIN into text box, then correctly

	entered email and PIN into input boxes	entered email and PIN into input boxes	entered email and PIN into input boxes
Validation errors occurred	No	No	Yes
Response to validation errors	N/A	N/A	Corrected typo successfully
Time taken	5	3	3
Frustration level	3/5	1/5	2/5

Task 2	User A	User B	User C
Able to find button to open data form	Difficulty finding button, required hint	Found button easily, but was unsure of its function	Noticed button, but didn't click as unsure of functionality
Able to find button to add new data	Didn't notice button, clicked when seen	Found button, clicked straight away	Tried selecting "edit" before clicking "add"
Entered data into input boxes correctly	Entered all correctly	Entered all correctly	Entered all correctly
Validation errors occurred	No	No	No
Response to validation errors	N/A	N/A	N/A
Time taken	6	3	4
Frustration level	3/5	0/5	2/5

Task 3	User A	User B	User C
Able to find button to open availability form	Found button, but not confident in selection	Found button confidently	Found button confidently
Entered data into input boxes correctly	Entered incorrectly, all times in format "7am"	Entered all correctly	Entered all correctly, but made typos
Validation errors occurred	Yes	No	Yes
Response to validation errors	Changed "7am" to "7:00 am" etc...	N/A	Corrected erroneous entries.
Time taken	12	4	4
Frustration level	4/5	1/5	2/5

Task 4	User A	User B	User C
Able to find button to open shifts form	Tried to "edit data" instead of "edit shift", found button in end	Found button easily	Found button easily
Able to find button to add new shift	Found button easily	Found button easily	Found button easily
Entered data into input boxes correctly	Entered all correctly	Entered all correctly	Entered all correctly
Validation errors occurred	No	No	No
Response to validation errors	N/A	N/A	N/A

Time taken	5	3	4
Frustration level	3/5	0/5	2/5

Task 5	User A	User B	User C
Able to find combination boxes to add employee	Hesitated, but found drop down	Found drop down	Found drop down
Able to add shift to employee selection	Found drop down	Found drop down	Found drop down
Able to add correct data	Entered correct employee and shift	Entered correct employee and shift	Entered correct employee and shift
Able to find button to send rosters	Found easily, sent it	Found easily, sent it	Found easily, sent it
Errors occurred in sending	Yes, not a real email	Yes, not a real email	Yes, not a real email
Response to errors	Understood cause, dismissed popup	Understood cause, dismissed popup	Understood cause, dismissed popup
Response to pop-ups	Confidently made selections according to task instructions	Confidently made selections according to task instructions	Confidently made selections according to task instructions
Time taken	1	0.5	1
Frustration level	0/5	0/5	0/5

Task 6	User A	User B	User C
Able to find way to remove staff	Looked around, finally opened employee drop-down	Opened employee drop-down confidently	Opened employee drop-down confidently
Selected correct drop-down item	Correct, empty item	Correct, empty item	Correct, empty item
Time taken	1	0.5	1
Frustration level	0/5	0/5	0/5

Task 7	User A	User B	User C
Able to find button to open search form	Found button easily	Found button easily	Found button easily
Able to find drop-down to select name	Tried to type name into statistics text box, needed hint to find list	Tried to type name into text box, then noticed drop-down list	Found drop-down list straight away
Selected correct employee name	Yes, eventually	Yes, eventually	Yes
Able to find button to save results file	Yes, saved correctly	Yes, saved correctly	Yes, saved correctly
Validation errors occurred in saving	No	No	No
Response to validation errors	N/A	N/A	N/A
Time taken	3	2	3
Frustration level	2/5	1/5	0/5

Task 8	User A	User B	User C
Able to find button to close program	Found drop down, selected correctly	Found drop down, selected correctly	Found drop down, selected correctly
Popup errors occurred	Yes, roster not sent (not real email addr.)	Yes, roster not sent (not real email addr.)	Yes, roster not sent (not real email addr.)
Response to popup errors	Asked why error occurred, dismissed error once understood	Dismissed error, recognised cause	Dismissed error, recognised cause
Able to reopen the program	Yes, ran executable	Yes, ran executable	Yes, ran executable
Time taken	1	0.5	1
Frustration level	0/5	0/5	0/5

Task 9	User A	User B	User C
Able to select user profile	Found drop down, selected correctly	Found drop down, selected correctly	Found drop down, selected correctly
Able to enter data correctly	Entered correct PIN	Entered correct PIN	Entered correct PIN
Entered data into correct objects	Entered PIN into text box, then correctly entered PIN into input boxes	Entered PIN into text box, then correctly entered PIN into input boxes	Entered PIN into text box, then correctly entered PIN into input boxes
Validation errors occurred	No	No	No
Response to validation errors	N/A	N/A	N/A
Time taken	5	3	2
Frustration level	3/5	1/5	1/5

Task 10	User A	User B	User C
Able to find combination boxes to add employee	Found drop down	Found drop down	Found drop down
Able to add shift to employee selection	Found drop down	Found drop down	Found drop down
Able to add correct data	Entered correct employee and shift	Entered correct employee and shift	Entered correct employee and shift
Able to find button to suggest rosters	Didn't see button for a bit, found in the end	Found easily, clicked	Found easily, clicked
Errors occurred in suggesting	No	No	No
Response to errors	N/A	N/A	N/A
Response to pop-ups	Confidently made selections according to task instructions	Confidently made selections according to task instructions	Confidently made selections according to task instructions
Time taken	1	0.5	1
Frustration level	0/5	0/5	0/5

Task 11	User A	User B	User C
Able to find button to close program	Found drop down, selected correctly	Found drop down, selected correctly	Found drop down, selected correctly
Popup errors occurred	Yes, roster not sent (not real email addr.)	Yes, roster not sent (not real email addr.)	Yes, roster not sent (not real email addr.)
Response to popup errors	Dismissed error, recognised cause	Dismissed error, recognised cause	Dismissed error, recognised cause
Able to reopen the program	Yes, ran executable	Yes, ran executable	Yes, ran executable
Able to select user profile	Found drop down, selected correctly	Found drop down, selected correctly	Found drop down, selected correctly
Time taken	1	0.5	1
Frustration level	0/5	0/5	0/5

Task 12A	User A	User B	User C
Able to find button to load suggested roster	Nearly missed button but found and clicked	Found easily, clicked	Found easily, clicked
Warnings occurred in loading roster	No	No	No
Response to warnings	N/A	N/A	N/A
Time taken	0.5	0.5	1
Frustration level	0/5	0/5	0/5

Task 12B	User A	User B	User C
Able to find combination boxes to add employee	Found drop down	Found drop down	Found drop down
Able to add shift to employee selection	Found drop down	Found drop down	Found drop down
Able to add correct data	Entered correct employee and shift	Entered correct employee and shift	Entered correct employee and shift
Time taken	0.5	0.5	1
Frustration level	0/5	0/5	0/5

Task 13A	User A	User B	User C
Able to find button to load last roster	Found easily, clicked	Found easily, clicked	Found easily, clicked
Warnings occurred in loading roster	No	No	No
Response to warnings	N/A	N/A	N/A
Time taken	0.5	1	1
Frustration level	0/5	0/5	0/5

Task 13B	User A	User B	User C
Able to find combination boxes to add employee	Found drop down	Found drop down	Found drop down
Able to add shift to employee selection	Found drop down	Found drop down	Found drop down
Able to add correct data	Entered correct employee and shift	Entered correct employee and shift	Entered correct employee and shift
Able to find button to send rosters	Found easily, sent it	Found easily, sent it	Found easily, sent it
Errors occurred in sending	Yes, not a real email	Yes, not a real email	Yes, not a real email
Response to errors	Understood cause, dismissed popup	Understood cause, dismissed popup	Understood cause, dismissed popup
Response to pop-ups	Confidently made selections according to task instructions	Confidently made selections according to task instructions	Confidently made selections according to task instructions
Time taken	1	0.5	1
Frustration level	0/5	0/5	0/5

3. QUESTIONNAIRE

3.1 SUMMARY

A survey of the testing users' thoughts and feelings regarding the look, feel, usage, and usability of the Blue Dog Café Rostering System.

It is estimated that this portion of the usability testing will take up to 10 minutes.

3.2 GOAL

To determine the user's satisfaction or frustration with various non-functional aspects of the software (such as placement, responsiveness and aesthetics of UI elements).

3.3 CRITERIA BEING EVALUATED

Evaluation Criteria	Area	Factor	Requirement
Are the forms easy to navigate (buttons in logical places)?	Usability	Effectiveness	Non-Functional
Do the buttons accurately describe their functions?	Usability	Effectiveness	Non-Functional
Are useful error messages provided?	Robustness/ Completeness	Effectiveness	Functional
Is the UI basic (not graphics intensive, few visual elements)?	Accessibility	Effectiveness	Non-Functional
Does the UI follow the macOS design language (in terms of button positions and functionality)?	Ease of Use/ Accessibility	Efficiency/ Effectiveness	Non-Functional
Are the UI elements big (with ample whitespace)?	Accessibility	Effectiveness	Non-Functional

3.4 DESCRIPTION

The survey will be distributed in person following the observation. The supervisor will be present while the survey is being answered but will not interact with the tester during this process. The response to the survey will be written on the paper on which the questions were printed.

3.5 TASK DETAILS

Testing subject will be presented with and asked to answer the following questions:

1. Was the user interface visually appealing?
2. Were the elements (buttons, boxes, writing) of the program easy to find/placed in logical positions?
3. How easy was it to navigate the program and complete the tasks?
4. Was the program responsive/fast enough?
5. How easy was it to understand what each button in the program does?
6. How useful were the pop-up messages in terms of the information they provided?
7. How would you rate the overall experience (1 to 10)?

3.6 RECORDED RESULTS

Question	User A	User B	User C	Overall
Was the user interface visually appealing?	Yes	Yes	Yes	Yes
Were the elements (buttons, boxes, writing) of the program easy to find/placed in logical positions?	Yes	Yes	Yes	Yes
How easy was it to navigate the program and complete the tasks?	Easy	Very	Easy	Easy
Was the program responsive/fast enough?	Yes	Yes	Fast	Yes
How easy was it to understand what each button in the program does?	Easy	Easy	Easy	Easy
How useful were the pop-up messages in terms of the information they provided?	Ample	OK	Useful	Ample
How would you rate the overall experience (1 to 10)?	10/10	9/10	9/10	9/10

4. INTERVIEW

4.1 SUMMARY

An interview will be conducted between the supervisor and the testing users following the completion of the survey.

4.2 GOAL

To further explore the user's satisfaction or frustration with various non-functional aspects of the software (such as placement, responsiveness and aesthetics of UI elements) and to gain a better understanding of how testing users made their decisions when using/navigating the program.

4.3 CRITERIA BEING EVALUATED

Evaluation Criteria	Area	Factor	Requirement
Are the forms easy to navigate (buttons in logical places)?	Usability	Effectiveness	Non-Functional
Do the buttons accurately describe their functions?	Usability	Effectiveness	Non-Functional
Are useful error messages provided?	Robustness/ Completeness	Effectiveness	Functional
Is the UI basic (not graphics intensive, few visual elements)?	Accessibility	Effectiveness	Non-Functional
Does the UI follow the macOS design language (in terms of button positions and functionality)?	Ease of Use/ Accessibility	Efficiency/ Effectiveness	Non-Functional
Are the UI elements big (with ample whitespace)?	Accessibility	Effectiveness	Non-Functional
Is it possible to send a roster within three clicks (not including generation)?	Speed of Processing/ Timeliness	Efficiency/ Effectiveness	Non-Functional

4.4 DESCRIPTION

The interview will be conducted in person. The supervisor's ask the tester questions related to their actions and decisions during the observation and their responses to the questionnaire. The responses will be noted on paper and/or on the supervisor's computer.

4.5 TASK DETAILS

Review responses to answers in questionnaire and discuss any observations made during the observation stage. Make note of any minor changes that the testing user would make to this program as well as any additional comments based on the usability and functionality of the system to determine the user experience and how many changes may or may not be required.

4.6 RECORDED RESULTS

User A Comments:

- The user interface was clear and easy to see.
- It was difficult to identify the “modify data” button as containing the “add data” functionality.
- Currently unsure of what changes to make (besides below)—would prefer to answer after using the program for a week.
- “Well done Jules. Fantastic!”

User A Suggestions:

- Change “modify data” button label to include “add/modify data”.
- Replace availability time entry text boxes with drop-down lists with times (in half hour increments).
- Label drop-down boxes.

User B Comments:

- The UI buttons were too low on the screen, user didn’t think to look there.
- The program felt relatively fast (on battery power).
- Each button described its function well, but most are not entirely complete in their descriptions.
- The pop-up messages were OK in terms of the information they provided but could be more useful.
- The hardest task to complete (for User B) was searching for rosters as he tried to type into the statistics name text box (and did not think to use the drop-down box).
- “Absolutely amazing.”

User B Suggestions:

- Move the buttons (on the bottom row) into positions that are easier to notice.
- Make it more obvious that you need to select a name from the drop-down when searching.

User C Comments:

- The user interface was mostly intuitive but has some quirks (such as button labelling and placement).
- The program was fast enough, wasn’t frustrated with the latency.
- The pop-up messages were useful but very numerous.

User C Suggestions:

- Label buttons and drop-down boxes with more accurate descriptions of their functionality.
- Make pop-up messages more concise if possible.

5. SUMMARY OF RESULTS

5.1 OBSERVATION

Task	Summary of All Results
1	All users able to select user profile and most entered data correctly. When validation errors occurred, typos were corrected. Average 3 minutes with 2/5 frustration.
2	Difficult to find or identify buttons to open data form and add new data. All data entered correctly. Average 4 minutes with 2/5 frustration.
3	Most users found button to open availability form with confidence. One user made typos and one entered data in the wrong timestamp format. Both users corrected their mistakes when validation errors occurred. Average 7 minutes with 3/5 frustration.
4	Most found button to open shifts form, one tried to open data form. All times entered correctly. Average 4 minutes with 2/5 frustration.
5	All were able to find the combination boxes to add employee, some hesitated before making selection. All found drop-down to add shift. Easily found button to send rosters. All understood causes of error messages and dismissed confidently. Average 1 minute with 0/5 frustration.
6	All users able to find the way to remove staff and selected correct drop-down item. Average 1 minutes with 0/5 frustration.
7	All users easily found button to open search form. Nearly all users tried to type into the statistics text box before noticing the drop-down box. All selected the correct employee and saved the results to a file correctly. Average 3 minutes with 1/5 frustration.
8	All users found the button to close the program. When warnings showed, one user required an explanation of warning before confidently dismissing. All easily re-ran the executable file. Average 1 minutes with 0/5 frustration.
9	All able to select user profile. All entered data correctly. All entered data into text box (wrong place) before trying input box. Average 3 minutes with 2/5 frustration.
10	All able to find combination boxes to add employee. All able to add shift. All entered correct data. All found button to suggest rosters (one did not notice button in beginning). Average 1 minutes with 0/5 frustration.
11	All users found the button to close the program. When warnings showed, one user required an explanation of warning before confidently dismissing. All easily re-ran the executable file. Correctly selected user group and logged on. Average 1 minutes with 0/5 frustration.
12A	All found button to load suggested roster. Average 0.5 minutes with 0/5 frustration.
12B	All able to find combination box to add employee and shift with ease. All added correct data. Average 0.5 minutes with 0/5 frustration.
13A	All found button to load last roster. Average 1 minutes with 0/5 frustration.
13B	All users were able to find combination boxes to add employee and shift. All added correct data. All easily found button to send rosters. All dismissed errors/pop-ups appropriately. Average 1 minutes with 0/5 frustration.

5.2 QUESTIONNAIRE

Question	Response
Was the user interface visually appealing?	Yes
Were the elements (buttons, boxes, writing) of the program easy to find/placed in logical positions?	Yes
How easy was it to navigate the program and complete the tasks?	Easy
Was the program responsive/fast enough?	Yes
How easy was it to understand what each button in the program does?	Easy
How useful were the pop-up messages in terms of the information they provided?	Ample
How would you rate the overall experience (1 to 10)?	9/10

5.3 INTERVIEW

Summary of interview comments:

- The user interface was clear and easy to see.
- It was difficult to identify the “modify data” button as containing the “add data functionality.
- The UI buttons were too low on the screen, user didn’t think to look there.
- Each button described its function well, but most are not entirely complete in their descriptions.
- The user interface was mostly intuitive but has some quirks (such as button labelling and placement).
- The pop-up messages were useful but very numerous.

Summary of interview suggestions:

- Change “modify data” button label to include “add/modify data”.
- Replace availability time entry text boxes with drop-down lists with times (in half hour increments).
- Label buttons and drop-down boxes with more accurate descriptions of their functionality.
- Make pop-up messages more concise if possible.
- Move the buttons (on the bottom row) into positions that are easier to notice.
- Make it more obvious that you need to select a name from the drop-down when searching.

6. RECOMMENDED CHANGES

Recommended Change	Justification	Severity
Label buttons and drop-down boxes with more accurate descriptions of their functionality. For example, change “modify data” button label to include “add/modify data”.	It is too difficult to identify the functionality of different elements in the interface—it is not clear how to complete certain tasks. This means the user wastes time looking-up/figuring out how to perform certain actions, which is inefficient.	Low
Replace availability time entry text boxes with drop-down lists with times (in half hour increments).	It takes too long to manually type in every timestamp. Additionally, entering times where any character input is allowed, and no restricted format is imposed causes many validation errors and is prone to typos.	Medium
Make pop-up messages more concise if possible.	There are a lot of pop-ups/warnings (because the program is complex) and thus it takes a long time to read all the messages. Making them more concise reduces the total time spent reading and not being proactive.	Low
Move the button (on the bottom row) into positions that are easier to notice.	The buttons are difficult to notice for new users, making the program frustrating and difficult to use as even the simplest of functions can only be found on the “home row” of buttons.	Medium
Make the log-on PIN text box the first-stage input to creating a new PIN (replace first input box).	Every testing user tried to type their new (not yet created) PIN into the text box labelled “PIN”. This shows that it is the most intuitive way to accept the first input when creating a new PIN. It will save users’ time and reduce frustration and confusion.	Medium
Make it more obvious that you need to select a name from the drop-down when searching (perhaps change “statistics” to “results”).	Users wasted time trying to type into the read-only text box labelled “name” as it was not obvious that it was read-only. This causes frustration among users as the program appears to be behaving incorrectly (refusing input).	Low

7. APPENDIX

All the documents used throughout the usability testing of Blue Dog Café Roasting System are attached in this appendix.