Software Test Report

RentO

Prepared by:

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Version 1.0

CSUN Senior Design Class

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1 Introduction

1.1 Document overview

This document is the software test report of the RentO testing phase of the RentO software development project. It contains the results of tests, which were executed during the testing phase for RentO.

1.2 Abbreviations and Glossary

1.2.1 Abbreviations

AWS: Amazon Web Services
SRS: Software Requirement Specification
STD: Software Testing Plan

1.2.2 Glossary

N/A

1.3 References

1.3.1 Project References

#	Document Identifier	Document Title
R1	SRS	SRS_RentO.pdf

1.3.2 Standard and regulatory References

#	Document Identifier	Document Title
STP1	STP	SoftwareTestPlan-RentO.pdf

1.4 Conventions

We will be performing Conventional Testing methods, more specifically, we will be performing Functional Tests to ensure that parts of the project that we test are working to the expectations of the average user. We will also be using Acceptance Tests to verify that the system is being tested for acceptability by the end user, making sure the system is up to business requirements.
-   Acceptance Tests
-   Functional Tests

2 Overview of Tests Results

2.1 Tests log

The RentO software (version 1.0.0) was tested on the manual test platform located in each tester's personal device, in various locations, from 4/25/2023 to 5/5/2023. The tests of the test phase (ref. SoftwareTestPlan-Rento.pdf) were. Several devices ranging from smartphones to desktops were used to make sure the website was functional.
Testers involved were:
- Cristian Ramirez,
- Mohammed Al Moosawi,
- Ravindu Gunasinghe

2.2 Rationale for decision

After executing a test, the decision is defined according to the following rules:
- **OK:** The test sheet is set to "OK" state when all steps are in "OK" state. The real result is compliant to the expected result.
- **NOK:** The test sheet is set to "NOK" state when all steps of the test are set to "NOK" state or when the result of a step differs from the expected result.
- **Partial OK:** The test sheet is set to "Partial OK" state when at least one step of the test is set to "NOK" state or when the result of a step is partially compliant to the expected result.
- **NOT RUN:** Default state of a test sheet not yet executed.
- **NOT COMPLETED:** The test sheet is set to "Not Completed" state when at least one step of the test is set "Not Run" state.

Tests results are listed in §3.

2.3 Overall assessment of tests

- All tests with interfaces have passed with minimal or no issue at all. Graphical User Interface is responsive regardless of size of screen.
- Web pages are accessed with no issue and minimal loss of data in the process.
- JavaScript of project has passed with a good percentage score, although there are some JavaScript commands that have not produced a exact result as we had hoped for.
- While data was not lost when entering a new website, we did notice that some data was not properly saved.
- Simple Mail Transfer Protocol has worked with no issue, being able to send an email to the team as well as able to email among the users.
- While at the time of writing of this report there are a few tests that would be considered Not Run due to not having the part needed in the code.

Statistics about tests:
- 90% of tests OK,
- 5% of tests NOK
- 0% of tests POK
- 5% of tests NR
- 0% of tests NC

Statistics about bugs and enhancements:
- Total number: 1,
- Number of Critical: 0,
- Number of Major: 1,
- Number of Minor: 0,
- Number of Enhancements: 0,

2.4 Impact of test environment

The major impact of the test environment is that we can see what the problems are based on the actions we have done. Since our website is a small project, we would not need to have an automated test platform since the scale of it is a lot smaller than a website, such as Amazon. Not to mention we are able to quickly locate the section that the issue might be incurring and do specific tests, thus dealing with the issue quickly. Not to mention since this is an ecommerce, with the given time, we would not have time to gather the necessary tools to perform a test where data is inputted by a testing program. Lastly, we do not want to overload the AWS servers since we will be charged after excessive use. We can isolate the problem with a few requests and actions.

3 Detailed Tests Results

For each executed test, this document contains:
- Test identification.
- Test title.
- Test decision.
- A comment containing additional information or problems encountered during execution and differences with the test procedure.

For the problems leading to a bug, the bug ID is reported in the result of the step where problem was encountered.

3.1 Access to Webpages
For each NOK in a step, at least one bug shall be created (or referenced if already exists).

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Accessing to Account page. STP_page_5		OK
Verified Requirement	SRS_ACC_001		
Initial conditions	At part of the website where you can see the Account link.		
Tests inputs	Clicking on the Account link		
Data collection actions	User input and verification that links to pages are working.		
Tests outputs	Entering Account page if user is signed in.		
Assumptions and constraints	Assumption would be entering to Account page once user clicks on link, constraint is if the server goes down for whatever reason.		
Expected results and criteria	Account page is obtained and displayed for user.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access header section of page.	Header is displayed	OK
2	User clicks on the Account link in header	Web server begins to process action.	OK
3	Account page is accessed	Account data is displayed for user.	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Accessing the Home Page. STP_page_5		OK
Verified Requirement	SRS_WEB_001		
Initial conditions	Able to see the RentO logo which access us the homepage		
Tests inputs	Clicking on the RentO logo link		
Data collection actions	User input and verification that links to pages are working.		
Tests outputs	Going back to home page of website.		
Assumptions and constraints	Assumption would be returning us to the home page once user clicks on link, constraint is if the server goes down for whatever reason.		
Expected results and criteria	Home page is obtained and displays the listings of items for rent.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access header section of page.	Header is displayed	OK
2	User clicks on the RentO logo link in header	Web server begins to process action.	OK
3	Home page is accessed	Home page is displayed for user to use current listings.	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Accessing the Sign In Page. STP_page_5		OK
Verified Requirement	SRS_SIGNIN_001		
Initial conditions	Able to see the Sign In link so users can login into their account.		
Tests inputs	Clicking on the Sign In link		
Data collection actions	User input and verification that links to pages are working.		

Tests outputs	Entering Sign In page so user can enter email and password.		
Assumptions and constraints	Assumption would be allowing user to go to Sign In page and login, constraint is if the server goes down for whatever reason.		
Expected results and criteria	Sign in page was accessed, thus user can login with their credentials.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access header section of page.	Header is displayed	OK
2	User clicks on the Sign In link in header	Web server begins to process action.	OK
3	Sign In Page is accessed and thus user is able to login.	Sign Page is displayed for user to use enter credentials	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Accessing the Sign Up Page. STP_page_5		OK
Verified Requirement	SRS_SIGNUP_001		
Initial conditions	Able to see the Sign Up link so users can create their new account.		
Tests inputs	Clicking on the Sign Up link		
Data collection actions	User input and verification that links to pages are working.		
Tests outputs	Entering Sign Up page so user can enter the necessary data.		
Assumptions and constraints	Assumption would be allowing user to go to Sign Up page and create account, constraint is if the server goes down for whatever reason.		
Expected results and criteria	Sign Up page was accessed, thus user can create their account with their input.		

Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access header section of page.	Header is displayed	OK
2	User clicks on the Sign In link in header	Web server begins to process action.	OK
3	Sign In Page is accessed and thus user is able to login.	Sing Up page is displayed for user to create account.	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Accessing the Forgot Page. STP_page_5	Was not able to create the functions for Forgot Password at the time of this report.	NOT RUN
Verified Requirement	SRS_SIGNIN_002		
Initial conditions	Able to see the Forgot Password link to reset password in Sign In page.		
Tests inputs	Clicking on the Forgot Password link		
Data collection actions	User input and verification that links to pages are working.		
Tests outputs	Entering Forgot Password if they can't remember their password.		
Assumptions and constraints	Assumption would be accessing the forgot password page, constraint is if the server goes down for whatever reason.		
Expected results and criteria	Display Forgot Password page so user can reset their passwords.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access Sign In page.	Sign In Page is displayed	NOT RUN
2	User clicks on the Forgot Password link.	Web server begins to process action.	NOT RUN
3	Forgot password page is accessed	Forgot Password page is obtained.	NOT RUN

Test ID	Same ID as in test desc.	Comment	Decision

Test description	Accessing the Policy page. STP_page_5		OK
Verified Requirement	SRS_NONFUNC_WEB_007		
Initial conditions	Able to see the Policy link at the footer of the website.		
Tests inputs	Clicking on the Policy link		
Data collection actions	User input and verification that links to pages are working.		
Tests outputs	Policy page is displayed.		
Assumptions and constraints	Assumption would be being able to access the Policy page, constraint is if the server goes down for whatever reason.		
Expected results and criteria	Policy page is displayed.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access footer section of page.	Footer is displayed	OK
2	User clicks on the Policy link in footer	Web server begins to process action.	OK
3	Policy page is accessed	Policy page is displayed for user to view.	OK

Test ID	**Same ID as in test desc.**	**Comment**	**Decision**
Test description	Accessing the Checkout Page. STP_page_5		OK
Verified Requirement	SRS_WEB_010		
Initial conditions	Able to see the shopping cart logo which access us the checkout page		
Tests inputs	Clicking on the checkout button		
Data collection actions	User input and verification that links to pages are working.		
Tests outputs	Entering the checkout page to see current items associated to cart object and be processed.		
Assumptions and constraints	Assumption would be being able to access the checkout page, constraint		

	is if the server goes down for whatever reason.		
Expected results and criteria	Checkout page is displayed for payment processing.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access Shopping cart page	Shopping Cart page is displayed	OK
2	User clicks on the checkout button.	Web server begins to process action.	OK
3	Checkout page is accessed	Checkout page is displayed for user to make their transaction.	OK

Test ID	**Same ID as in test desc.**	**Comment**	**Decision**
Test description	Accessing the Cart Page. STP_page_5		OK
Verified Requirement	SRS_CART_001		
Initial conditions	Able to see the shopping cart logo to access cart page.		
Tests inputs	Clicking on the shopping cart logo.		
Data collection actions	User input and verification that links to pages are working.		
Tests outputs	Entering cart page where listings that was added are displayed.		
Assumptions and constraints	Assumption being able to access the page with no issue, constraint is if the server goes down for whatever reason.		
Expected results and criteria	Cart page is displayed and shows necessary data.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access header section of page.	Header is displayed	OK
2	User clicks on the shopping cart logo in header	Web server begins to process action.	OK
3	Cart page is accessed	Cart page is displayed for	OK

		user to view current listings.	

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Accessing the Listing Page. STP_page_5		OK
Verified Requirement	SRS_LIST_001		
Initial conditions	Able to see listings on the website.		
Tests inputs	Clicking on any of the listings.		
Data collection actions	User input and verification that links to pages are working.		
Tests outputs	Displays listing for item.		
Assumptions and constraints	Assumption being able to access the page with no issue, constraint is if the server goes down for whatever reason.		
Expected results and criteria	Listing page for specific item is obtained and displayed with more information.		
Test procedure			
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Access main page of website.	List of items are displayed	OK
2	User clicks on the RentO logo link in header	Web server begins to process action.	OK
3	Listing page is accessed.	Listing of items is displayed for user.	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Accessing the Contact page. STP_page_5		OK
Verified Requirement	SRS_CONTACT_001		
Initial conditions	Able to see the Contact Us link in the footer of the website.		
Tests inputs	Clicking on the link		
Data collection actions	User input and verification that links to pages are working.		
Tests outputs	Displays Contact Us page.		
Assumptions and	Assumption being able to access the page with no		

constraints	issue, constraint is if the server goes down for whatever reason.		
Expected results and criteria	Contact Us page is displayed.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access footer section of page.	footer is displayed	OK
2	User clicks on the Contact Us link in footer	Web server begins to process action.	OK
3	Contact Us page is accessed	Contact page is displayed for user to send the team an email.	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Accessing the Create Listing. STP_page_5		OK
Verified Requirement	SRS_ACC_008		
Initial conditions	Able to see the create listing in the Account page.		
Tests inputs	Clicking on the Create listing button.		
Data collection actions	User input and verification that links to pages are working.		
Tests outputs	Creating Listing page is accessed.		
Assumptions and constraints	Assumption being able to access the page with no issue, constraint is if the server goes down for whatever reason.		
Expected results and criteria	Create a listing page is shown.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access account page	Account page is displayed	OK
2	User clicks on Create listing button	Web server begins to process action.	OK
3	Create Listing is shown	Create a Listing page is displayed for user to create an item.	OK

3.2 JavaScript Functionality

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Sign In Page: JavaScript. STP_page_5		OK
Verified Requirement	SRS_SIGNIN_001		
Initial conditions	Access sign in where user is able to login with their credentials.		
Tests inputs	Entering email/password		
Data collection actions	User input and will verify if data inputted in email text field is a valid email address. As well as if password belongs to valid email.		
Tests outputs	If email or password is invalid, will not let user login, if both are valid, then user logs in with their account.		
Assumptions and constraints	Assumption would user knows the convention for email addresses and remembers their password, constraint is if the server goes down for whatever reason or the users don't type in the correct data format.		
Expected results and criteria	User does not get access to account if email and password or wrong or does not match to database version or user is able to login using the correct credentials.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access Sign In page	Sign In page is displayed	OK
2	User enters wrong account credentials	Web server begins to process action and lets user that email, or password is wrong and must try again.	OK
3	User enters the correct credentials	Web server checks to see if they match and lets the user in.	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Sign Up: JavaScript. STP_page_5		OK
Verified Requirement	SRS_ACC_004		
Initial conditions	Access Sign Up page where user will create account.		
Tests inputs	Entering data needed to create account.		
Data collection actions	User input and verification data is legit for account creation.		
Tests outputs	Account is created and user is taken to account page.		
Assumptions and constraints	Assumption is that the user knows to properly type in a valid email address and that they enter the correct information for the account.		
Expected results and criteria	Account is created and user is taken to the Account page where the data they recently put is shown.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	Access Sign Up page.	Sign Up page is displayed	OK
2	User enters an invalid email while the rest of the entry is legit.	Web server begins to process input and informs user that they need to type a correct email address.	OK
3	User will not type one or more data in the list of input boxes.	Web server will alert user that they are missing some data before the account can be created.	OK
4	User will type in the correct data for each input field and submit it.	Web servers verify each data and creates a account, as well as sending the user to the account page.	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Create Listing: JavaScript. STP_page_5		OK
Verified Requirement	SRS_ACC_008		
Initial conditions	User is able to access the create a list page but clicking on the button at the account page.		
Tests inputs	Accessing the Create a Listing page and entering data to create a listing.		
Data collection actions	User input and verification that the input is valid for list creation.		
Tests outputs	Listing of item is created for user.		
Assumptions and constraints	Assumption is that the user reads what is needed to create a listing and follows the guidelines. Constraints is that they will input wrong data, thinking it will go through and make a bad listing.		
Expected results and criteria	Web servers verify and creates a listing for the item.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	User access the Account page	Account Page is displayed	OK
2	User clicks on the Create Listing button	Create a Listing page is displayed.	OK
3	User adds the necessary data, such as title, description, price, etc. for the listing.	Web server will verify that the data is valid and achievable and will create a listing for the item.	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Checkout: JavaScript. STP_page_5		OK
Verified Requirement	SRS_WEB_010		
Initial conditions	User goes to the checkout page to make their transaction.		
Tests inputs	User enters a fake credit information for payment processing.		
Data collection actions	User input and verification the transaction went through.		
Tests outputs	Order object is created, associated to user, and is seen at the account page.		
Assumptions and constraints	Assumption is that the user enters the necessary fake credit card information so that no real credit card is charged. Constraint is that user ignores the instruction and uses a real credit card.		
Expected results and criteria	Credit card is processed and an order object is created for user.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	User access Checkout page	Checkout page is displayed	OK
2	User enters the fake credit card information.	Web server begins to process credit card in the Stripe server for a test charge.	OK
3	Transaction is completed	Order object is created and associated to user's unique Id, and then redirected to Account page.	OK

3.3   Database Functionality

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Adding Items to Shopping Cart, STP_page_5		OK
Verified Requirement	SRS_CART_001		
Initial conditions	Able to a listing, including the "Add to Cart" button.		
Tests inputs	User will add listing to shopping cart.		
Data collection actions	User clicking will notify server to grab the listing's unique ID and store it to cart object.		
Tests outputs	Listing is added to shopping cart.		
Assumptions and constraints	Assumption would be user seeing a listing and click on the add to cart button. Constraints would be if the server goes down for whatever reason.		
Expected results and criteria	Item is added to cart object.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	User access the website	Main page is displayed.	OK
2	User sees an item they are interested and clicks "add to cart" button.	Web server begins to process action, if there exist a cart object in the session, then item will be added, if not then a new cart object will be added.	OK
3	Item is added to cart.	Cart is saved into database until future use or deletion.	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Creating an Account. STP_page_5		OK
Verified Requirement	SRS_ACC_001		
Initial conditions	Able to see the Sign Up page to enter data.		
Tests inputs	Data input by user for account creation.		
Data collection actions	User input data and once the verification is valid, data will be used to create an account and save it in the database.		
Tests outputs	Account created and saved to database.		
Assumptions and constraints	Assumption would be that the user enters valid data for the account, while the constraints is that the server goes down.		
Expected results and criteria	Account is created and saved to database.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	User access the Sign up page	Sign Up page is shown.	OK
2	User enters the necessary data for account creation.	Web server begins to verify that data entry is valid and begins to create account object.	OK
3	Account is created for user.	Account is saved to the database.	OK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Updating Cart with items if user logins in and has no cart associated with their ID. STP_page_5		NOK
Verified Requirement	SRS_CART_001		
Initial conditions	Fill items to the shopping cart, while not logged in.		
Tests inputs	User logs into their account.		
Data collection actions	Server will verify if the user's account has a cart during the session.		
Tests outputs	If user had no cart, a cart object will be created and the items transferred to the new one.		
Assumptions and constraints	User will add items to cart before signing to account.		
Expected results and criteria	Items transferred to new cart object when user logs in.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	User adds items to cart	Items are added to the session's cart object.	OK
2	User then proceeds to login to their account.	Web server begins to verify if user has a cart saved within a time period, if not new cart is created and items are transferred.	OK
3	New cart object is created and the items the user added are now in the new cart object.	New cart has items of the old cart.	NOK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Updating Cart with items if user logins in and has no cart associated with their ID. STP_page_5		NOK
Verified Requirement	SRS_CART_001		
Initial conditions	Fill items to the shopping cart, while not logged in.		
Tests inputs	User adds items and proceed log into their account.		
Data collection actions	Server will verify if the user's account has a cart during the session.		
Tests outputs	If user had no cart, a cart object will be created and the items transferred to the new one.		
Assumptions and constraints	User will add items to cart before signing to account.		
Expected results and criteria	Items transferred to new cart object when user logs in.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	User adds items to cart	Items are added to the session's cart object.	OK
2	User then proceeds to login to their account.	Web server begins to verify if user has a cart saved within a time period, if not new cart is created and items are transferred.	OK
3	New cart object is created and the items the user added are now in the new cart object.	New cart has items of the old cart.	NOK

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Storing a listing object when creating one. STP_page_5		OK
Verified Requirement	SRS_ACC_008		
Initial conditions	User must be signed into their account and be at the account page.		
Tests inputs	User will click on the create a listing button and begin entering the data for a listing.		
Data collection actions	Server will gather the data entered and used to create a listing.		
Tests outputs	Listing object is created and then saved to the database.		
Assumptions and constraints	User will click on the create a listing button and create the necessary information. Constraint is that the server goes down		
Expected results and criteria	Listing Object is created and saved into the database.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	User access the account page	Account page is displayed	OK
2	User then clicks on the create a listing button	User is taken to the Create a Listing page.	OK
3	User enters the data to create a listing.	Server will process the data in order to create a listing object associated to the user's Id.	OK
4	Listing is created and can be seen in the recent Listing section of the main page,	Listing is created and then saved to the database.	

Test ID	Same ID as in test desc.	Comment	Decision
Test description	Checking that each object in the database has a unique ID. STP_page_5		OK
Verified Requirement	SRS_LIST_005		
Initial conditions	Creation of any object, such as order, cart, listing, account, etc.		
Tests inputs	Object is created.		
Data collection actions	Will verify that the objects have a unique Id so that no two object share the same Id.		
Tests outputs	Objects have a unique Id associated to them.		
Assumptions and constraints	Assumptions is that users know how to access the mongoDB to verify each object.		
Expected results and criteria	Each object has a unique Id.		
Test procedure			
Step number	**Operator actions**	**Expected result and evaluation criteria**	**Result**
1	User will create an object such as creating a list, an account, a cart, or a order.	Object is created.	OK
2	User than will proceed to MongoDB Atlas to see that the new object has a unique ID	Checking the collection of and verifying each document has a unique Id.	OK
3	Each objects have a unique ID	Each objects have a unique ID	OK