QA Plan For Bikroy.com

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Change history

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30.01.2023	V1.01	Md.Shayed Hasan	Initial Draft

1 Contents

2   Introduction

This QA plan document describes the features, test cases and test scenarios, workflows and test methodologies used to plan, schedule for testing and report on Bikroy.com .

3   Description

Bikroy.com is a classified e-commerce platform that enables users to buy and sell used goods. The platform offers a wide range of categories, including electronics, vehicles, real estate, and fashion, among others.

3.1   Main Functionality

- Users can create a profile and list items for sale.
- Users can browse items to buy.
- User can post an ad to sell.
- Users can search for items using various filters, such as location, category, and price range.
- Users can send massages to sellers through the platform's messaging system.
- Users can make calls to integrate with sellers.
- Users can make secure payments only by hand to hand.
- If users are avail of the premium paid services, Bikroy has 3 major payment services,
  1. Online payment,
  2. Direct Bkash and
  3. COD or Collectors.

3.2   Navigation

- Bikroy has a hompage where users can access their profile, messaging from the top menu.
- The platform features a user-friendly interface with clear categories and a search bar for easy navigation.
- An user can post by clicking Post Your Ad at to top right corner.
- User can see product photo, information and description.
- User can see seller information to integrate.
- There is a Bikroy.com logo at the top left corner.
- User can find a footer at the bottom of the page that shows minor links for such things as more things about bikroy, frequently asked questions, about bikroy and career opportunities

3.3 User Flow

- Users sign up for an account or log in to an existing account.
- Users browse the platform for items they are interested in buying or post an ad to sell.
- Users can contact the seller to ask questions or make an offer.
- If the seller accepts the offer, the buyer can make the payment by hand to hand or other payment methods available on market.
- The seller ships the item to the buyer or the buyer can get the item by himself/herself and the transaction is complete.
- After the transaction the seller categorized the idem to "SOLD" or he/she can remove the item.

4 Quality Objective

A primary objective is to assure that the system meets the full requirements, including quality requirements (AKA: Non-functional requirements) and satisfies the use case scenarios and maintain the quality of the product. At the end of the project development cycle, the user should find that the project has met or exceeded all of their expectations as detailed in the requirements. Below are the main objective that we plan to achive for Bikroy project

- Ensure the Application Under Test conforms to functional and non-functional requirements
- Ensure the UAT meets the quality specifications defined by the client
- Bugs/issues are identified and fixed before go live

5 Staffing

Following Test personnel are assign to test Bikroy.com

1. Mr. X-Head/Team Lead Of QA
2. Mr. Y-Lead QA Engineer
3. Mr. Z-Sr. QA Engineer
4. Md. Shayed Hasan-Intern

6   Test Scope

All defined functional requirement of (SRS/BRS) document is the test scope of Bikroy.com website. Beside functional scope, non-functional scope also been covered by this plan. Though we don't have any (SRS/BRS), here is some test scenarios covering Bikroy's main functionality-

6.1   Seraching

- Verify that the searchbar is present and functional.
- Test the search result with various keywords, filters (such as pricing , location and category) and combination.
- Verify that the search results display accurate, organized and relevant information.
- Test the sorting and filtering of search results.
- Test the search result with various filters (such as pricing, location) and verify the accuracy of the result.
- Test the search result with different categories (such as electronics, vehicle,etc.) and verify the accuracy of the result.
- Verify the search recomandation keywords working properly.

6.2   Browsing

- Verify that categories are lebeled and organized correctly.
- Verify that user can user the filter "URGENT" and "FEATURED"
- Verify that user can sort searching product by "DATE" and "PRICE" (Such as "Newst on top" or "High on top")
- Test the location filter if its working properly or not.
- Verify that Next page and Previous page working properly.
- Verify the "Types of poster" wokling properly
- Verify the product pictures are visible.
- Verify the Product Information and description works properly

6.3   Purchasing Items

- Verify the product pictures are visible.
- Verify the chat methode with buyer and
- Verify that when buyer pick an item he/she can make an offer for that item.
- Verify that call seller function works properly so that a buyer can integrate with the buyer directly.

6.4   User Account Management

- Verify that user can create an account.
- Verify that user can use their Facebook, Google account to create an account.

- Veriy that user can login and logout form their account.
- Verify that user can update their information.

6.5   Messaging

- Verify that user can send and receive message.
- Verify that messages are securely stored and protected.
- Verify that user and buyer can send and receive pictures

7   Test Delivarables

Testing will provide specific deliverables during the project. These delivarables fall into three basic chategories such as Documents, Test Case/Bug Write-Ups, and Reports. Here is a list of the delivarables that will be provided-

1. Test Case
2. Requirement Traceability Matrix (RTM)
3. Bug Report
4. Softwere Test report on Functional & Non-Functional Testing

8   Entry and Exit Criteria

Entry and exit criteria of software test life cycle (STLC) are flexible benchmarks. If they are not met, the QA team will assess the risk, identify mitigation actions and provide a recommendation. Below are the entry and exit criteria of each phase of Bikroy test life cycle:

STLC Stage	Entry Criteria	Activity	Exit Criteria	Deliverables
Requirement Analysis	• Requirements Document available (both functional and non functional) • Acceptance criteria defined. • Application architectural document available.	• Analyse business functionality to know the business modules and module specific functionalities. • Identify all transactions in the modules. • Identify all the user profiles. • Identify types of tests to be performed. • Gather details about testing priorities and	• Signed off RTM • Test automation feasibility report signed off by the client (if applicable)	• RTM

STLC Stage	Entry Criteria	Activity	Exit Criteria	Deliverables
		• focus. • Prepare Requirement Traceability Matrix (RTM). • Identify test environment details where testing is supposed to be carried out. • Automation feasibility analysis (if required).		
Test Planning	• Requirements Documents • Requirement Traceability matrix. • Test automation feasibility document (if any).	• Analyze various testing approaches available • Finalize on the best-suited approach • Preparation of test plan/strategy document for various types of testing • Test tool selection • Test effort estimation • Resource planning and determining roles and responsibilities.	• Approved test plan/strategy document. • Effort estimation document signed off.	• Test plan/strategy document. • Effort estimation document.
Test Case Development	• Requirements Documents • RTM and Test Plan • Automation analysis report (if applicable)	• Create test cases, test design • Review and baseline test cases and scripts • Create test data	• Reviewed and signed test Cases/scripts • Reviewed and signed test data	• Test cases/scripts • Test data

STLC Stage	Entry Criteria	Activity	Exit Criteria	Deliverables
Test Environment Setup	• System Design and architecture documents are available • Environment set-up plan is available	• Understand the required architecture, environment set-up • Prepare hardware and software development requirement list • Finalize connectivity requirements • Prepare environment setup checklist • Setup test Environment and test data • Perform smoke test on the build • Accept/reject the build depending on smoke test result	• Environment setup is working as per the plan and checklist • Test data setup is complete • Smoke test is successful	• Environment ready with test data set up • Smoke Test Results.
Test Execution	• Test Plan , Test case/scripts are available • Test environment is ready • Test data set up is done • Unit/Integration test report for the build to be tested is available (if appicable)	• Execute tests as per plan • Document test results, and log defects for failed cases • Update test plans/test cases, if necessary • Retest the defect fixes • Regression Testing of application • Track the defects to closure	• All tests planned are executed • Defects logged and tracked to closure	• Test cases updated with results • Defect reports

STLC Stage	Entry Criteria	Activity	Exit Criteria	Deliverables
Test Cycle Closure	• Testing has been completed • Test results are available • Defect logs are available	• Evaluate cycle completion criteria based on - Time, Test coverage, Software Quality, Critical Business Objectives • Prepare test metrics based on the above parameters. • Document the learning out of the project • Prepare Test closure report • Test result analysis to find out the defect distribution by type and severity	Test Closure report signed off by client	

9   Test Metrics

Metrics	Description	Frequency
Daily execution status	Status on completed Test Case, Pass/Fail, Bug Status. Defects severity wise Status – Open, Closed, Resolve Total defects, Highlight Critical Defects.	Daily

10 Test Methodology

10.1 Overview

Software Testing Methodology is defined as strategies and testing approaches used to certify that the Application Under Test (UAT) meets client expectations. Test Methodologies include functional and non-functional testing to validate the UAT.

10.2 Testing Strategy And Approaches

To verify the quality of Bikroy, QA team will apply various standard tools & techniques. Below are some test approaches along with overall test strategy for each test criteria which will apply throughout the development to deployment of Bikroy.

S\N	Test Name	Objective	When To Be Done	Execution Process	Tools	Outcome	Verification Method
1	Unit/Component Testing	Purpose of this testing is to validate that each unit of the software code performs as expected.	During development coding phase	Automation	Selenium	Correctness of code at it's granular level like individual function, method, procedure, object etc.	Unit test report
2	Validation Testing	Purpose of this testing is to validate each individual component of application interface is working properly	During system testing phase	Manual	Validation Check list	Proof of application's workable individual component	Validation check list
3	Smoke/Sanity Testing	Smoke/Sanity Testing	After getting any new release	Manual	Test Case list	Stability of given release	Result in cases
4	System Testing	To verify the system functionality within shortest possible time	Parallel with development	Manual	Test Case list	Proof of successful implementation of provided requirement	Test Case with screen shot(Where applicable), Test execution metrics with details

S\N	Test Name	Objective	When To Be Done	Execution Process	Tools	Outcome	Verification Method
5	Integration Testing	To verify the inter dependent feature/module functionality successfully working	Parallel with development, After getting any new release	Manual/ Automation	Selenium Web driver	All inter dependent and overall system's successful implementation	Integration Reports
6	Regression Testing	To Identify nothing abnormal happen in already tested feature	After getting release for bug fixing or enhancement	Manual/ Automation	Test case list, Selenium Web driver	Proof of application stability on update release	Test case result report
7	Acceptance testing/User Acceptance Test	Objective of this test is to verify whether the end-to-end flow of the system is as per the business requirements or not and if it is as per the needs of the end-user. Clients execute this test.	After getting QA clearance for UAT and before production release	Manual	Test case list	Proof of expected application	UAT report
8	Alpha Testing	The objective of this testing is to identify all possible issues or defects before releasing it to the user.	Alpha Testing is carried out at the end of the software development phase but before the Beta Testing.	Manual & Automation	Selenium Web driver	Proof of successful implementation of provided requirement	Test Case with screen shot, Test execution metrics with details
9	Beta Testing	Objective of this test is to verify the application in production environment. Clients execute this test.	After successful UAT	Manual	NA	Proof of expected application in production environment	Beta signoff
10	Database/Backend Testing	Main Objective of this test is to verify data integrity is maintained while doing CRUD operation in database.	At the time of functional testing	Manual	NA	Proof of data integrity of application.	Test report

S\N	Test Name	Objective	When To Be Done	Execution Process	Tools	Outcome	Verification Method
11	Load/Stress/Performance /Scalability Testing	To identify the capability of application on serving user request	After getting code freeze & almost zero bug release	Automation	JMeter	Proof of application scalability and performance according to expectation	Test case with result & performance report
12	Negative/Destructive Testing	Testers having the mindset of "attitude to break" and using Negative Testing they validate that if system or application breaks	During Alpha testing	Manual/ Automation	Selenium JMeter	Application behavior on invalid/ negative input	Test report

10.3 Test Schedule:

Feature Name	Activity: Usability/Functional/ Integration/Regression Testing	Start Date	End Date	Total Man Days	Assigned To
Login/Signup	1. Test case writing 2. Test execution 3. Bug report and manage 4. Daily status report	x/x/2023	x/x/2023	X	X
Posting Add	1. Test case writing 2. Test execution 3. Bug report and manage 4. Daily status report	x/x/2023	x/x/2023	X	X
Searching	1. Test case writing 2. Test execution 3. Bug report and manage 4. Daily status report	x/x/2023	x/x/2023	X	X
Chat & Call	1. Test case writing 2. Test execution 3. Bug report and manage 4. Daily status report	x/x/2023	x/x/2023	X	X
Mobile App	1. Test case writing 2. Test execution 3. Bug report and manage 4. Daily status report	x/x/2023	x/x/2023	X	X

Membership Payment	1. Test case writing 2. Test execution 3. Bug report and manage 4. Daily status report	x/x/2023	x/x/2023	X	X
User account management	1. Test execution 2. Feedback report and manage 3. Daily status report	x/x/2023	x/x/2023	X	X
Customer Support	1. Test execution 2. Feedback report and manage 3. Daily status report	x/x/2023	x/x/2023	X	X

11 Defect Tracking

All The issues that may be found during different test phases will be reported in JIRA/Excel. All issues will be initially assigned to development lead. The development lead will analyze any defects that may be reported and will assign to respective developers for proper resolution.

Any fixed issue should be redirected to respective defect reporter for retest or regression along with any suggestions that may help to figure out the affected path of the changes that would be required to fix a defect.

12 Resource & Environment Needs

Following are the expected test environment and tool requirements:

12.1 Testing Tools

1. Jira
2. Excel
3. Jmeter
4. Eclipse IDE

12.2 Test Environment

12.2.1 Hardware

1. Test Server info: Processor core i5, Core 4, Threads/Logical Processors 8, Ram 8gb

12.2.2 Software

1. Application**:**
   Test URL : *https://bikroy.com/*
2. Web Browser:
   Chrome
3. Operating System:
   Windows 10