**LEVEL 1**

| **Documentation** | **Description** | **Pros** | **Cons** |
| --- | --- | --- | --- |
| **Check-list** | The checklist is most often an ordinary list  Order of the points may does (not) matter  It can be a structured (multilevel) list that allows to display a hierarchy | Can be expressed graphically (for example, using a mind map)  Well-thought-out and neatly designed checklists can be reused, which saves time and effort.  Due to tight deadlines and/or lack of other resources, testing can be carried out directly on checklists without test cases. | Can turn into a dump of thoughts that not connected between themself  There may be duplication due to different formulations of the same idea. |
| **Test-case** | A set of inputs, execution conditions, and expected results designed to test a property or behavior of a software tool. | Structures and systematizes the approach to testing  Calculates test coverage metric  Clarify mutual understanding between the customer, developers and testers  Store information for long-term use and exchange of experience between employees and teams  Conduct regression testing  Quickly bring up to date a new employee who has recently joined the project. | If the test case does not have input data, execution conditions and expected results, and / or the purpose of the test case is not clear, test case not valid  It takes time and clarity to develop and describe each test case. |
| **User scenario** | Presents a chain of actions performed by the user in a specific situation to achieve a specific goal. | Scenarios show real and understandable examples of using the product  Scenarios are understandable to end users.  Scenarios perfectly show flaws in the requirements  In the extreme case (lack of time and other force majeure), scenarios can not even be written in detail and experience engineer can implement them as it need | Formulated scenarios do not have accurate definition, on how part of program should work(it behaviour on exception or rules)  The interpretation of user scenarios has a vague description |

Checklist for main page of **rozetka.com.ua**

| **Main page** |  |
| --- | --- |
|  |  | Chrome  (v104.0.5112) | Firefox  (v 104.0) | Safari  (14.1.2) |
| **Section** | **Case** | **pass/fail** | **pass/fail** | **pass/fail** |
| **Search** | Results exist/do not exist |  |  |  |
|  | Empty search term |  |  |  |
|  | Search by audio query |  |  |  |
| **Search (authorized user)** | When you click on the search bar, the search history is displayed |  |  |  |
|  | You can clear your search history |  |  |  |
| **Catalog** | The categories window will appear. |  |  |  |
|  | Displaying the various sub-categories on the right when hovering over the main categories in the sheet |  |  |  |
|  | Display a list of popular searches in the directory |  |  |  |
|  | Clicking a category\subcategory takes you to the corresponding sections on that tab |  |  |  |
| **Ad banner** | Display of current promotions |  |  |  |
|  | Automatic switching between promotions |  |  |  |
|  | Manual switching |  |  |  |
| **Compatibility** | Checking the display of the UI on different screen resolutions (mobile, tablet, laptop, PC) |  |  |  |
|  | Checking the display of the UI on different browsers |  |  |  |
| **Web page** | All buttons are active |  |  |  |
|  | Header |  |  |  |
|  | Popup ads on page load |  |  |  |
|  | Hover links are underlined |  |  |  |
|  | You can change the language UA\RU |  |  |  |
| **Web page (authorized user)** | Item browsing history |  |  |  |
|  | Product advertisement |  |  |  |
| **Authorization** | Go to your personal account through the navbar |  |  |  |
|  | Authorization using Google\Facebook |  |  |  |
|  | Authorization by email |  |  |  |
|  | Registration |  |  |  |
|  | Password recovery |  |  |  |

**LEVEL 2**

TEST CASES IN ZIP FILE

**LEVEL 3 (I have tried my best for now :( )**

**Test Plan**

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**Project “Paws”**

Document Revision History

| Date | Version | Description | Author | Reviewer | Approve |
| --- | --- | --- | --- | --- | --- |
| **28.08** | **0.1** | **Test plan** | **M.OSINTSEV** |  |  |
|  |  |  |  |  |  |

# INTRODUCTION

Project will be launched as an mobile application for sharing photos of cats for iOS and Android devices. Using base as social network, users will share and comment another cats photo.

The Test Plan has been created to facilitate communication within the team members. This document describe approaches and methodologies that will apply to the unit, integration and system testing of the "Paws.apk". It includes the objectives, test responsibilities, entry and exit criteria, scope, schedule major milestones, entry and exit criteria and approach. This document has clearly identified what the test deliverables will be, and what is deemed in and out of scope.

# SCOPE

The document mainly targets testing of user manipulation and correct respond of the application as per Requirements Specifications created by Product Owner.

## Functions to be tested.

* GUI
* Upload/Download
* Account management
* Performance
* Security
* Compatibility

## Functions not to be tested.

* Promotion from Google Ads

# QUALITY OBJECTIVES

## Primary Objectives

A primary objective of testing is to: assure that the system meets the full requirements,

including quality requirements (functional and non-functional requirements) and fit

metrics for each quality requirement 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.

Any changes, additions, or deletions to the requirements document, Functional

Specification, or Design Specification will be documented and tested at the highest level

of quality allowed within the remaining time of the project and within the ability of the test

team.

## Secondary Objectives

The secondary objectives of testing will be to: identify and expose all issues and

associated risks, communicate all known issues to the project team, and ensure that all

issues are addressed in an appropriate matter before release. As an objective, this requires

careful and methodical testing of the application to first ensure all areas of the system are

scrutinized and, consequently, all issues (bugs) found are dealt with appropriately.

# TEST APPROACH

The approach, that used, is Proactive, therefore this approach defines and prepares the way to carry out the testing procedures, as soon as possible, even before the development of the initial software build. Technique used as a preventive approach, in order to find and fix defects. Test cases will be created during exploratory testing. All test types are determined in Test Strategy.

Team also must used experience-based testing and error guessing utilize testers' skills and

intuition, along with their experience with similar applications or technologies.

The project is using an agile approach, with weekly iterations. At the end of each week the

requirements identified for that iteration will be delivered to the team and will be tested.

# ROLES AND RESPONSIBILITIES

| **Role** | **Staff Member** | **Responsibilities** |
| --- | --- | --- |
| **Back-end developer** |  | Develop the system/application  Develop Use cases and requirements in collaboration with the Product Owner  Follow RTM changes  Conduct Unit, system, regression, and integration testing for iOS/Android/server environment  Support user acceptance testing |
| **iOS** |  |
| **Android** |  |
| **Product Owner** |  | Acts as a primary contact for developers  Create and update RTM  Participation in the project plan creation/update process.  Planning and organization of test process for the release.  Coordinate with developers on any issues/problems encountered during development/testing. |

# ENTRY AND EXIT CRITERIA

## Entry Criteria

* The development phase has been finished
* Requirements have been defined and approved
* Test design and tests plan have been created
* The test environment has been set up
* Proper test data is available.

## Exit Criteria

* A certain level of requirements coverage has been achieved.
* No high priority or severe bugs are left outstanding.
* Tests cases are executed
* The rate of tests cases passed is satisfactory, e.g., 95%
* Failed test cases are not related to crucial functionality
* Critical defects have been fixed.

# SUSPENSION CRITERIA AND ASUMPTION REQUIREMENTS

## Suspension criteria

* The build contains many serious defects which seriously or limit testing progress.
* Software/Hardware problems
* Assigned resources are not available when needed by test team.
* Availability of devices
* New features and modification which have not been planned in advance
* Changes in requirements
* Delays in schedule

## Assumptions

* Each release is accompanied by a note with information about implemented features and their impact on the system
* All blocker bugs receive the high priority status
* All the bugs found are fixed before the next software release
* All documents are up-to-date and delivered to the testing team in time
* All necessary equipment and tools are provided and ready for testing
* The test schedule is reviewed in case there are any obstacles for testing

# TEST STRATEGY

## Unit Testing

### Objective

The main objective of unit testing is to verify whether every unit operates as intended. A function, procedure, method, or even the entire module can be considered a separate unit.

## System Testing

### Objective

System testing is generally conducted after Unit Testing. The objective is to evaluate compliance of an integrated application with its requirements.

### Testing Procedure

* test cases preparation
* test executions
* bug reporting

## Types of System Testing

### Functional Testing

Verify creation of account from user side

Verify possibility of account editing by the user

Verify access to the main page of application for user

Verify access to gallery for upload pictures

Verify like system from users

### Performance Testing

Verify response time to access main page

Verify response time to access personal gallery

Verify response time to access another user gallery

Verify download speed of posts for main page

### Interrupt Testing

Verify correct deployment of the application after call interruption

Verify correct deployment after minimization of application

Verify correct deployment after restart of mobile phone

Verify correct deployment with floating window

### Usability Testing

Verify ease of navigation through a sample set of screens

The application shall be easy-to-use and shall be appropriate for the target market of animal lovers

The user-interface shall be represented by designed layout

### Data and Database Integrity Testing

Verify access to database of cat pictures for each user

Verify simultaneous record read accesses

Verify correct retrieval of update of database data

### Load Testing

Verify system response when loaded with 50000 logged on user

Verify system response when 5000 simultaneous user active

### Installation and Launch testing

Verify installation and launch on iOS platforms

Verify installation and launch on Android platforms

### Security testing

Verify Logon security through user name and password mechanisms

Verify two-step identification authorization

### Regression testing

Check notified critical and major defects are resolved

## Pass/Fail Conditions

All the conditions when tests pass or fail are defined and described.

## Test Report

Test Report helps to summarize testing activity in a formal way. It should contain:

* name and overview of an application
* testing hardware and software environment
* the number of test cases executed/passed/failed.

For each issue that has been encountered, the following information is provided:

* bug description
* bug status (open, fixed, etc.)
* bug location
* steps to reproduce an issue

# BUG REPORTS

Bug reports are created in order to provide the development team and the project managers with exhaustive information about the discovered defects. Defect Severity can be classified into four categories:

* Critical (blocker) defects are the failure of the complete software system or of a critical subsystem, and no work or testing can be carried out after the occurrence of the defect. It also applies to data loss failures and with processes that leave inconsistent data stored in the database.
* Major defects (and crashes) are those which also cause failure of the entire or part of the system, but there are some processing alternatives which allow further operation of the system. It also applies to the system crashing, or aborting, during normal operation of a non-critical flow.
* Minor defects do not result in failure but cause the system to show incorrect, incomplete, or inconsistent results.
* Trivial defects are small errors that do not affect the functionality: typos, grammar mistakes, wrong terminology, etc.

The information that is indicated in each bug report:

* the software product name;
* version number of the software product;
* the platform on which the tests were performed.

Each report provides the next information about the defect:

* summary, which is short description of the problem;
* location of the defect in the software product;
* steps to reproduce the error;
* frequency of the defect occurrence;
* severity of the defect;
* additional information about the defect in the form of attached screenshots or video records

Third party software will be used for reporting and maintaining discovered errors

# RESOURCE AND ENVIRONMENT NEEDS

## Testing Tools

| Defect tracking | Jira |
| --- | --- |
| Test Cases | Testrail |
| Screenshot/Video capture | Snagit 21 |
| Project management | Microsoft Word |

## List of devices

| **Name of device** | **OS** |
| --- | --- |
| **iPhone devices** | **All supported OS** |
| **Android devices** | **All supported OS** |

## Test Environment

iPhone 12 /13, iPad pro/mini, Redmi Note 9, Google Nexus 10, One Plus 9

# DELIVERABLES

* Test Plan
* Test Strategy
* Bug reports and reports regarding the testing progress