

Software Testing Portfolio – Mobile Application

Software Testing Projects for Mobile application

I have successfully accomplished various projects in Software Testing from small level to enterprise level for Mobile Based applications. Few of the projects are mentioned below.

1. Dollar Digits

Overview

Dollar Digits allows user to add unlimited anonymous numbers [unlimited personals] to users smartphone at anytime, call text, picture texting and encrypted self destruct messaging between Dollar Digits users. Protect users privacy and stay safe with Dollar Digits! This application is in Android and iOS.

Challenges

- The mobile application was planned to work on a wide range of devices so extensive compatibility testing was required.
- Testing was focused on Android and iOS.
- Development and QA teams had to work closely using agile methodology.
- Non-functional requirements such as memory leakage and battery consumption also needed to be tested.
- Testing team needs to be well aware about the various functionalities, and the environment used for the software.
- Cross dependency of software- testers need to ensure that any changes in one component or layer should not lead to side effect on the other.

Recommended Solution and Result

In order to help my client and to meet their testing needs, I performed following:

- I had used testing tools efficiently to give the client confidence their application would support a wide range of users.
- I helped to client for setting up agile testing to facilitate communication and reporting between development and QA teams.
- I worked closely with client's development team to ensure frequently changing requirements were taken care.
- I performed Memory Leakage and Battery Consumption testing effectively to identify all possible issues.
- My experience in mobile testing helped the client conduct end-to-end testing while focusing on high-risk areas.
- Created Test design documents like Test Cases, Test Scenarios from the requirement document which were modified regularly.
- By executing all test cases, I have achieved 100% Test coverage.

Tools and Technologies

Technologies

Backend and API: PHP, Codeigniter, Twilio,

Database: MY SQL, Firebase

Payment gateway: Strip Languages: Java (Android), Swift (iOS)

- **Tools:** JIRA, TestRail

Major Testing Performed:

- Functional Testing
- Regression Testing
- Cross Device testing
- End-To-End Testing
- Battery Usage Testing
- Memory Leakage Testing.

Provided Documents and Reports

- Requirement Analysis document
- Test Plan
- Test Cases
- Bug Report
- Test Summary Report

2. GRUVI MYSTICS

Overview

With the Gruvi Mystics network of accurate psychics, you can get answers and direction to help guide your life. Chat or call with our readers to receive guidance in with Love, Relationship, Career, and Life. Call directly through the app or chat anytime for free. Our psychics and intuitive are ready to assist you.

Challenges

- Specific working environments were required to be maintained for the testing of UI for mobile application.
- Achieving high quality regression testing with the time restrictions pressures.
- Testing of Chatting and calling needs to be performed.
- Operational stability of pre-release versions of the application and I had to give recommendations on how to improve main features of the application.

Recommended Solution and Results

- I gone through the overall application and requirement to understand it thoroughly.
- I created Test cases and Test Scenarios for various functionalities based on the client's needs.
- I executed test cases on both iOS and Android platforms using a variety of devices.
- Defects were verified on daily basis as per their severity.
- I performed Usability Testing.
- At the initial stage of testing, I recommended a lot of UI changes, and then the changes were made that helped to improve the features of the application.
- Performed Battery Usage testing after having call or chat to make sure that battery is used normally or consuming more battery.

Tools and Technologies

- **Technologies**
Backend/Frontend/API: PHP, HTML, CSS, JQuery , Javascript YII2 , Twilio voice
Database: MY SQL
Payment Gateway: Stripe, Paypal
Languages: Java (Android), Swift (iOS)
- **Tools:** JIRA

Major Testing Performed

- GUI Testing
- Functional Testing
- Regression Testing
- Cross Device Testing
- Battery Usage testing
- Usability Testing
- Exploratory Testing

Provided Documents and Reports

- Bug Report
- Test Scenarios
- Test Cases
- Test Summary Report
- Release Note

3. Gate Buzzer

Overview

Gate buzzer's goal is to make communities safer for families via technology. I have made many designs and eventually came up with a retrofitted simple and secure system that is affordable for any community.

Challenges

- There are a number of mobile devices available these days, ranging from smartphones to tablets to ipads with varying sizes, screen sizes, and configurations. This makes it difficult for the testers to assess the quality of their application.
- Different Operating Systems like iOS, Android, and Windows send out upgrades to their newer versions often, which results in several versions of the same OS being in use at one point of time.
- There are a number of test interfaces, like mobile emulators and simulators, which prove to be quite important when performing regression testing

Recommended Solution and result

During Execution of QA, I recommended some solutions and following results has been achieved:

- Proposed & implemented End to End testing solution covering functional testing across multiple browsers and mobile devices
- Setup testing process with Dev and QA.

- Test plan based on the Enhancement Specification document
- Creating & executing all the test cases on and issues logged to Project management tool
- Once Changes are moved to staging server, retest and confirm back to development team.
- Staging server is handed over to Customer admin people for their review after testing.
- Security testing helped to detect and further eliminate critical moments of the application

Tools and Technologies

- **Technologies**
Backend/Frontend: PHP, Codeigniter
API: PHP, Firebase notification, Twilio
Database: MY SQL, Firebase
Languages: JAVA (Android), Swift (iOS).
- **Tools:** JIRA

Major Testing Performed

- Functional Testing
- Regression Testing
- Cross Device Testing
- Interrupt Testing
- Usability Testing
- End-To-End Testing
- Security Testing.

Provided Documents and Reports

- Bug Report
- Test Plan
- Test Cases
- Test Summary Report
- Security Testing report

4. TRAVAIL GLOBAL

Overview

Travail Global is a thriving staffing firm with a successful track record of making a positive difference in the lives of those I serve. Travail Global boasts an award-winning approach to delivering the hiring needs of the local business community as they continuously leverage new and reliable technology to optimize efficiency and effectiveness.

Challenges

- How to provide systematic and trackable testing process with all necessary documents in a Scrum project providing verification of the user stories at the end of each sprint?
- How to verify that all functionalities are working on different versions of Android and iOS and on different devices supporting corresponding OS?
- Checking for Security of the application.

Recommended Solution and Result

Since I introduced to the project, the following results has been achieved:

- Working functionality/user story at the end of each sprint, giving reliable status of the application to the project stakeholders
- Systematic and trackable testing process that ensures what/when/how was verified
- Efficient continuous testing on device test cloud, ensuring application is working on different Android and/or iOS devices with different OS versions
- Functional mobile application that satisfied customer needs
- Security testing was one of the key stages of the project. It helped to identify and further eliminate the critical moments in the application security.

Tools and Technologies

- **Technologies**
Backend/Frontend: PHP, Laraval,
API: PHP
Database: MY SQL, Twilio
Payment gateway: Stripe
Languages: Java (Android), Swift (iOS)
- **Tools:** JIRA

Major Testing Performed

- Functional Testing
- Regression Testing
- GUI Testing
- Cross Device Testing
- Usability Testing.
- Security Testing.

Provided Documents and Reports

- Bug Report
- Test Plan
- Test Cases
- Test Summary Report

5. TOTELY

Overview

Totely enables Businesses and Individual Sellers to drive sales and supercharge customer interactions. Some of the features are Respond via SMS, Email, App, and Web single inbox, Collaborating via Chat, Video, Voice, Browse and Whiteboard together.

Challenges

- QA Process and Development was not in sync. Due to this it is difficult to manage Test planning and Test Result.
- Challenge that faced by client was related to compatibility as application is running on multiple devices and operating systems.

- Another challenge was related to performing application testing and automating it.
- Performance testing on Mobile API and web services was also challenging.
- Providing Application crash log to find exact bug was challenging.

Recommended Solution and result

During Execution of QA, I recommended some solutions and following results has been achieved:

- Robust testing on different devices and Simulators helped very much to client.
- SDK used effectively to compile and run the app in simulator. I provided excellent mobile devices inventory to help application testing.
- Automation achieved for more than 50% of the application.
- I also performed database testing to find defects related to data missing or any other issues.
- I generated crash log to identify bugs effectively.
- JMeter and SOAP UI framework used for load profiling.
- Functional Automation Test script were writing using Appium.

Tools and Technologies

- **Technologies**
Backend: Firebase, nodejs, firebase cloud functions
API: Mailgun, Twilio video, Twilio voice, Plivo SMS
Frontend: Javascript, HTML, JQuery, Swift4, ARKit
- **Tools:** JIRA, JMeter, SOAPUI, Appium

Major Testing Performed

- Functional Testing
- Regression Testing
- Cross Device Testing
- Usability Testing
- Exploratory Testing
- Automation Testing using JMeter, Appium and SOAPUI

Provided Documents and Reports

- Bug Report
- Test Plan
- Test Cases
- Usability Recommendations
- Test Summary Report
- Automation Test Result