

Ringl Messenger

Mobile app for secure and convenient communication, calls and file sharing

Ringl Software Development:

Ringl Messenger is a mobile application where users can exchange end-to-end encrypted messages, share media files, make free voice and video calls, and manage contacts. Users can create group chats, group calls, and video conferences, edit their profile, and customize various application settings. Ringl also allows users to hide chats, enable confidential mode, and receive notifications for screenshots or video recordings.

The Ringl Messenger app caters to a wide range of users who wish to communicate and share information via mobile devices. It can be used for both personal and business purposes.

Team goals

The goal of this project is to verify the functionality, reliability, performance, and security of the Ringl Messenger mobile application. We plan to test all core features of the app and ensure its compatibility with various platforms and devices.

First of all

Test Plan. Our task was to determine the deadlines, methods and types of testing to be used in the course of work, resources and capabilities of the team and assign roles on the project.

Team composition:

1. Novikova Volha, Team Lead, QA Engineer
2. Ilya Meleshkevich, QA Engineer
3. Polina Korolenko, QA Engineer

Smoke testing

In order to verify the basic functionality of the application, smoke testing was performed, including application installation and registration, sending and receiving messages, chat types and actions with them, calls and video calls, group calls and video conferences. The choice of tests was based on the studied documentation and our own solution. 32 smoke tests were conducted - 16 on iOS and 16 on Android.

During the smoke test execution the team did not find any bugs.

Critical path testing

Having tested the core functionality of the app, the team proceeded to critical path testing - how the average user behaved with the app and what they used on a regular basis.

During the critical path testing, 59 tests were performed - 29 on iOS and 30 on Android. One bug was found - the edit function is periodically missing on both iOS and Android.

Extended testing

The team approached the extended test creatively - having checked all the additional functionality, they started searching for different ways of revealing the program's behavior in all kinds of situations. The team tested different ways of interrupts, equivalence classes and boundary values, used cross-platform testing. The team's choice settled on checklists - to save time and cover more work. 754 checklist ideas were written for iOS and 781 for Android. During the course of testing, 14 more bugs were discovered.

Bugs

Bug changing profile photo - when you deselect a photo, the app opens the profile instead of staying in the gallery.

Bug inviting friends by email - even if you have an email address on your device, the app notifies you that your email address is not installed on your device.

Background color change bug - the app notifies that background change is only available in the "light" version of the app. This theme is not found on the iPhone :)

Limit bug - when entering 40,000 characters, the app crashed, but no set limits were found.

Message selection bug - when deselecting messages, you can't bring up a menu of actions with the message. Another bug with this function - when user select a message in chat larger than screen, some message text visually disappears

Music playback bug - when listening to music in the background, if you play multimedia files in the app, the paused background music does not play after closing the files. Telegram messenger and VK messenger served as a comparison.

UX/UI bug - Appearance word is displayed differently in settings and chat.

Bug of joining a member during a call - when joining a member of a group call, the user who joins can no longer be heard for the duration of the connection.

Geolocation view bug - on Android user cannot view received and sent geolocation.

Some bugs are found on both platforms, some only on iPhone or Android.

Test result report

The result of the work done is displayed in the Test Result Report. The document contains brief information about the schedule, bugs found and testing progress.

Conclusions and results

The Ringl Messenger application performs all the main advertised functions, providing secure message and call exchange, media files, and voice messages. The app includes non-typical messenger features such as notification of screenshots and screen recording, screen protection, automatic message translation, verification code, confidential content, and changing the current encryption session.

The total number of tests performed and the relatively small number of bugs detected indicate that the application is fairly stable and has undergone basic testing. To improve quality, it is recommended to pay attention to fixing the identified issues before releasing the next version of the application.