Case Study







Client Overview

- Client is a real money technology group, delivering cutting-edge technology solutions. Their portfolio currently includes companies in the Gaming arenas, Software Development, Hospitality and Media & Entertainment
- Key requirement: End to End functional validation of their mobile poker game application
- Testing Types: Functional Testing, Compatibility Testing, Performance Testing, User Acceptance Testing



Business Requirements

- To provide flawless End user experience
- To ensure full functional validation of the poker game on Android
- To conduct Stand-up meetings on daily basis, bug triage and retrospective meetings after completion of release
- To provide daily status reports and weekly metrics



Our Solutions

- Few players to none around at any given timeExceedingly difficult to get some specific Hands
- No standardized game design document, no database access and zero test cases available
- Validation of the game functionality by choosing the best fit mobile devices Measuring application performance across multiple android devices Ensuring flawless user interaction with the application interface



Deliverables

Daily Status reports, Release retrospective report, Defect reporting Test Case document, Suggestions document to improve the quality of the game application

Sample Reports



Daily Status Report

Hi.

Below is the Daily Status Report for the title "XYZ" as on 29th July 2022.

Date: 29th July 2022

Title: XYZ

Build Version: Live (XYZ games)

Platform: Android Mode: Hold'em Device: Mobiles Environment: Live Team size: 2

Total Issues including observation: 19

Highlights:

Testing has been ended as of today and hope our Team delivered to your expectation.

Team performed Game Bench test and below you can performance report has been attached along with this mail.

Let me know if you require the complete data of Game Bench session which is approximately 900 MB.

Team did manage and played handful games with full table and did not face any issues during the gameplay.

Team did not face any hang/crash and title seem very consistent, although there was a session the title suffering from low

frame rate issues. Log has been attached in this mail for your reference.

Team is working on the live environment of the game mode "Hold'em."

Funds have been added to the member's account for testing purpose (XYZ).

Team will be working on the mode **Hold'em** until the mode **Omaha** goes live.

Device details:

Device name	OS version	RAM	Root Status
OnePlus 6T	Android 11	6GB	Locked
Redmi Note 11T	Android 12	8GB	Locked
Pixel 5	Android 12	6GB	Locked
Poco F1	Android 12	6 GB	Unlocked
OnePlus 8	Android 12	8Gb	Locked

Test Focus:

- · Functionality testing
- End user experience

Game bench Session Details:

Below are the performance test results as executed on Game Bench. The Game Bench tests performed are in addition to services covered in the test scope document.

Summary	Stats
Date recorded	29-07-2022 06:26
Account	abc@indiumsoft.com
Арр	com.XYZ
App version	2.2.8
Device	POCO F1
OS version	12

GPU model	Adreno (TM) 630
Seconds played	4882
Median FPS	18
Fps Stability %	8
Fps stability index	9.22
Avg CPU usage %	11.02
Max CPU usage %	48.88124847
Avg memory used MB	620.6779804
Max memory used MB	831
Avg GPU usage	0
Max GPU usage	0
Avg mWatt	1322
Avg mAmp	322
mAh consumed	436
MB downloaded	95.52
MB uploaded	4.08
ID	c8c59610-7363-42eb-9535-d8751d5c6807

2 issues were reported today.

Issue ID	Summary
1	[iXiE][Audio] There is no SFX played for Check/Fold during the player's turn when selecting Check/Fold option.
2	[iXiE][Audio] There is a delay when toggled with the Auto Post BB option.

Observations:

Positive:

- Title seems very consistent, and no serious issues related to the performance of the title.
- · Creating Parallel games is a good feature of the game.
- Managed more games with real players and did not face any issues during the session.

Negative:

- · No restriction on the Parallel Games feature and players can create multiple sessions of games.
- The games started to feel sluggish and were suffering from low frame rate when playing Parallel games for more than 30 mins.

Next Shift:

Team will continue to work on the current task until further instructions are received.

Sample Reports



Sample Poker Estimation Sheet

Bug Reporting and

Screenshot/Logs/Video/cross verifing on other devices&OS)

Team allocation, Familiarization and	d Test Setup		1-2 weeks	
			Hours	_
Installation and update checks			1	_
Funtionality Testing (Which covers				
all below mentioned components)				2.
	=::1 0	e I I Fri I I I		_
	Title Screen	Splash screen/Title screen/Loading screen	3	
		Play As Guest		
		Register Now		
		Already a user? Login		
		Google Login		2
		FaceBook Login		
		Register Bonus		_
	Main Menu and Game Modes	Cash	80	_
		Tournaments		
		OFC		
		Sit & Go		
		Spin & Go		
		Quick Seat - Cash and Sit & Go		
		Favorites - Cash and Sit & Go		
		Real Money		
		Play Money		
		i lay inology		_
	Profile	My Account	5	
		Banking		
		Promotions & Rewards		2
		My Poker		
		Refer & Earn		
		24x7 Help & Support		
		About Us		
		Logout		
				_
	Add Cash & Payment Method	Fast Cash	20	
		Choose Bonus		
		Credit / Debit Cards		
		Net Banking		
		UPI		
		eWallet		
		Payment GateWay checks		
In-game		Negtive test cases		
		Interrupt testing		
		Network Testing		_
	Cash Withdraw		N/A	
	Cash Withuraw		IN/A	_
	WD Flowback		N/A	

GamePlay	Table and Seat	20
ourner ia,	Profile icon for players	i
	Card distribution	i
	Fold, Call, Raise, Bet, Sit in, Auto Post BB	i
	Win, lose, exit table flow	i
	Menu - Sit out all tables, Auto check, Sit out next hand, Sit out next BB	í
	Hamburger Menu - Game info, Settings, Game history, Report a bug, Leave table	i
	Player cash - Winning cash, pending cash	i
	Total Pot Cash	
Animation and Visual Effects		4
Follow Us On	About Us	2
	Tournaments	
	Testimonials	
	Responsible Gaming	
	FAQ's	i
	Mobile	i
	Poker Rules	i
	Winners	i
	How to Play poker	·
	Promotions	·
	Legality	·
	Support	i
	Blogs	i
	Partners & Business Devlopment	
UI Check		5
		5
Interrupts, Network Throttling		5
Compatablity Testing	Considering 5 devices on Android	5
		 i
		10
		i
<u></u>	Total Hours	160
Lead Hours	Lead Hours	40
Total Estimated Hours	Total QA Hours/Build sweep	200
Team Size	Recommended Headcount	5 (1 Lead + 4 teste



- Implemented process, templates and guidelines for functional testing
- Created Check-lists to ensure the game functionality (Payouts, Betting, Buy-in, Hand strength, Table and player preference, join table, hand strength, Parallel play, Menu, Game finances etc.)
- Tested and fixed the game mechanics issues, asset integrity and checked the stability pitfalls
- Performed Compatibility test to check if the game app could be installed on 5 devices and then ensured game consistency with the supported devices
- Performed GUI testing to check the parts of user interface & graphics: menu structure, colors & backgrounds, screen resolution, font size, animations etc.
- Major defects have been fixed and retested as part of UAT Conducted benchmark testing using the Game Bench tool.



Business Impact/Benefits delivered

- Exceeded client's expectation in delivering more than what they asked for (Performance, Compatibility testing). Team received positive feedback on the quality of work delivered.
- Developed a regression testing scenario of 66 critical test cases that reduced the testing time and helped test the app swiftly and seamlessly.
- Implemented QA best practices for an improved visibility into the quality of the game application and testing
- Assessed and provided information regarding areas of improvement of the game application
- Ensured complete functionality testing on the game play and improved the end user experience of the game application.
- Team found few good issues which are marked as major and requires fixing



Tools/Technology

Microsoft Excel, Game Bench



USA

Cupertino | Princeton
Toll-free: +1-888-207-5969

INDIA

Chennai | Bengaluru | Mumbai | Hyderabad Toll-free: 1800-123-1191 **SINGAPORE**

Singapore Ph: +65 6812 7888 UK

London Ph: +44 1420 300014