Functional and Compatibility Testing of a Puzzle Based Game







Client Overview

 The client is an interactive entertainer and multiplatform licensing group delivering attractive online games for smartphones, tablets and other connected devices



Business Requirements

- The Game is a food-themed, puzzle matching, multiplayer mobile game
- The game was to be tested for compatibility on the latest mobiles for US market
- Provide consulting on the latest devices/OS versions in that would represent the usage of user base
- Test for functional stability and performance of the game for 50 users



Our Solutions

- Engaged in a 3-day pilot to understand the game and set stage for QA Process, Defect Management and Reports
- Provided Device consulting for over 50 devices considering latest mobiles in market, screen resolutions, chipset, processors and OS versions
- Created a Smoke Checklist and tested for functional stability (Game launch, Login, Player Vs Player functions and Game Crashes)
- Created a Smoke Checklist and tested for functional stability (Game launch, Login, Player Vs Player functions and Game Crashes)
- •) Performed Soak tests, and load tests for 50 users
- Verified basic network vulnerabilities



FUNCTIONALITY TEST CASES								
DATE:x	BUILD: x							
	VERIFICATION POINTS VERIFICATION POINTS	RESULTS	BUG ID AND COMMENTS					
	INSTALLATION							
	INSTALLATION							
	LAUNCH							
	AVATAR							
	AVATAK							
	TUTORIAL							
	MAIN MENU							



DEVICE COMPATIBILITY					
	BUI				
	DEVICE DETAILS			BUG ID AND COMMENTS	
CATEGORY	DEVICE	os			
н	GH AND MID END				
Mobile	Apple iPhone Xs Max	iOS12			
Mobile	Apple iPhone Xs	iOS12			
Mobile	Apple iPhone Xr	iOS 12			
Mobile	Apple iPhone X	iOS 11, iOS 12			
Mobile	Apple iPhone 8	iOS 11, iOS 12			
Mobile	Apple iPhone 5C	iOS 7, iOS 8,iOS 9, iOS 10			
Mobile	Apple iPhone 6	iOS 8, iOS 9,iOS 10, iOS 11, iOS 12			
Tablet	Apple iPad Air 2	iOS 11, iOS 12			
Tablet	Apple iPad Mini	iOS10			
Mobile	Motorola G Series	Android 5			
Mobile	Google Nexus 7	Android 4			
Tablet	Samsung Galaxy Tab	Android 4			
Tablet	Samsung Galaxy Tab A	Android 7			
Mobile	Samsung Galaxy S7	Android 7			
Mobile	Sony Xperia Z	Android 5			
Mobile	Google Pixel 2	Android 8			
Mobile	HTC One X	Android 4			
Mobile	Google Pixel 2	Android 8			



DEVICE COMPATIBILITY						
	BUILD:x					
DEVICE DETAILS			RESULTS	BUG ID AND COMMENTS		
CATEGORY	DEVICE	os				
LOW END						
Mobile	Apple iPhone 5	iOS 8, iOS 10				
Mobile	Apple iPhone 6 Plus	iOS 8, iOS 10				
Mobile	Apple iPhone 6s	iOS 11, iOS 12				
Mobile	Samsung Galaxy Grand 2	Android 4				
Mobile	Samsung Galaxy Note II	Android 4				
Mobile	ASUS Zenfone 5	Android 4				
Mobile	LG Nexus 4	Android 4				
Mobile	HTC One	Android 4				
Tablet	LG Nexus 7	Andriod 4				
Tablet	ASUS Nexus 7	Android 4				
Tablet	Google Nexus 7	Andriod 4				
Tablet	Google Nexus 10	Andriod 4				
Tablet	Lenovo Tab2 A7	Android 4				



Performance Testing

Build: 0.0.1

Device Versions	ios		Android	
Results	Results	Bugs / Comments	Results	Bugs / Comments
Load Testing				
Verify performance with at least 50-100 devices playing PVP. Test all available worlds AND monitor for game stability and network lag. (Cross platform)				
Soak Testing				
Leave devices in various stages of game play for a few hours (3-6) and verify that game is stable afterwards Soak Checklist: 1. Main menu				
Network Testing				
1. 2G 2. 3G				
3. Edge4. Wi-Fi5. Intermittent loss of data				
6. No Internet				



•) 2 Senior Test Engineers, 4 Test Engineers, 1 Test Lead

Deliverables: Test plan, Smoke Checklist, Daily Reports, Scrum Notes, Bugs

Tools: Mantis – Bug Reporting



Business Impact

- Reported over 30 issues (56% being major and 44% major issues) during 3 day pilot
- •) Bugs reported as categories of recommendations on game play, design, functionality issues and compatibility



INDIA

Chennai | Bengaluru | Mumbai Toll-free: 1800-123-1191 USA

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

SINGAPORE

+65 9630 7959

UK London

MALAYSIA Kuala Lumpur +60 (3) 2298 8465