Higher Order Testing on 3-in-1 Game
Team 5

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Performance testing, Volume testing, Stress testing, Usability testing, Security Testing

<u>Defects Log:</u>

Defect No.	Defect Description	Defect Severity	Type of Higher Order Testing	Test Case No. or Description
1	After you complete a game, if you click outside of the modal that pops up to let you restart the game, it disappears without doing anything, forcing the user to restart the app to continue using it.	Important	Usability	Edge case handling test case for post-game activities for all games.
2	After you complete a singleplayer game of Connect 4 and click the "restart" button that then reappears, the app crashes	Critical	Usability	017 - forfeit option is similar to restarting the game.
3	After you complete a singleplayer game of Tic Tac Toe and click the "restart" button that then reappears, the app crashes	Critical	Usability	018 - forfeit option is similar to restarting the game.
4	As you are playing Hangman, if you click letters quickly, the placeholder underscores representing each letter in the word disappear.	Important	Usability	022 - We played a game of hangman to end and changed our letter selection speeds.
5	In the middle of a game of Hangman, if you change the orientation of the phone to landscape, all game progress is erased. Additionally, the keyboard	Critical	Usability	An accidental change of orientation while testing

	does not fit on the screen. Additionally, the placeholder underscores representing each letter in the word disappear.			
6	In the middle of a hangman game, if you orient the phone to landscape and back to portrait, it will reset the game.	Important	Usability	Edge case for in-game portion of application, addressing accidental orientation change
7	In the middle of a Connect 4 game, orienting the screen to landscape causes the majority of the board to disappear. Additionally, all board pieces are reset.	Critical	Usability	Edge case for in-game portion of application, addressing accidental orientation change
8	In the middle of a game of Connect 4, orienting the screen to landscape and back to portrait will reset the board entirely.	Important	Usability	Edge case for in-game portion of application, addressing accidental orientation change
9	In the middle of a game of Connect 4, orienting the screen to landscape and back to portrait and then pressing the "Forfeit" button causes the score to increase without doing anything else.	Important	Usability	Edge case for in-game portion of application, addressing accidental orientation change
10	In the middle of a game of Tic Tac Toe, orienting the screen to landscape resets the board and the score.	Critical	Usability	Edge case for in-game portion of application, addressing accidental orientation change
11	In the middle of a game of Tic Tac Toe, pressing the forfeit button causes the app to crash.	Critical	Usability	018 - pressing the forfeit button during game
12	After completing a game of Tic Tac Toe, pressing the	Critical	Usability	018 - forfeit option is similar to restarting

	"Restart" button causes the app to crash.			the game
13	In the middle of a game of multiplayer hangman, rotating either participating phone to landscape causes the app to crash.	Critical	Usability	Edge case for in-game multiplayer portion of application, addressing accidental orientation change
14	In the main menu, rotating the screen to landscape cause the menu to no longer fit on the screen. The degree of this error varies based on the size of your phone's screen.	Workaround	Usability	Edge case for menu view for accidental screen orientation change
15	For multiplayer games, with 1000 virtual users and 2000 requests per user, the server stops accepting request and gameplay on existing games stops.	Important	Stress	Using the Charles network profiler, we obtain the host, and use the artillery stress tester to create virtual users and sent 2000 requests concurrently.
16	If you use a network profile to obtain the request route for multiplayer games, you can keep calling the request without using an authentication token.	Important	Security	Using the Charles network profiler, we obtain the host, and send requests to the server.
17	If you send 2000 post requests of a 500 KB size file with 3 virtual users, you get request time outs.	Workaround	Volume	Using the Charles network profiler, we obtain the host, and use the artillery stress tester to create virtual users and sent 2000 requests concurrently.We sent a dummy file as the body to add volume to our requests.

18	With 20 virtual users with 200 requests each, the latency during gameplay increases.	Important	Performance	Using the Charles network profiler, we obtain the host, and use the artillery stress tester to create virtual users and sent 200 requests concurrently.We then used the app on the phone to see if the performance affected. We also checked network latency on our stress tester.