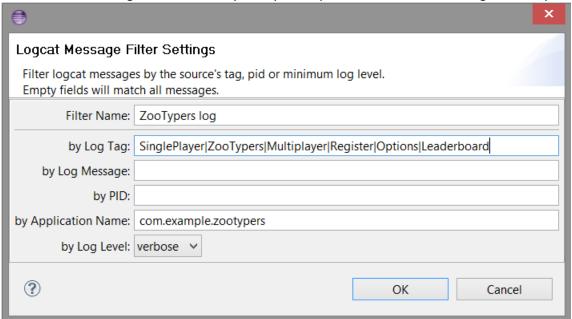
Reliability Testing Writeup

For Reliability testing we did:

- implementing substantial logging in your code to be better aware of the causes of problems
- setting up site monitoring software to check if your app is "live" and report an alert if not

Logging

In order to see our logs more accurately it may be helpful to create a filter for LogCat in Eclipse.



- ZooTypers represents general mechanics of the application such as navigation between the screens
- SinglePlayer represents all interactions with single player matches
- Multiplayer represents all interactions with multiplayer matches
- Register represents all interactions with registering a user account
- Options represents all interactions with the application's options
- Leaderboard represents all interactions with showing/storing scores from matches

We have four log files. Each file is a sample of what the logging in our code reports for unique scenarios of using our application. Logging was focused on any user interactions, internal errors from the application, network/database accesses, and any file inputs or outputs.

- single-player-log.txt NOTE: Because the words are randomized for each game, you may or may not click the exact buttons that are highlighted to match the log.
 - Enter application
 - Click "Single Player"
 - Click "Main Menu"
 - Click "Single Player"
 - Click "Continue"
 - Click the keyboard button on top left corner of the screen (to disable)
 - o Click the keyboard button on top left corner of the screen (to enable)
 - Click the pause button on top right corner of the screen

- Click "Continue"
- o Click the keyboard button on top left corner of the screen (to enable)
- Click "p"
- Click "I"
- Click "a"
- Click "n"
- Click "e"
- O Click "j"
- Click "c"
- o Chek c
- Click "r"
- Click "o"
- Click "w"
- Click "d"
- Wait for game to finish
- Click "Save Your Score"
- Click "x" on the pop up menu (to exit the pop up)
- Click "Save Your Score"
- o Enter "blah" into the "Please enter your name:" text field
- o Click "Submit"
- o Click "Close"
- Click "Main Menu"
- multiplayer-log.txt NOTE: Because the words are randomized for each game, you may or may not click the exact buttons that are highlighted to match the log.
 - Enter application
 - Click "Multiplayer"
 - Click the "x" on the pop up menu (to exit the pop up)
 - Click "Multiplayer"
 - Click "Join now!"
 - Click "X" to exit the RegisterPage
 - O Click "Forgot your password?"
 - Click "X" on the pop up menu (to exit the Reset your password popup)
 - Enter a username and password into their respective fields or (aaaa for username and password)
 - o Click "Login"
 - Click "Main Menu"
 - Click "Multiplayer"
 - Click "Continue"
 - Wait for approximately 15 seconds
 - Click "Main Menu"
 - Click "Multiplayer"
 - Click "Continue"
 - With another device running our application, log in to multiplayer and click "Continue".
 - Click "t"
 - Click "e"
 - Click "e"
 - Click "t"
 - Click "h"
 - Click "z"

- Click "f"
- Click "i"
- Click "e"
- Click "l"
- Click "d"
- Click "x"
- o Click the keyboard button on top left corner of the screen (to disable)
- Click the keyboard button on top left corner of the screen (to enable)
- Wait for game to finish
- Click "Save Your Score"
- o Click "Close"
- o Click "Main Menu"
- Click "Logout"
- o Click "Close"

leaderboard-log.txt

- o Enter application
- Click "Leaderboard"
- Click "MULTIPLAYER"
- Click "REALTIVE POSITION"
- Enter a username and password into their respective fields or (aaaa for username and password)
- Click "Login"
- Click "Main Menu"
- Click "Logout"
- o Click "Close"

options-log.txt

- Enter application
- Click "Options"
- o Click "Clear Single Player Leaderboard"
- Click "Close"
- Click "Clear Multiplayer Leaderboard"
- Enter a username and password into their respective fields or (aaaa for username and password)
- o Click "Login"
- o Click "Close"
- Click the "On" by "Vibration:"
- o Click the "Off" by "Vibration:"
- Click the "On" by "Background Music:"
- Click the "Off" by "Background Music:"
- Click "Main Menu"
- o Click "Logout"
- o Click "Close"

Site Monitoring Tool:

We use http://www.montastic.com/ to monitor our website. To view the setup of our site monitoring on Montastic, visit the link above and log in with winglam@cs.washington.edu as the username and the password we use for our Parse database as the password. In summary we use Montastic to check for the word "Down" on our website every 30 minutes and if the word is present then an email will be sent to winglam@cs.washington.edu. The word "Down" would only be present if we attempted to access our database and was unsuccessful. This will indicate to us that our application's multiplayer feature is no longer live and functioning.



The code for our website is located on our Github in:

https://github.com/ZooTypers/ZooTypers/tree/master/ZooTypers/website

Our website's URL is: http://zootypers.parseapp.com/

Our homepage currently does nothing but provide some brief information about our application. On http://zootypers.parseapp.com/status.html we have a table on the right side that provides information about whether the tables we need to access inside our database is accessible or not. We check for this with Javascript and by making a dummy query to each table.



- Registration represents the User table in our database which stores all the registration information of our users
- Matches represents the table we use for the multiplayer to match two different users against each other for a multiplayer game
- Words List represents the list of words used in our multiplayer game
- Leaderboard represents the leaderboard we use to store the name and score of each user from the multiplayer games

If the query for our dummy objects for whatever reason is not successful then a screen like this will be shown:

