

# Incremental & Regression Testing: Sprint 2

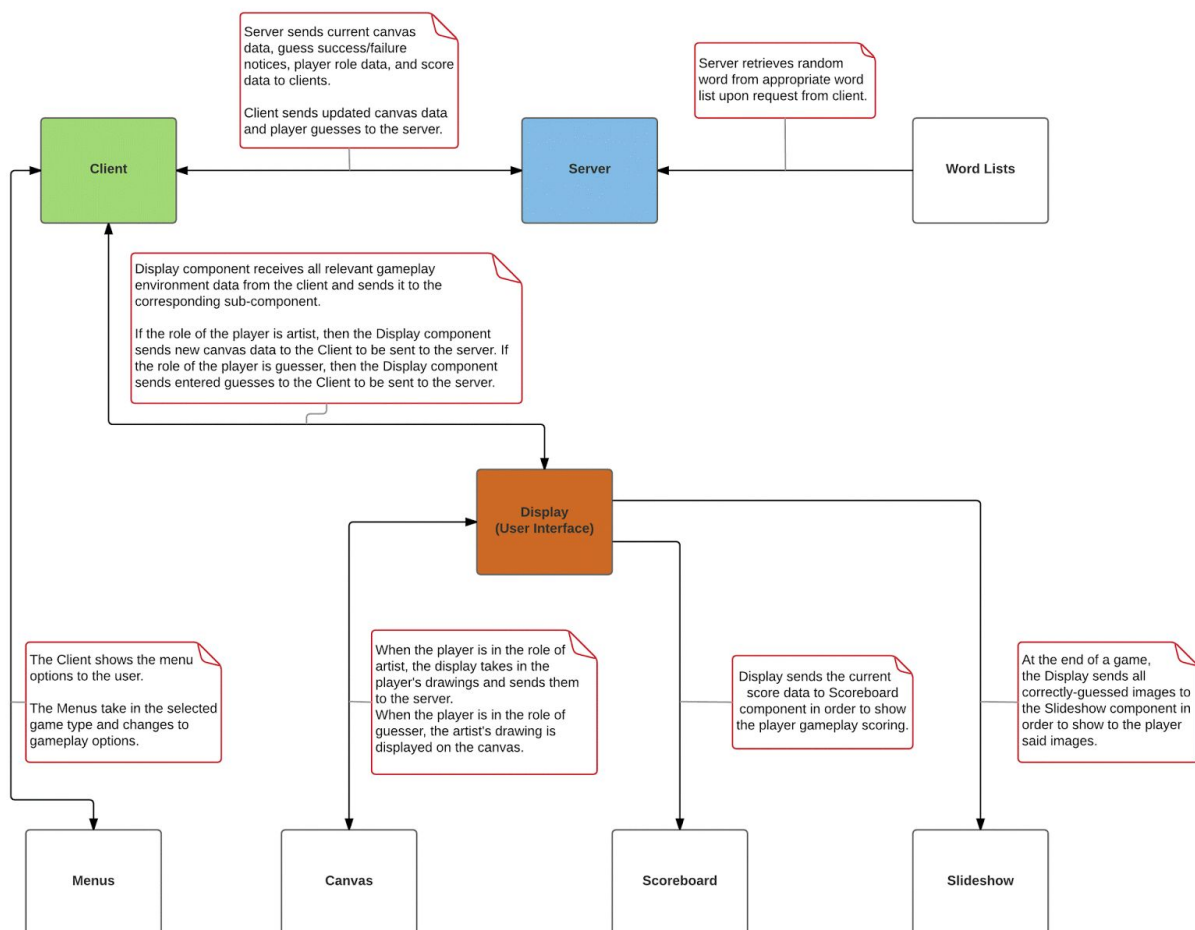
## Team 7 – Yoodle

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## CLASSIFICATION OF COMPONENTS

### COMPONENT DIAGRAM



## INCREMENTAL TESTING

We used bottom-up testing. We tested individual functions of modules first (such as the canvas, scoreboard, and menus), then began testing full modules that implemented these sub-components. Finally, we tested all the components together as a full system (Client, Server, and Display (UI)).

# INCREMENTAL & REGRESSION TESTING

## MODULE: Server

Incremental Testing			
Defect #	Description	Severity	Solution
1	Drawings made on the canvas before the beginning of a game are not cleared when the game starts.	2	Have Display clear the canvas during the game start-up process.
2	Artist clearing canvas did not clear client canvas.	1	Add event to be fired when artist clears the canvas. When received by the client, canvas will be cleared
3	All users are shown the current word, which should only be seen by the artist.	1	Forbid users from seeing words when they are in the guesser role.
4	Unable to retrieve any words from word lists because the used words list contained all words.	2	Clear word lists at the start of the round.
5	Joining a game that's already in-progress prevents the client from moving beyond the start-game state.	2	Ensure all in-progress games are marked as such and that the client is informed with an appropriate error when trying to join one.

Regression Testing			
Defect #	Description	Severity	Solution
1	Adding canvas clearing to game start-up did not have an effect	2	Correct program logic to use the correct event.
2	Clear canvas event did not take effect in the client	1	Correct syntax error in the code that handled the event.
3	When roles are changed, the same players are able to see or not see the word being drawn as previous round.	1	Recheck current roles, and prevent all guessers from seeing the current word being drawn.
4	Only clearing used words list at the start does not prevent the use of skip to fill up used words list.	2	Skipping words does not add them to used words list.

5	Broadcasting the “inProgress” condition prevented clients from joining any game rooms.	1	Set the “inProgress” boolean only after the game is started, and set the default value to false.
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**MODULE: Client**

Incremental Testing			
Defect #	Description	Severity	Solution
1	Sending the artist's mouse position caused drawing to taking place at a significant offset from the mouse cursor.	1	Modified drawing offset values to better match mouse cursor to drawing line.
2	When the artist cleared the canvas, the artist's canvas was the only one cleared, and the artist was no longer able to draw.	1	Corrected the way the canvas clearing event is sent to the server by the client.

Regression Testing			
Defect #	Description	Severity	Solution
1	The corrected offset values did not work for a larger window sizes.	2	Made the artist's mouse position (being sent to the client) relative to page size.
2	The modified clearing event sent to clients does not result in the canvas being cleared.	2	Client corrected to listen for an "artistClear" event instead of "clear".

**Module: Display (User Interface)**

Incremental Testing			
Defect #	Description	Severity	Solution
1	When a client leaves a game that has already started and enters a new game, the 'Start Game' button doesn't appear, but all of the other buttons do (as if the new game was already in progress).	1	Reset all game state variables after the client leaves the game.
2	Game is sending artist cursor positions too frequently causing unnecessary network traffic.	3	Add an interval to the drawing events.
3	Timer and the word being drawn are too small.	3	Increase font size and placement of the timer and word for a better layout.

Regression Testing			
Defect #	Description	Severity	Solution
1	Resetting all game state variables causes the word being drawn to display as 'undefined'.	1	Change the value the word field is reset to (Angular expression).
2	Adding an interval causes lines to be drawn from the start position to the new cursor position every time the interval fires.	1	Force the client to grab new starting cursor coordinates every time the interval fires.
3	Changing the size of the timer and word makes the canvas appear partially out of the window.	3	Reconfigure the layout of the game screen to accommodate the larger timer and word.