

Incremental & Regression Testing

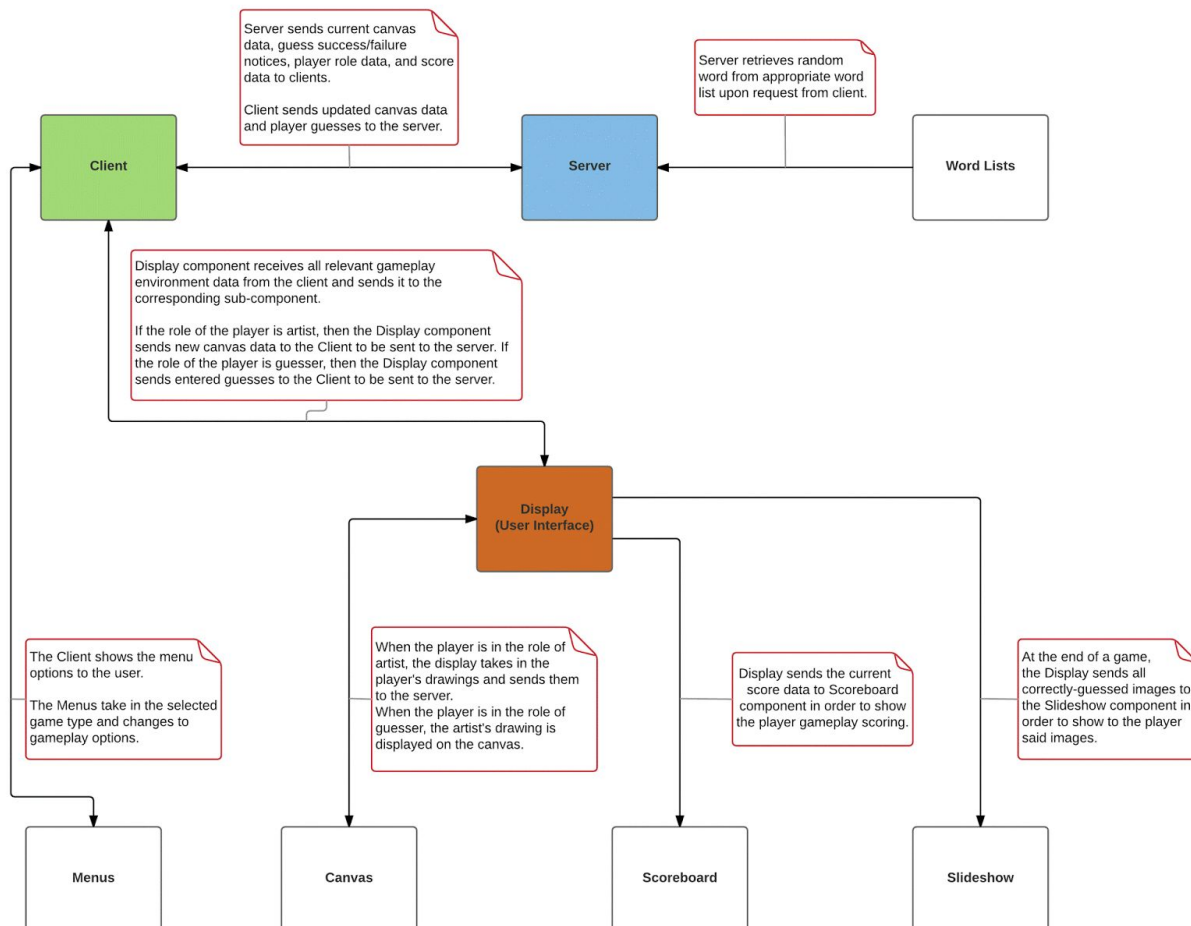
Team 7 – Yoodle

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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	Server malfunctions when receiving invalid messages from the client.	1	Add an invalid message handler.
2	Server malfunctions and tells multiple clients that they are in the 'artist' role.	1	Fix variable that tracks whether or not an artist exists in the current game.

Regression Testing			
Defect #	Description	Severity	Solution
1	Adding the invalid message handler caused server to deny valid messages.	1	Correct the logic to catch invalid inputs.
2	The addition of artist tracking caused the client to display an additional artist each round.	1	Correct logic that manages artist tracking variable.

MODULE: Client

Incremental Testing			
Defect #	Description	Severity	Solution
1	The pictures of correct guesses are only stored on the host's machine, preventing the gallery pictures from displaying on other players' screens.	2	Send a flag to other players to save picture copies on their machines.
2	Once you set your username, there is no way to change it.	3	Add name change functionality in settings.

Regression Testing			
Defect #	Description	Severity	Solution
1	Fixing the storage of correct guesses caused pictures to pop up in a new window instead of displaying them on the game screen.	2	Draw the images in the existing game window instead of creating a new window.
2	Changing name in settings doesn't save the changes to persistent storage.	3	Save username to local storage.

Module: Display (User Interface)

Incremental Testing			
Defect #	Description	Severity	Solution
1	The size of canvas becomes overridden, making it impossible for players to draw on.	1	Create a dedicated stylesheet for canvas.
2	The gallery has multiple pages even when all of the correct images can be shown within one page.	3	Create a handler to manage the gallery pages.
3	Some on-screen elements display at the wrong size.	3	Fix size values for malfunctioning elements.

Regression Testing			
Defect #	Description	Severity	Solution
1	Adding border image to the canvas in the stylesheet causing canvas lines are not drawn directly under the mouse cursor in component.	2	Adjust the cursor position offset accordingly.
2	Adding the gallery page handler caused pages with only one image to be omitted from the client's display of the gallery.	2	Add sanity checking to gallery length values to ensure that no values less than 0 were included and that one image is a valid value.
3	Fixing sizes of on-screen elements also caused menus to become distorted.	3	Resize menu to correct distortion.