

## CS 408 Design Inspection Sprint 2

Yew Aili, Qian Zhang, Dennis Chia, Xiaotian Yu, Yuzhu Yang

Severity: 1(Critical) - 3(Not severe)

### Design Inspection

Product		GuessIT Design Inspection		
Date		03/02/2017		
Defect #	Authors	Description	Severity	How correct it
1	Ai Li Yew	When the time's up, it is supposed to go to the image page.	1	Set an intent to the image page that takes place when the time's up.
2	Aili Yew	The emitted user name should appear on the game page	1	Once inputted username checked to be valid, pass the customized username to game page by server. Save it locally and display on the top of game page
3	Qian Zhang	System will be closed automatically if a player confirms to exit	1	Treat "exit game" as an activity, the activity will direct player out of the system and notify other players
9	Qian Zhang	Player is allowed to exit game either on main game page or on result page for convenience	2	Add "Exit" button on both main game page and result page. Once the "Exit" button is clicked, player will be directed to confirm exit page for further actions.
10	Qian Zhang	Player is allowed to change his / her mind and return back to game, even though	1	Add "Back" button on confirm exit page which allows player to return back to main

		player is on confirm exit page		game page in case player changes mind
11	Qian Zhang	Synchronize progress bar and countdown timer, or it will confuse players	1	Use same progress tracking function for both progress bar and countdown timer
12	Dennis Chia	After a user leave the game, his / her name and score should be removed from database since we do not keep historical information	1	After a player confirms to exit, call database and remove player's corresponding name and score. The update will show up in score table.
13	Ai Li	After a user leave the game, the total number of player for this game should be decreased by 1	1	Update database for the number of player for the particular game. Then this game becomes available for new player to join in. New player cannot join a game which already reaches maximum number of player
14	Xiaotian Yu	After the hint giver choose the image from gallery, the image should display on the result page	1	Use a image loading library to asynchronously populate the imageView

### Code Module Inspection

Product	GuessIT Code Module Inspection		
Date	03/02/2017		
Authors	Dennis Chia, Qian Zhang, Xiaotian Yu, Aili Yew, Yuzhu Yang		
Defect #	Description	Severity	How to correct it
1.	Hello appears after the	3	<code>android:layout_toLeftOf="@+id</code>

	username on the game page.		<code>/showuser"</code>
2.	<p>Image uploaded by player overlaps with the avatar's image on the game page.</p> <pre> &lt;ImageView  android:layout_width="wrap_content"  android:layout_height="wrap_content"  android:id="@+id/imageview"  android:layout_alignLeft="@+id/viewHintButton"  android:layout_alignStart="@+id/viewHintButton" /&gt; </pre>	1	<pre> &lt;ImageView  android:layout_width="wrap_content"  android:layout_height="wrap_content"  android:id="@+id/imageview"  android:layout_below="@+id/avatarImg"  android:layout_alignLeft="@+id/viewHintButton"  android:layout_alignStart="@+id/viewHintButton" /&gt; </pre>
3.	<p>The "Exit" button on main page is not clickable, so players can not be redirected to confirm exit page</p> <pre> android:onClick="informOtherPlayers" </pre>	1	<p>Instead of setting "Exit" button clickable on layout page, declare a listener function in java file to listen for player click and perform functionality.</p> <pre> confirmExit.setOnClickListener(new View.OnClickListener() {     @Override     public void onClick(View v) {          Toast.makeText(getApplicationContext(), "Player exits game",         Toast.LENGTH_LONG).show();          StartGameUsername.globalplayerrcount--;          data.remove(Constants.playerName);     } }); </pre>
4.	The timer was not converted to the correct time as I wanted.	1	<p>Need to multiply by 100 and multiply by 60.</p> <pre> private long startTime = timeRound * 1000 * 60; </pre>
5.	Timer progress bar not in sync with time.	1	<p>Keep track of time elapsed from start time and set progress length by the time left. Use android library function to</p>

			<p>update progress bar's length</p> <pre> <b>progressBar</b>.setProgress((<b>int</b>) (<b>progressBar</b>.getMax()-progress));  @android.view.RemotableViewMethod <b>public synchronized void</b> setProgress(<b>int</b> progress) {  setProgressInternal(progress, <b>false</b>, <b>false</b>); } </pre>
6.	<p>Player cannot exit game gracefully by calling system exit</p> <pre> System.exit(0); </pre>	1	<p>Add finish() to make sure that all running functions can complete and then exit system.</p> <pre> <b>public void</b> exitSystem(){     finish();     System.exit(0); } </pre>
7.	<p>Process bar and countdown timer are not synchronized. Countdown timer runs faster than progress bar.</p>	2	<p>Use the same function to keep track of time elapsed, and update both countdown timer and progress bar.</p> <pre> <b>countDownTimer</b> = new CountDownTimer(<b>startTime</b>, <b>interval</b>) { // Parameters has to be changed to what the room initiator set.     @Override     <b>public void</b> onTick(<b>long</b> millisUntilFinished) {         <b>long</b> progress = millisUntilFinished/1000;  <b>progressBar</b>.setProgress((<b>int</b>) (<b>progressBar</b>.getMax()-progress));          // Need code for written time  <b>timerView</b>.setText(""+String.format(<b>FORMAT</b>,  TimeUnit.<b>MILLISECONDS</b>.toMinutes(millisUntilFinished) - TimeUnit.<b>HOURS</b>.toMinutes(  TimeUnit.<b>MILLISECONDS</b>.toHours(millisUntilFinished)),  TimeUnit.<b>MILLISECONDS</b>.toSeconds </pre>

			<pre> ds (millisUntilFinished) - TimeUnit.<b>MINUTES</b>.toSeconds (  TimeUnit.<b>MILLISECONDS</b>.toMinut es (millisUntilFinished))) ); } </pre>
--	--	--	---------------------------------------------------------------------------------------------------------------------------------------------------

### Automated Unit Testing.

Product	GuessIt Automated Unit Testing	
Date	03/02/2017	
Authors	Dennis Chia, Xiaotian Yu, Qian Zhang, Aili Yew, Yuzhu Yang	
Test #	Framework	Description
1	Espresso	Test that “Exit” button on game page works by checking if the button is enabled and player will be redirected to confirm exit page
2	Espresso	Test that “Exit” button on result page works by checking if the button is enabled and player will be redirected to confirm exit page
3	Espresso	Test that “Back” button on confirm exit page works by checking if the button is enabled and player will be redirected to main game page
4	Espresso	Test that “Yes” button on confirm exit page works by checking if the button is enabled and system will exit gracefully
5	Espresso	Test that user can set the time for either 1 minute, 2 minute or 3 minutes.
6	Espresso	Test that time is correctly displayed next to the progress bar.
7	Espresso	Test that when time goes up, it goes to the next page.

### Unit Testing

Product	GuessIt Unit Testing		
Date	03/02/2017		
Authors	Dennis Chia, Xiaotian Yu, Qian Zhang, Aili Yew, Yuzhu Yang		
Defect #	Description	Severity	How to correct it
1	When a player leaves a game, other players in the same game should receive a notification for player exiting. However, by now only the player who leaves the game will receive a notification	2	Create a leave game listener on server. Once there is a player leaving the game, it will send a message to server. Once leave game listener receives the message, it will broadcast all other players in the same game for player leaving
2	When a player directs to confirm exit page, countdown timer and progress bar should be frozen and resume if player changes mind and return back. However, by now, both progress bar and timer keep running when player is directed to other pages	1	Set time process to be local variable and be active only when player is on current page. Disable progress setting function when player is redirected to confirm exit page or other pages. This way assures that the timer will resume from breakpoint when player returns back