Team 15 Sprint 2 Design Inspection, Code Inspection and Unit Testing

Project Name: Crater Clash!

Team : Brendan Raftery, Benjamin Loisch, Mangkorn Yuan, Conner Isaacs, Nada Alnoory

Severity: 1 = Less Severe, 4 = More Severe

**Design Inspection**

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| Product | Crater Clash! | | |
| Date | 02/26/19 | | |
| Author | Scoreboard: Conner Isaacs, Nada Alnoory  Main menu: Mangkorn Yuan | | |
| Inspector | Nada Alnoory | | |
| Module Inspected | Combining scoreboard with the main menu | | |
| Defect # | Description | Severity | How Corrected |
| 1 | When joining scoreboard scene and main menu scene, we wanted to change the design of scoreboard to match the main menu design. However, the text size used in the main menu design was much larger than the one used in scoreboard scene. Therefore, after increasing the size of scoreboard, some of the highscores was not shown (lost) because they were outside of the panel. | 3 | This was fixed by decreasing the number of rows in each page in the scoreboard from 10 to 5 rows only. |
| 2 | Adding objects with the getScore.cs script to the scoreboard was changing their scales to strangely large scales. | 3 | By setting the boolean parameter “worldPositionStays” to false for the function SetParent |

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| Product | Crater Clash! | | |
| Date | 03/01/19 | | |
| Author | Ben Loisch | | |
| Inspector | Ben Loisch, Brendan Raftery, Nada Alnoory | | |
| Module Inspected | Gameplay | | |
| Defect # | Description | Severity | How Corrected |
| 1 | Originally was creating different tiers of units by changing the hue (using unitInstance.GetComponent<Renderer>().material.color = new Color(0.5f, 1.0f, 0.5) ) of the existing basic units and assigning different HP points and attack to those hue-colored units. Hue changes everything about the color without keeping certain colors the same. This ends up being an issue in the look of the entire unit. | 1 | Instead of changing color of the unit, we will introduce another 4 sprite sheets for the other two tiers of units. We added in more unit tier prefabs and animations for each tier. |
| 2 | When a unit is selected and then the end turn button is pressed without having that unit do anything, then during the other players turn, that player can move the selected unit around. | 3 | To fix, check selectedUnit and make null before ending turn, and also call eraseValidMoveTiles() to get rid of highlighted move tiles. |

**Code Inspection**

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| Product | Crater Clash! | | |
| Date | 02/26/19 | | |
| Author | Conner Isaacs, Nada Alnoory | | |
| Inspector | Nada Alnoory | | |
| Code Inspected | getScores.cs | | |
| Defect # | Description | Severity | How Corrected |
| 1 | offset (a variable used to keep track of the regular highscores list) was used as an index instead of (searchOffset) to print out the search highscores, which caused indexOutOfBoundary exception sometimes (when offset is greater than the size of the search array). | 4 | Changed the index of the search array to “searchOffset” instead of “offset”. |

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| Product | Crater Clash! | | |
| Date | 03/01/19 | | |
| Author | Conner Isaacs | | |
| Inspector | Conner Isaacs | | |
| Module Inspected | Score submitting | | |
| Defect # | Description | Severity | How Corrected |
| 1 | When submitting the score, an error code 400 kept being thrown | 4 | The API key being used was incorrect, and so we were not being given access to the database. After fixing the API Key, the connection worked. |
| 2 | When submitting the score, an error code 415 would be returned | 4 | When establishing the type of data we were sending, there is a string with “json” written in it. There was a typo in this string, resulting in the response being an unknown media query |

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| Product | Crater Clash! | | |
| Date | 03/01/19 | | |
| Author | Ben Loisch | | |
| Inspector | Ben Loisch | | |
| Module Inspected | Gameplay | | |
| Defect # | Description | Severity | How Corrected |
| 1 | When animating a unit (idle, movement, combat animations), animation prevents other actions from being completed (simultaneous animations or health bars to adjust). | 4 | Instead of animating inside the game loop, animate inside a coroutine (MovementCoroutine 1 and 2) on a seperate thread so other animations and actions can continue to execute. |

**Unit Testing**

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| Product | Crater Clash! | | |
| Date | 02/26/19 | | |
| Author | Conner Isaacs, Nada Alnoory | | |
| Inspector | Nada Alnoory | | |
| Unit | Highscores (search) | | |
| Defect # | Description | Severity | How Corrected |
| 1 | When trying to search in the highscores list, using the next and previous buttons doesn’t update the scores. After inspecting the code we figured that we’re using a wrong index (offset instead of searchOffset) to show the search results. | 3 | Changed the index of the search array to “searchOffset” instead of “offset”. |
| 2 | If the search result was a multiple of 5, clicking the next button will advance to an empty page at the end instead of the staying on the last page. | 1 | Changed the condition operation for updating searchOffset to !(searchOffset + 5 **>=** searchIndex) instead of !(searchOffset + 5 **>** searchIndex) |

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| Product | Crater Clash! | | |
| Date | 03/01/19 | | |
| Author | Ben Loisch | | |
| Inspector | Ben Loisch | | |
| Module Inspected | Gameplay | | |
| Defect # | Description | Severity | How Corrected |
| 1 | When selecting a B2 unit, the highlight of places that this unit can move to will still highlighted even after the player moves it and ends his/her turn. The highlight will only change if another unit was selected. This violates the “take turns” policy. | 2 | Make sure to call eraseValidMoveTiles() at end of each turn to erase old movement highlight tiles. |
| 2 | When a player ends his/her turn and the other player also ends his/her turn immediately, the texts “Player 1 turn” and “Player 2 turn” will overlap. | 1 | Add a check to see if text from previous turn is active and if so, call renderer.visible = false on it to turn it off to prevent overlap. |