Assessment 3 Report

Description of Game

The genre of this game is a trivial quiz type game, where the player is given an option of modes to play. These modes can either be a round of 5 where 3 Prime Ministers are randomly selected and then given to the player, for which they have to decide which prime minister served earliest. Once the player has chosen their option, the program will run a series of functions where it will output the correct answer and awards the player if they got it right. Otherwise the player gets no points and will progress to another set of the Prime Ministers for them to then choose who served earlier. After 5 rounds of this, the player is given their final score out of 5 and then offered to either try again or try the stretch game or quit the application.

In the stretch game, the player is given three Prime ministers again but this time a random date is given to the player to choose which Prime Minister served between those times. The player can choose between the three Prime Ministers which will then output a response, using a set of different functions that provides the answer to check whether their answer is correct. After this the player is then given the options to return to the main game or try again or quit the application.

Testing

I carried out a white-box and black-box testing for the games functionality. In my black-box testing I had set out tests whether any player can understand the controls and the input for the game. This would test for any unencountered inputs that the white-box testings would not have gotten as well as demonstrating that there are paths for failure and success in inputs. In my white-box testings I showed them the code for them to try and reach all areas of the code so that none of it was unreachable or had at least some error handling.

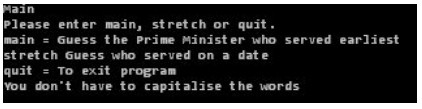
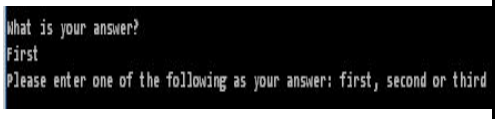
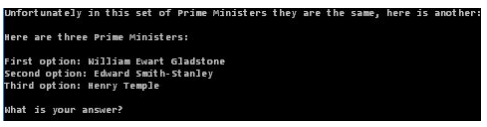
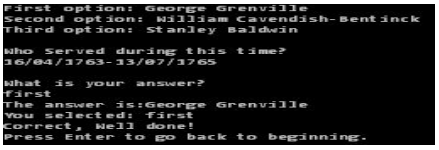
During my black-box testings, I had given the game to someone else to let them play around. This is done because in doing black-box testing, I would know if the game would be getting any bugs during debugging. In the test that follows, the player had noted that the fluidity of the game was good as there were not any points at which they had stumbled upon an error. They researched every boundary of the game in terms of inputs, at every stage of the game, as this will provide an array of results. Within the results, each conclusion of tests was met with a response from the console. In summary of my black-box tests, they were designed so that the player could meet the end of the program without it terminating, if the player could understand the correct inputs for the game and which were not.

During my white-box testings I had given the game and the code to someone who would inspect the code so, that the boundaries for input values could be reached as well as code that might not be reached in the black-box tests. This includes trying to get a set of Prime Ministers who were the same but served at different times. In turn the overall idea of the white-box tests were to make sure it meets the requirements of its design to output three Prime Ministers and then have the player choose who served first. They tested the success path where every correct and allowed input was inputted, to then met with the correct response and proceeded to the point where they explored the successful paths. Conversely, they then tested the failure paths which should led them to encounter errors and they only met messages from the console which had given an understandable response on how to fix the player's error or the game error.

White-box Test results

Test No.	Description	Condition	Expected Result	Actual Result
1	Getting 3 Prime Ministers without getting the same Prime Minister	Must have Prime Minister name appear twice in a round	Message appears telling the player and prints 3 new prime minister	As expected. (See Expected Result)
2	Accumulation of score	Completion of a round in the game	Score increments if correct if not correct doesn't increment then the score printed to the console	As expected. (See Expected Result)
3	No unreachable Code	None.	Game should be able to output everything within the section of code.	As expected. (See Expected Result)
4	Run without unexpected terminations	None.	Game should keep going till the player selects "quit"	As expected. (See Expected Result)
5	Dates corresponds to Prime Ministers	Stretch exercise must be selected and outputs need to be outputted	The Date given is the one assigned to the Prime Minister in the .csv file	As expected. (See Expected Result)

<u>Black-box Test Results</u>

Test No.	State of Game	Inputs	Outputs	Conclusion
1.	Menu phase	Main		Player thinks inputs need to be capitalised
2.	Main Game - Questioning phase	First		Player thought they needed to capitalise their answer but found they don't need to
3.	Main Game - Same Prime Minister	None		Player continues game having read the console.
4.	Stretch Game - Date output	first		Player gets answer correct and can proceed to other areas of game