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## <u>Prime Ministers Game – Report</u>

The version of the Prime Ministers Game that I created presents the user with a menu when it is opened. They can learn how to play the game, they can turn on or off the harder version or they can start playing. If they have it on the easy mode, it will present them with the names of three prime ministers and then will have to type the name of the prime minister that served first. It will then repeat five times and then it will give them their score along with either words of encouragement or a congratulatory message depending on their score. If they turn on the harder difficulty, it will present them with the same as in the easy mode, but every other question will present the player with a start date and then an end date, e.g.: "05/12/1905-03/04/1908" and they will then have to choose one of the options for who served in that time span. At the end of the game it will tell them their score out of the ten questions, with the same messages as earlier. When they have finished the game, the game will send them back to the main menu.

## **Black box testing:**

Test	Description	Expected Results	Actual
ID			Results
1	The menu works as intended.	By typing 1-3, the menu will go to the respective location.	Pass.
2	The menu does not allow for erroneous input.	Typing in A, 5 and % and it should not allow for that as input and go back to the menu as normal.	Pass.
3	When presented with the three prime ministers, typing a name that isn't in there will not be allowed.	With the names "William Ewart Gladstone", "David Cameron" and "Alec Douglas-Home", typing "a" will not be allowed.	Pass.
4	Same as above but in the second section.	Date: 28/11/1990-02/05/1997 - John Major - Herbert Asquith - William Pitt the Elder Typing "wrong answer &&" will not be allowed.	Pass.
5	Typing in the correct answer will be noticed in the first section.	Same as in 3, William Ewart Gladstone is correct answer, the program sees it as correct.	Pass.
6	Typing in the correct answer will be noticed in the second section.	Same is in 4, typing "John Major" (the correct answer), the program will see it as correct.	Pass.
7	Typing in the incorrect answer will be noticed in the first section.	Same as in 3, typing in "David Cameron", the program will see it as incorrect.	Pass.
8	Typing in the incorrect answer will be noticed in the second section.	Same as in 4, typing in "Herbert Asquith", the program will see it as incorrect.	Pass.
9	The final score is correct.	In the extended game, getting 5 right will be displayed as getting a score of 5/10.	Pass.
10	Able to exit the program without having to force the window to close.	Pressing 4 on the menu will close the game.	Pass.

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## White box testing:

Code Line	Description	Condition	Expected Results	Actual Results
55	Any prime minister in the text file where their end date says "incumbent".	if (ed == "Incumbent")	Make the program see their end date as being the same as today.	Pass.
105	If any of the three names in the first section are the same.	if (p0.Name == p1.Name etc.	Restart the game loop without incrementing so that the program get the three names again.	Pass.
116	If any of the six names from first section and second section are the same.	if (p0.Name == p3.Name    p1.Name == p3.Name   etc.	Restart the game loop without incrementing to get all six names again.	Pass.
141, 156, 172	If the name of the first Prime Minister is the chosen answer	<pre>if (game_answer == p0.Name. ToUpper())</pre>	Deal with their answer based on what they have typed in.	Pass.
144	If their answer is the correct and the prime minister they typed in was the one with the earliest start date.	if (p0.StartDate < p1.StartDate && etc.	The program will print out "Correct!" and the player's score will increment by 1.	Pass.
228	Switch that chooses randomly which order to put the answers in.	switch (rl) case 0:	Running with same names multiple times and they are outputting in a random order each time.	Pass.
270, 277	Checking if the answer is correct (the correct answer will always be "first name", in a different location).	<pre>if (answer == first_name)</pre>	The program prints "Correct!" and increments the player's score.	Pass
113, 125, 198, 295, 359, 391	This makes use of the menu and makes sure that the user is able to get to the extended part of the game only if turned it on in the menu.	if (player.DateOption)	For 391, Prints the score with "out of 10." To the end of it.	Pass.
354	Loop to make sure it keeps going back to the menu if they input something wrong.	while (true) {later "break;" is used to leave}	When inputting a non- number on the menu, the screen clears and the menu is printed again.	Pass.
433	If they have not got the prime ministers.csv file in with the program, then the program will tell them and close.	try { using (StreamReader reader = new StreamReader( @"PrimeMinister .csv"))	The program closes after telling the user "PrimeMinister.csv has not been found", "Please put the .csv file"	Pass.