Backgammon Game (Classic Backgammon(known as Erkek Tavlası in Turkish) Programming using Files.

You will create and maintain 2 files, one for Backgammon table (name must be Table.dat)(figure 2), the second table is for Dice history and play log (the example file is like in Figure 1)

6

4

X 2 3

Y 6 6

X 4 3

…..

Figure 1

The starting Table.dat is like below:

Player X's Side (Player X's play direction is clockwise)

	A	B	C	D	E	F	G	H	I	J	K	L	
	5Y				3X		5X					2Y	1
													2
					Broken Flake of X	Dice No1	Dice No2	Broken Flake of Y					3
													4
	5X				3Y		5Y					2X	5

Figure 2

Player Y's Side (Player Y's play direction is counter-clockwise)

E3 and F3 is the container of current dice throw

1)The starting state must be written into the file.

2) Throw of one dice each side to determine the first turn. (You may generate a random number independently for each dice between 1 and 6 integer only)(Dice no1 is for player X, Dice no2 is for player Y. The higher side will roll double dice to play first.

3)For example the player X won the dice roll and throw 3-1(Dice no1=3, Dice no2:1) only the player enters the source slot, player enters E1 and G1 so computer change the E1 to "2X", H1 to "X" (for dice 1)and computer changes the G1 to "4X" and H1 to "2X". ,(if the dices are rolled and a double dice came like 1-1, 2-2….6-6. This dice will be played as 4 times the single dice- 4-4 means 4 times 4)

So the new Table.dat will be like below:

 Player X's Side (Player X's play direction is clockwise)

	A	B	C	D	E	F	G	H	I	J	K	L	
1	5Y				2X		4X	2X				2Y	1
													2
				0	3	1	0						3
													4
	5X				3Y		5Y					2X	5

Figure 3

And the turn will be Y's and new dices roll.

If some player's flake is broken by the other player, the file slot E3 is for player X and H3 is for player Y. For example Player X has one broken and Y has 2 broken, E3 will be "X" and H3 will be "2Y"

4) The player who can pass all his/her flakes can start to pick the flakes up, whoever pick all flakes up win the game.(When picking up you don't need to store the picked-up flakes, only erase it from the related slot)

5) I3 will save who has the turn. (X or Y) Before each turn, turn holder can end the game for future play. Engage a keyboard shortcut to end the game for future play and your game will save automatically the status of the game for future play. Next time you will ask to user if he want to play the old game, if yes the game will load the old game and continue the playback.

Rules of Project Deliver:

1) Don't pass the deadline no matter what.
2) Send your project as rar or zip and rename the file as "Student Number-Surname Name.zip or ……rar". In the archive file (rar or zip) create a folder with the same name as the archive so when I decrunch your file I need to see the folder with the same name. Under this folder you must put your source code as text file, Dice roll log file (name as you wish but needs to be updated after each turn)Table.dat file viewable with normal text editors. So don't use any binary writing functions. (In each turn I want to see your Table.dat's status) You may use any other temporary files as you wish. You may use arrays before writing to the file but after each turn you must update the file. Failure to comply this rule will **severely** deduct your score .
3) Do the project yourself. I will check with eye and software between your projects and the examples from the net. You will get 0 if you don't follow this rule.
4) You may use whatever desktop based language you want(web based languages aren't accepted) only the files mentioned above can be observable and openable with a normal text editor.

Deadline: 31 May 2021 17:00 (Deadline will not be stretched no matter what excuse you have, so finish and send your project without waiting for the last minute)

Controls: 1 June 16:40   Group 1 (all groups will be announced later according who delivers before the deadline)

2 June 16:40   Group 2

3 June 16:40   Group 3

4 June 16:40   Group 4

If you have other courses in the same time as your group you need to inform me for a group change.

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