Unit 2 – Darts Assignment

Please complete all the pages on this form and upload it along with your .exe, code and report. This form **must** **not be zipped.**

Please 🗸 which tasks you have completed:

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| --- | --- |
| Task 1 | 🗸 |
| Task 2 |  |
| Task 3 |  |

Files for uploading – these must be checked off before uploading

|  |  |
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|  | 🗸 **to indicate these have been included** |
| Code – **must be compressed as a .zip** | 🗸 |
| .exe – **this must be included in the .zip** | 🗸 |
| Report - **.pdf must be uploaded separately from the .zip** | 🗸 |

Please answer the following questions

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| **Questions** |  |
| Does the code compile without syntax errors? If no explain what the problems are and how you’ve attempted to resolve it. | 🗸 |
| How many matches does your program simulate? | As many as the user wants |
| Who plays first? | Players throw for bullseye to see who goes first |
| What percentage accuracy have you assigned to the players? | The user decides |

# Task 1

Explain how your code calculates the frequency across all of your simulations. If no frequency is calculated explain how you have modified your code from the 301 exercise. Please include a screen shot of the output.

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| In the player class I created I made a integer array named winsArray with 7 rows, I also made an integer named totalFinals. Then I made functions to get and add to these private variables. In the final function after every championship I have 1 added to totalFinals using the function created, I also play the frequencyTable function created in the gameplay class. In the frequencyTable function I have a for loop that loops 7 times inside that loop I have an if statement, if (joes sets == 7 and sids sets == I) if that is activated add 1 to joes winsArray in row i. I then repeat that if statement but switch the players around. I then calculate the frequency by dividing the different rows of the players winsArray by the totalFinals variable and times it by 100/ Finally I print it all the data out |

# Task 2 – if attempted/completed

Explain how you have developed your solution beyond the basic algorithm in task 1. How does a player now decide on the best target to aim for? What challenges did this present? Please include a screen shot of the frequency output.

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# Task 3 – if attempted/completed

Explain how you developed the game beyond the basic interface in task 1. How do users choose what to aim for? How did you design and develop the interface? Please include some screen shots of the user interaction.

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# Code – for each class please copy this page and paste screenshots of the code in.

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| **Class Name: Player** |
| **.cpp** |
| **.h** |

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| **Class Name: Board** |
| **.cpp** |
| **.h** |

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| **Class Name: Gameplay** |
| **.cpp** |
| **.h** |
| **Class Name: 501 Darts Program** |
| **.cpp** |