

CS1428

Summer 2023

Assignment 3 Rubric

Student Name: [REDACTED]

Style: 20 points

Condition	Max Points	Points Awarded
All lines less than 80 characters.	4	[REDACTED]
Variables have meaningful names.	4	[REDACTED]
Every block indented one tab or 4 spaces.	4	[REDACTED]
File name is [Authors Last Name]_assignment3.cpp	4	[REDACTED]
Comments included for “complicated” actions.	2	[REDACTED]
Author, date, and collaborator comments included.	2	[REDACTED]

Code Refactor: 30 points

Condition	Max Points	Points Awarded
Design New Ship implemented as 1 function	6	[REDACTED]
Test a Ship Design implemented as 1 function	6	[REDACTED]
Simulate a Flight implemented as 1 function	6	[REDACTED]
Menu branches each call 1 function	6	[REDACTED]
Good comments for all function returns and parameters	6	[REDACTED]

Test Cases: 50 points

Programs that do not compile, will not be graded on the test cases.

Input	Test Condition (Not exact output)	Max Points	Points Awarded
D Walter Hohman Sally 500 5200	<u>Contents of Sally.txt</u> Ship Mass: 500.0kg Acceleration: 10.4m/s ² Impulse: 22.9Ns/kg Max Altitude: 469.0km Designed by: Walter Hohman	3	
D Jules Verne Valentina 340 679	<u>Contents of Valentina.txt</u> Ship Mass: 340.0kg Acceleration: 2.0m/s ² Impulse: 6.8Ns/kg Max Altitude: 145.6km Designed by: Jules Vernes	3	
D Isaac Asimov Kalpana 100 560	<u>Contents of Kalpana.txt</u> Ship Mass: 100.0kg Acceleration: 5.6m/s ² Impulse: 16.9Ns/kg Max Altitude: 347.7km Designed by: Isaac Asimov	3	
T Sally	Console prints, "Sally has failed test number 3"	5	
t Valentina	Console prints, "Valentina has failed test number 4"	5	
T Kalpana	Console prints, "Kalpana has passed all tests."	5	
j	Console prints error message.	2	
s 15 0	<u>Console Output</u> At 0 seconds: 0.0m/s 0.0m	10	
S 7.5 40	<u>Console Output</u> At 0 seconds: 0.0m/s 0.0m ... At 10 seconds: 75.0m/s 375.0m ... At 40 seconds: 300.0m/s 6.0km	10	
q	Program prints, "Thank you for using Craft Designer Plus." and exits.	4	

*values can be +- 0.1

All test cases will be entered in order on one run of the program.

Total Points: