

CPSC 233: Assignment 5

Functionality marks	Actual score	Max score
Displays required contact information as a 'banner'		1
Displays an introduction to the program that describes the rules.		2
Displays an appropriate status message when the program ends		3
Displays the appropriate menu for the SUV and sports car movement.		2
<ul style="list-style-type: none"> Gets user input for the SUV and sports car menu and repeats prompts until valid input is entered. 		2
<ul style="list-style-type: none"> Program runs until the user quits. 		2
<ul style="list-style-type: none"> Cheat menu can be invoked from either car menu. 		2
<ul style="list-style-type: none"> Gets user input for the cheat menu and repeats prompts until valid input entered (range check) 		2
<ul style="list-style-type: none"> Each track is properly initialized and displayed at the appropriate time. 		2
SUV can move and consume fuel as specified in the class description (non-AWD mode)		4
Sports car can move and consume fuel as specified in the class description		4
Program checks and properly handles when cars run out of fuel		4
SUV can move and consume fuel as specified in the class description (AWD mode)		4
Arctic track can randomly generate and properly handle the effects of a blizzard on the SUV (regular mode)		4
AWD mode working properly during a blizzard		4
Desert track can randomly generate and properly handle the effects of a heat wave on the sports car		4
Program can determine when one or both cars have reached the end		4
Subtotal functionality marks earned		50
Deduction: Static methods implemented – aside from main() (half functionality marks) ²		
Deduction: Only a single class is used to implement the solution (half functionality marks) ²		
Subtotal: Functionality marks		50

Style	Actual score	Max score
Good naming conventions for identifiers (variables, constants, methods)		2
Layout and appearance of source code		2
Layout and appearance of output		1
Deduction: variable class attributes not made private		-1 per attribute
Deduction: static variables employed (except for debugging flags)		-1 per variable
Subtotal: style marks		5

Documentation	Actual score	Max score
Contact information provided in banner documentation e.g., name, ID, course info, tutorial number etc.		1
List of program features completed		7
List of program limitations		1
Inline documentation: lists features implemented in each method		1
Subtotal: Documentation marks		10

Design	Actual score	Max score
The five required classes have been created. The methods and attributes are logical (3 marks each x 5 classes = 15 marks)		15
UML Diagram (2 marks per class diagram x 4 classes = 8 marks, 3 marks to illustrate the relationships = 11 marks)		11
Subtotal: Design marks		26

TOTAL SCORE		91
GRADE POINT		4.3

1 These penalties are cumulative so if an assignment written using a bunch of static methods and the inputs didn't come from file then the functionality marks would be quartered (rounded down).

Min raw score	91	89	85	80	75	70	65	60	50	40	30	0
GPA	4.3	4.0	3.7	3.3	3	2.7	2.3	2.0	1.7	1.3	1.0	0.0