

COMP612 Computer Graphics Programming

Assignment 1 – Fish Tank

Marking Sheet

Student Name	«First_Name» «Last_Name»	
ID	«ID»	

Part	Breakdown	Comments	Max.	Mark
1	Basic 2D Drawing:		1	
	-button area			
	-drawing area			
2	Sandy Bottom		2	
	-uses by-vertex colours			
	-vertices drawn in correct order			
3	Water		6	
	-animated			
	-smooth motion			
	-continuous animation (wave cycles			
	continuously)			
	-looks like a small wave or ripple on the			
	surface of the tank			
	-semi transparent			
	-code in a class with suitable functions			
4	Toggle Buttons		5	
	-has a Button class			
	-button labels (uses GLUT bitmap fonts)			
	-on/off states change appearance			
	-all buttons operational (2 marks)		_	
5	Pump		2	
	-has a Pump class			
	-vertices pre-compiled in a display list			
	-attributes pre-compiled in a display list			
	-draws using display list			



6	Bubbles	10	
	-initially positioned within pump		
	-random initial size		
	-semi-transparent		
	-generated over time		
	-recycling of memory, if bubble:		
	- is at water level		
	- becomes fully transparent		
	- radius becomes 0		
	-become smaller and more transparent		
	as they rise		
	-rise faster as they get smaller		
	-can be toggled via the pump button		
	-has a particle class		
	-has a particle system class		
7	Fish	4	
	-looks like fish or sea creature		
	-has moving parts (2 marks)		
	-code in a class with suitable functions		
8	Feature Extension 1	6	
	Feature Extension 2	6	
9	Logbook	8	
Total		50	