

**NANYANG
TECHNOLOGICAL
UNIVERSITY**

SINGAPORE

CZ2003 Computer Graphics and Visualisation

Experiment 5: Morphing

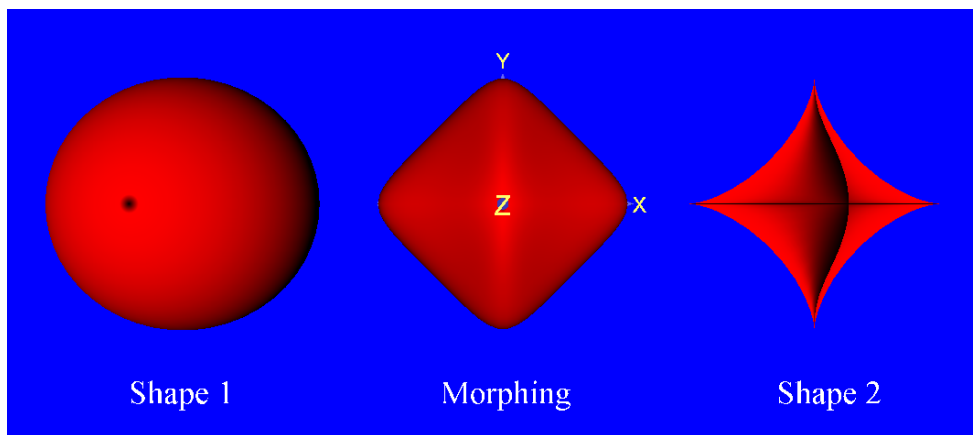
Name: Ngo Jun Hao Jason

Matriculation Number: XXXXXXXXXX

Lab Group: XXX

Surface numbers: 21 and 25

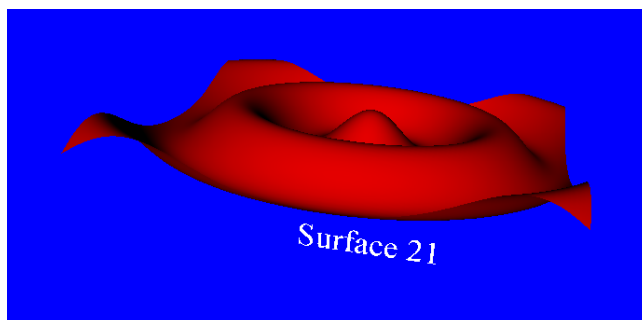
Exercise 1



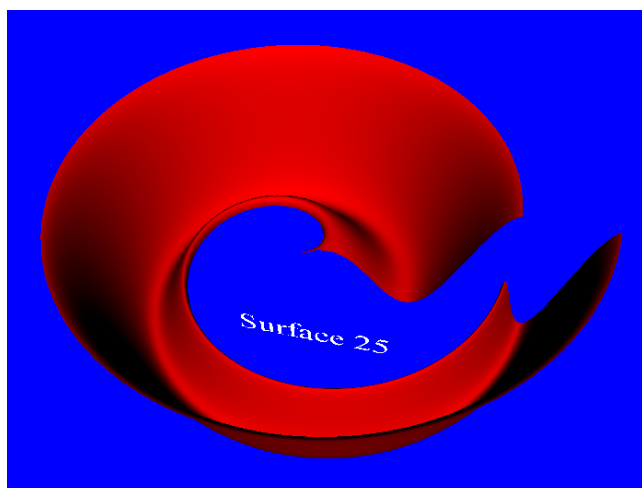
Exercise 2 and 3

- Formula_number_1 = 21
- Formula_number_2 = $21 + 4 = 25$

Exercise 4



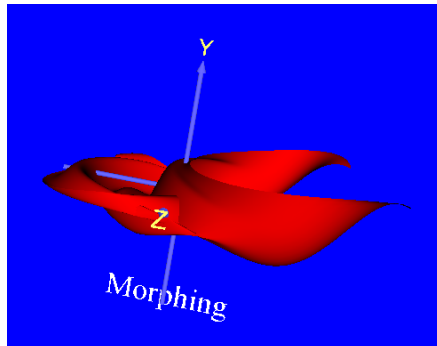
Exercise 5



Exercise 6

- surface 21: already parameterised (let $a = u$, $b = v$)
- surface 25:
 - o $x = 0.2 * \sqrt{16(\pi/2*u)^2 + 4(\pi*v)^2} * \cos(2\pi*v)$
 - o $y = 0.4(\pi/2*u) * \cos(4*\pi/2*u)$
 - o $z = -0.2 * \sqrt{16(\pi/2*u)^2 + 4(\pi*v)^2} * \sin(2\pi*v)$

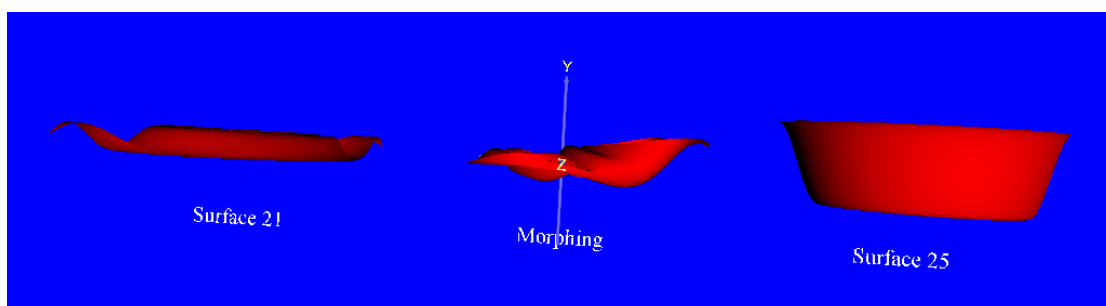
Exercise 7



Exercise 8

- resolution of surface 21: [100 100]
- resolution of morphing surface: [50 50]
 - o higher resolution results in a bit of jitter at the start
- resolution of surface 25: [100 100]

Exercise 9



Exercise 10

- refer to the folder "Created_Shapes"

Exercise 11

- refer to this report