

## Assignment 3

### 3D “Super Bug Zapper” – Sphere Generation and Rotation

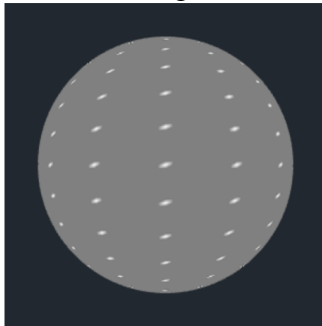
This is an individual assignment. This assignment is marked out of 10 points.

**Due Date: March 15 Friday, 2024, 11:59PM**

In Assignment 3 and the following Assignment 4, use WebGL and JavaScript (but not three.js), and the mathematics package that comes with the textbook, to develop a three-dimensional interactive game “Super Bug Zapper” with the following features:

[5 point]

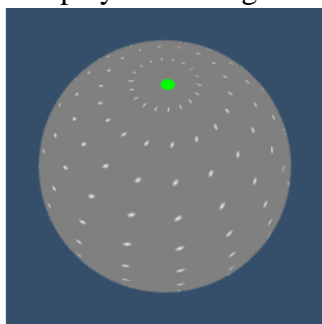
1. The playing field starts as surface of a sphere centered at the origin. You need to put some dots or grids on the surface to make it look like 3D (not a 2D circle).



(Please ignore the background color in the image)

[5 point]

2. The player can drag the sphere to rotate to look for bacteria (under interactive control).



(Please ignore the background color in the image)

### Submission:

Electronic submission of source code and documentation will be through Canvas:

1. Submit everything as one zip file to Canvas.

2. This .zip file should contain all your source files plus the files specified in 3 below and the files should be correctly placed so that the program runs from a browser.
3. Include in your submission one .doc (or .docx or .pdf) file for a gallery of screen captures (with at most a 3-line explanation of each image). The screen captures should be complete and illustrate all aspects of the assignment requirements sufficient for marking needs.