COSC3000 visualisation project plan:

Goal:

Develop the analysis of gravitation in solar system and relate that to general relativity and make complex visualization of that theory of gravitation.

Step 1:

Find dataset for this project.

The degree of curvature or warping of spacetime depends on the mass and energy of the object creating the gravitational field. In the case of the solar system, the Sun's mass is so large that it creates a strong gravitational field that affects the motions of all the planets orbiting around it.

Data types:

Planet’s mass (m), distance (r) that can form this formula = gravitational force between two objects.

|  |  |  |
| --- | --- | --- |
| Planet | Gravitational force from sun | Centre distance from sun |
| Earth |  |  |
| Venus |  |  |
| Mars |  |  |
| Jupiter |  |  |
| Moon |  |  |
| Mercury |  |  |
| Saturn |  |  |
| Uranus |  |  |
| Neptune |  |  |

NASA’s fact sheet:

Table

Description automatically generated with low confidence