

South East European University

Faculty of Contemporary Sciences and Technologies

# Computer Graphics Project Proposal:

# Title: Interactive 3D Solar System

Our project aims to develop an **Interactive 3D Solar System**, providing users with an engaging way to explore and learn about the planets and their orbital mechanics. The system will feature realistic 3D models of the sun, planets, and their moons, with accurate scaling and orbital paths. Users will have the ability to navigate the solar system using interactive controls such as zoom, rotation, and camera panning.

**What We Want to Achieve:**

* Create accurate and visually appealing 3D models of planets with appropriate lighting.
* Implement dynamic camera controls to allow users to explore the solar system freely.
* Add interactive features, such as displaying planetary information (e.g., size, distance from the sun, and orbital speed) when clicked or hovered over.
* Simulate planetary orbits in real time using mathematical models.

This project will help us enhance our skills in 3D rendering, animation, lighting, and user interactivity in computer graphics. It will also provide an excellent demonstration of computational methods used to simulate real-world physics in a visually engaging manner.

**Students: Date: 30.11.2024**

1. **Gzim Ismailji - 130166**
2. **Tringa Shatmani - 130164**