

South East European University

Faculty of Contemporary Sciences and Technologies

# Computer Graphics Project Proposal:

# Title: 3D Aquarium Simulation

This project aims to create an interactive 3D aquarium using JavaScript and Three.js. The simulation will feature a virtual underwater world with realistic fish, corals, and an aquarium structure. Users will be able to zoom in, out, and explore the environment using dynamic camera controls.

**Technology:**

* **JavaScript** and **Three.js** for 3D rendering
* **GLTFLoader** for importing fish and coral models

**Key Features:**

* Interactive camera movement
* Realistic fish swimming and coral models
* Sun rays filtering through the water
* Glassy aquarium walls with a dynamic background

**Timeline:**

* **Week 1:** Gather models and set up the 3D scene
* **Week 2:** Implement camera controls and fish animation
* **Week 3:** Add corals, lighting effects, and sun rays
* **Week 4:** Final testing and optimization

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**Students: Date: 30.11.2024**

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