

Tecnologias e Sistemas de Informação para a Web

COMPUTAÇÃO GRÁFICA – 2021/2022 – Project 02

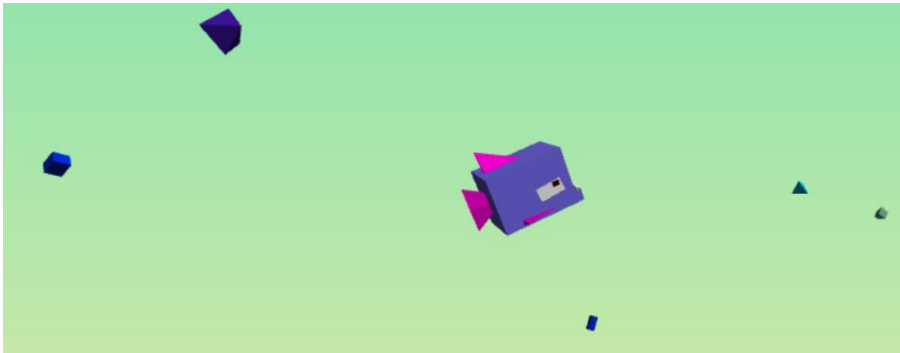
Goals

The main goal of second project of Computer Graphics is to develop a 3D web animation using the Three.js library.

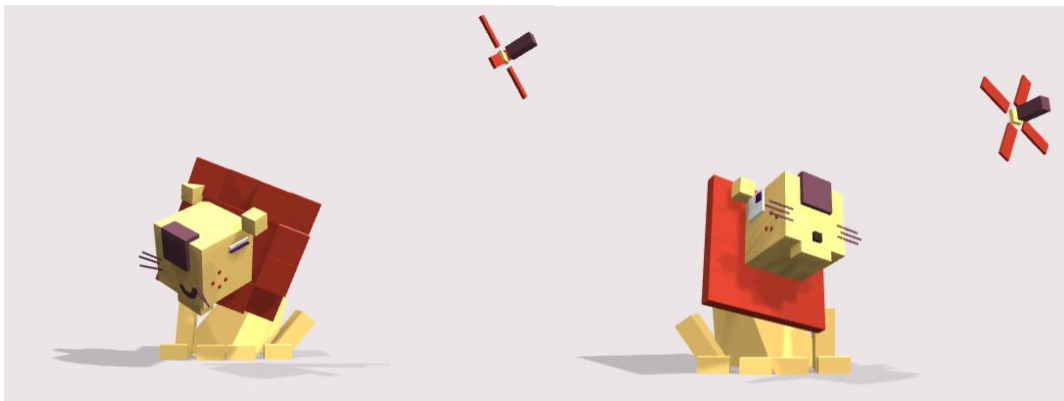
The group is free to choose a theme. The animation must have at least one 3D articulated object (one per group element). Each student is responsible to design, develop and animate one of the articulated objects. At least one interaction between user/object and one interaction between objects present in the web application 3D scene must be implemented by each student.

Below are some examples of articulated objects:

[Mighty Fish](#)



[Chill the Lion](#)



[The](#)

[Aviator](#)



[Car from Bruno Simon](#)



[Walter White](#)



[3D](#) [Chrome](#) [T-Rex](#) [Runner](#)



Considerations:

- Each 3D articulated object must be created by only one student;
- Each student must develop at least one interaction between its object and the user and between its object and some other object present in the scene;
- The group can import other 3D models, just to add visual interest to the application;
- Imported 3D models are not considered as an object created by the student.

Advices:

- Design low-poly objects, like the ones in provided examples;
- Check Three.js library reference for its [built-in 3D geometries](#).

Implementation

Students should implement the project **in groups of a maximum of 3 elements**. Groups can differ from the 1st Project. If any there is a **change in the group composition**, identify it in the Wiki available in Moodle until the **21th of December**.

Students should concentrate on three components: **visualization, interaction and animation**.

The use of frameworks or other graphic libraries must be previously agreed with the professor. The use of external resources should be used as a source of inspiration or help in solving small algorithmic issues. All assets/code not developed by the students must be properly referenced. The work will be **disqualified** if plagiarism is detected and may trigger a **disciplinary process**.

Evaluation

The final evaluation of the project is based on the deliverance and overall quality of web game. The following penalties will be applied if some of these deadlines are not fulfilled:

- **1st delivery** – description of the theme, including the articulated object that each group element will develop and animate: **-1 value**;
- **In-class follow-up** – presence during the classes dedicated to project follow-up: **-3 values**;
- **Final delivery** - .zip file with the project code: **-10 values**;

Deadlines

1st delivery: **21st December**

Final delivery: **20th January**

Defense: **21st January**

- Mandatory presence of all group members
- Absent students will not be evaluated