

ECOSYSTEMS 3D

USER GUIDE

06-01-2020

Document Revisions

| Date | Version Number | Document Changes |
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| 01/06/2020 | 0.1.1 | Initial Draft |
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1 Introduction

This document is intended to be a way to teach and explain the correct usage of Ecosystems 3D, going through every screen and option available, and showing the information that belongs to that specific part, also, explaining how to control the scenes that the product has, and be capable of enjoying all the features it has.

Ecosystems 3D is an interactive, educational web application that allows students to explore four different ecosystems of the world without leaving their homes. The software provides a simple yet powerful way of navigating through different ecosystems and exploring each one of them, this includes being able to visualize and interact with their flora and fauna.

2 Interface Description

The application has two main components that the user can interact with

2.1 3D Canvas

- Renders an interactive 3d model of a globe which serves as a menu for the different ecosystems
- Renders each individual ecosystem with the corresponding scenery such as: backgrounds, floor and ceiling textures, 3d models for the organisms in the ecosystem
- Enables the user to interact with the scene loaded, for the main menu enables selection for the ecosystem to load, for the ecosystem it lets the user move around the scene to explore and get better view of the organisms
- The canvas has a button to enable or disable background sound, and another one to reset the camera to the original position

2.2 Information panel

- Provides information to the user such as: ecosystem information (name, description), organism information (picture, name, scientific name, description)
- The information panel has a button to return from one ecosystem to the main menu from the application

3 Usage Guide

1. Load application

Run a web browser compatible with OpenGL and access the provided url for the application

2. Ecosystem navigation

2.1. Select an ecosystem

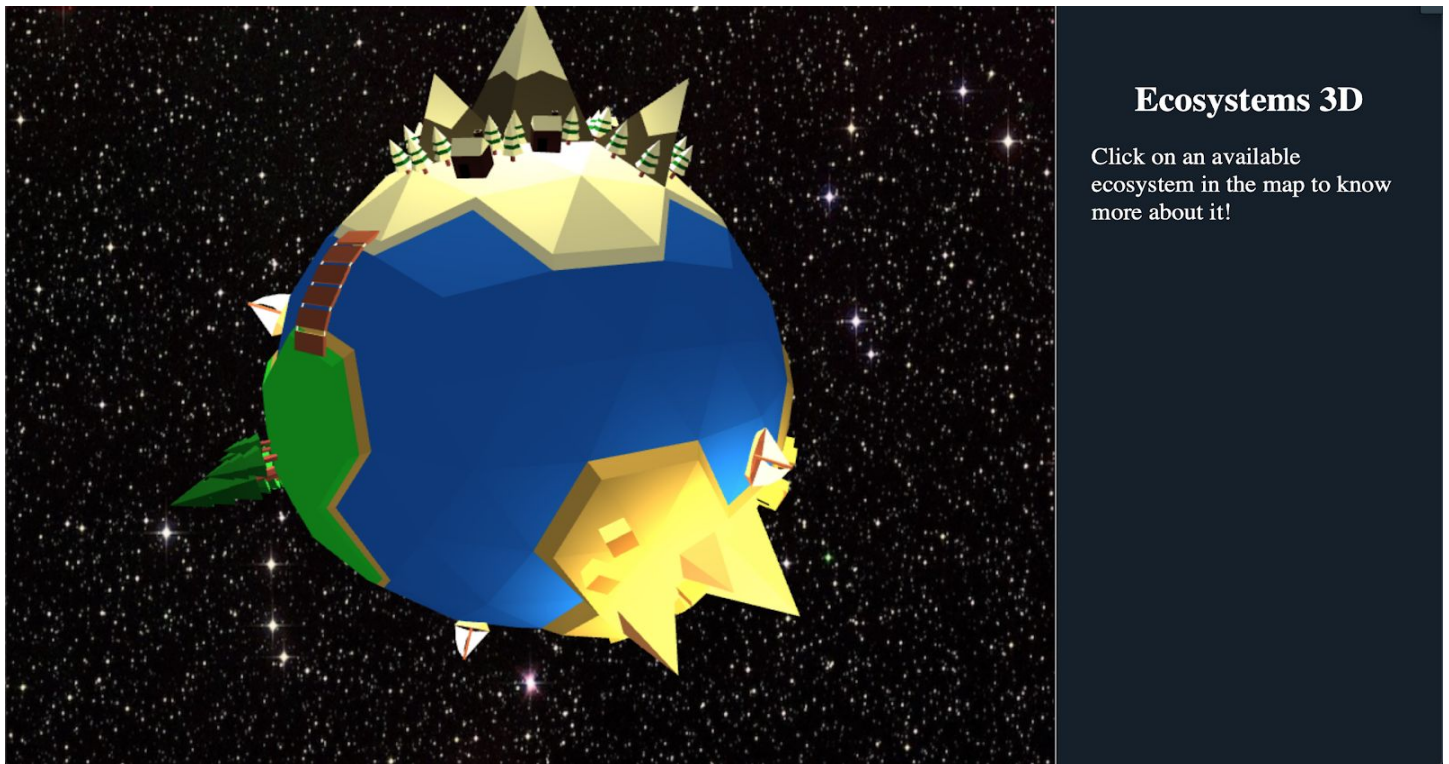


Image 1 - First screen of the app

This is the first screen the user sees, there is no need to login, the 3d globe serves as a menu to select one of the ecosystems available, the user can move around the globe by dragging it with a left click. The user can click on a highlighted area of the globe to load the corresponding ecosystem. Currently, the product has only 4 ecosystems available.



Image 2 - Desert ecosystem



Image 3 - Tundra/Polar ecosystem

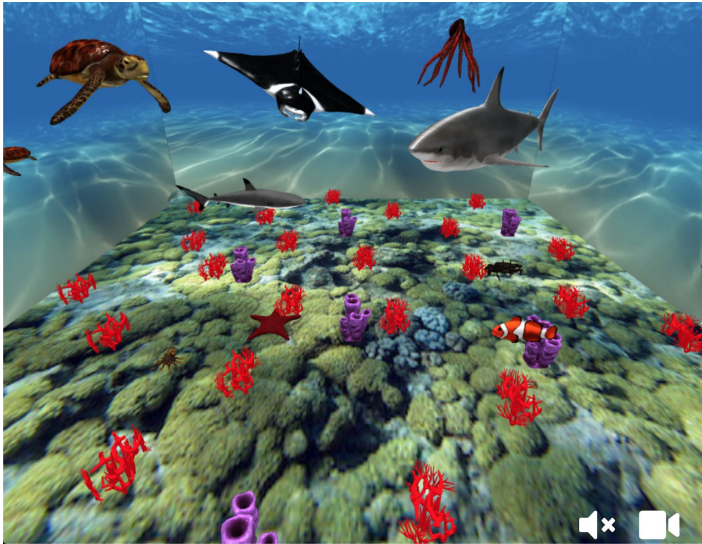


Image 4 - Ocean ecosystem



Image 5 - Jungle ecosystem

Once the ecosystem is selected the user can see information about in in the *Information panel*

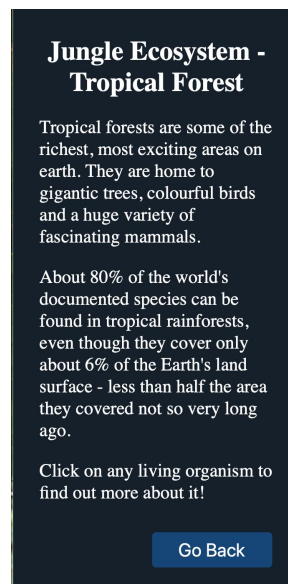


Image 6 - Information panel (Jungle ecosystem panel)

2.2. Ecosystem settings

While the ecosystem is being shown the user can toggle the background audio from the own ecosystem by clicking the audio icon, and reset the camera position and orientation to the original one by clicking on the camera icon [Image 7]

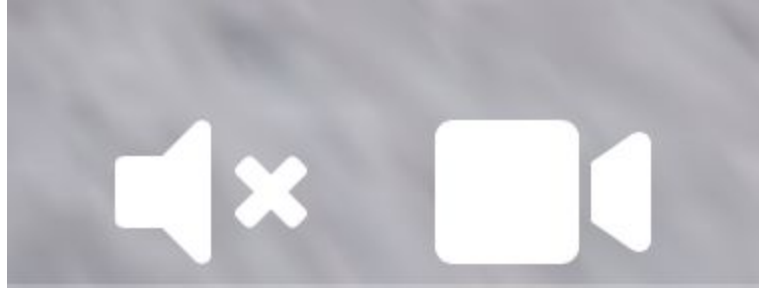


Image 7 - Sound icon (left) - Camera icon (right)

2.3. Return to main menu

The user can go back to the main menu [Image 1] by clicking the blue button 'Go Back' on the Information panel [Image 6]

3. Interaction with the ecosystem

- The user can move around the ecosystem by holding **right click**
- The user can orbit around the ecosystem by holding **left click**
- By **clicking** on an organism the user can get a better view of it (the camera will move to towards the organism and point directly to it)[Image 8 - Canvas], also the *Information panel*[Image 8 - Information panel] will show information for the selected organism such as: name, scientific name, image, and a short description

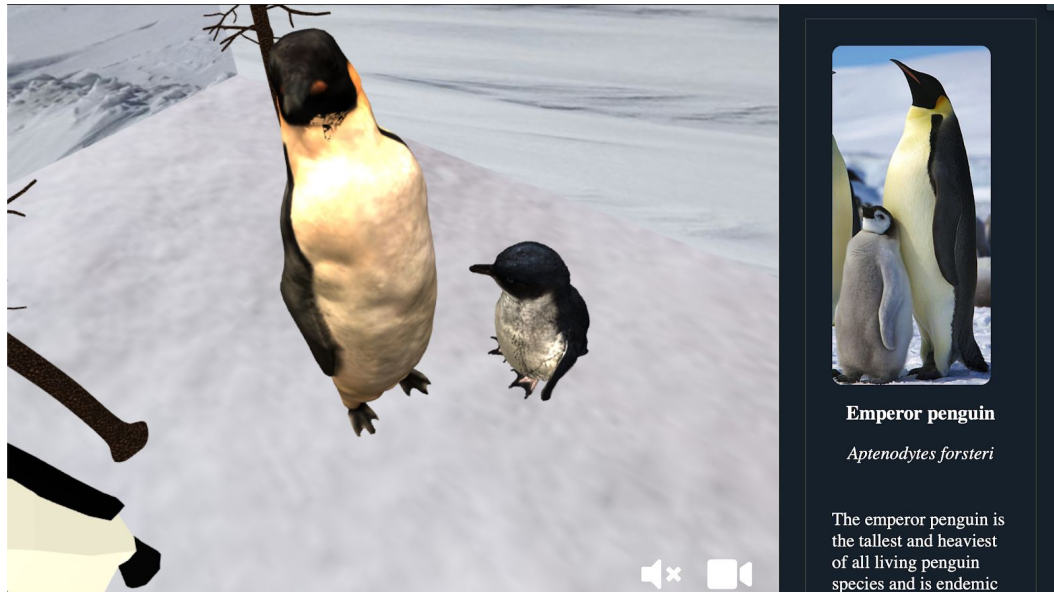


Image 8 - Organism focus and display of its information in the right panel