

**Unit I: Introduction: Installation and Alice Navigation**

# Chapter 1: Introduction to Alice 3



In this chapter, you will download and install the latest version of Alice and learn how to run the program. You will become familiar with the Alice user interface and learn how to navigate its major tools and features. You will also explore some of the 3D models available in Alice and begin learning how these objects can be used to create interactive scenes and animations.

## Objectives

- Download and install Alice (or find a computer lab with Alice);
- Select a template, such as grass, moon, sea floor, etc.;
- Toggle between the scene editor and the code view windows;
- In the code view window, locate each of the panels;
- Name 3 classes in the Alice gallery;
- Be able to search for an object in the gallery.

Alice 3 is the latest IDE (integrated development environment) for the Alice programming language. It has all of the features that have made Alice an exciting and creative first programming experience with an added emphasis on object-oriented concepts. Alice 3 has a new rich gallery of models that includes everything you need to spark your creativity including a full The Sims™ character builder. The new gallery is built upon a class joint structure allowing you to share animations between different characters of the same type.

1. Download and install Alice 3.9 or later from <http://www.alice.org>
2. Do **NOT** download Alice 2.x

Follow the installation procedures. These are different for different operating systems and are not covered here.

## Mac

This link explains how to download Alice for Mac. You need to disable something first in order to download it. <https://www.youtube.com/watch?v=hKKQPJHl1Gw>

Please see this also: [Installation on MacOS10](#)

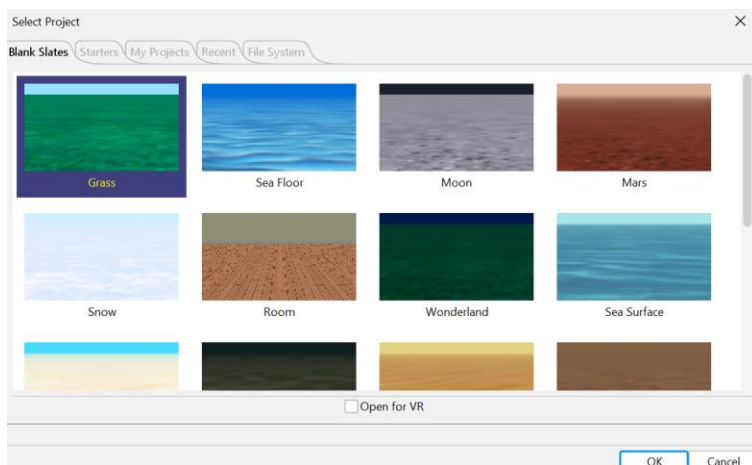
**Check point:** If you have downloaded and installed Alice3 and are able to run it you have successfully completed your first objective!

*If not, review the videos and instructions. Did you miss a step? Is there someone you can ask for help? Is Alice3 installed somewhere else that you can use?*

**You need a running version of Alice3 to continue these lessons.**

## Starting Background

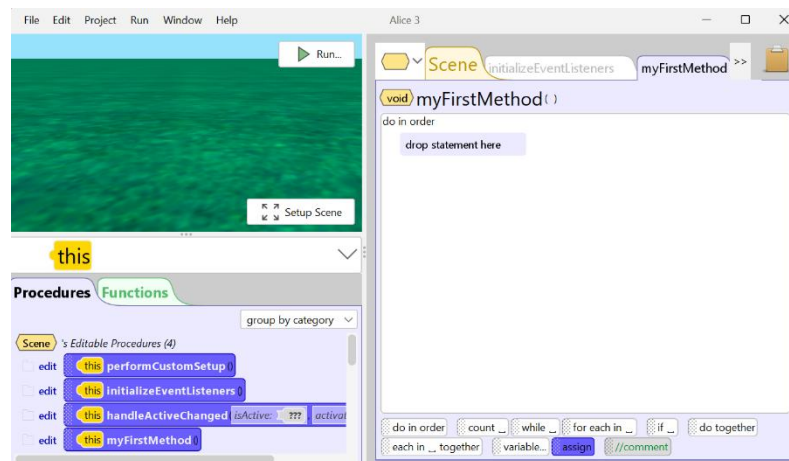
When you start Alice, you will select a starting background. To start, select a blank slate such as grass. You will learn about the other tabs later.

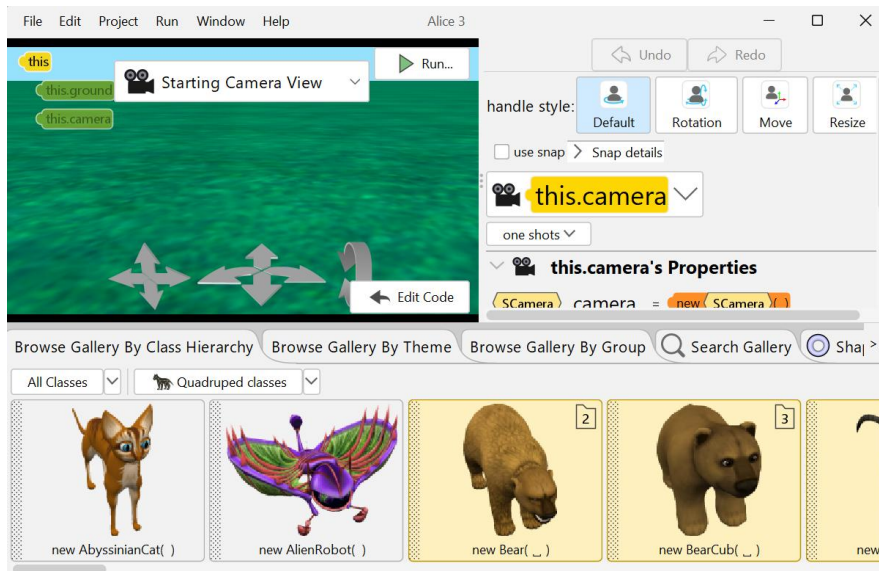


## Code View

After you select the background, you will see a window like this: This window is the Code View. In the code view, you can add code to control what the movie **does**.

**Click the Setup Scene button.**





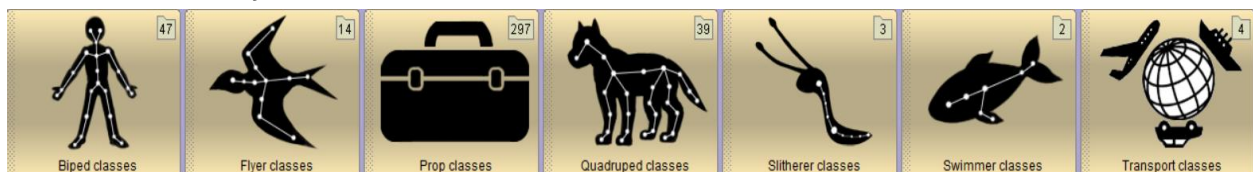
## Scene View

After clicking the Setup Scene button, you will see a window like this: this is the code view window. In the code view window, you can add some characters and change the camera position and make other changes to how your movie **looks**.

You can click the **Edit Code** button to go back to code view. You will often toggle back and forth between Code view and Scene setup. In code view you control what the program **does**. In Scene view you control how the program **looks**.

## Gallery

In Alice, the gallery shows some of the main classes that you can select from: Biped (walk on 2 legs), Flyer (have wings), Prop (inanimate objects such as trees and buildings), Quadruped (walk on 4 legs), Swimmer (lives in water), and Transport (airplanes, cars, boats, etc.) When you select a class and add it to the scene, you have created an object. In other words an object is an instance of a class.

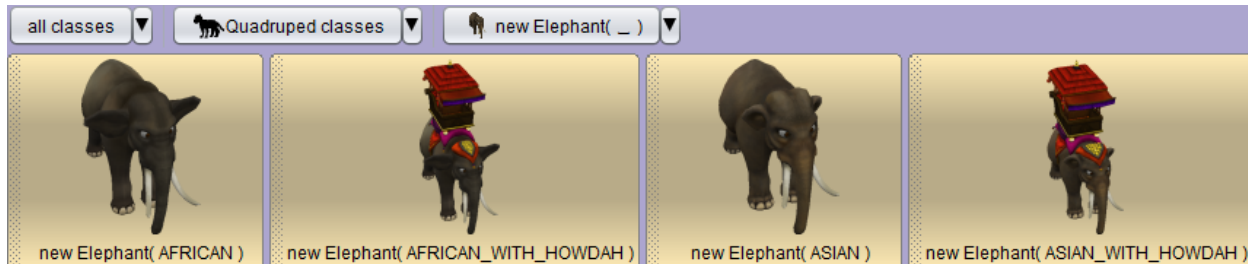


After selecting one of the main classes you will see pictures of the 3D models in that class. Here are some of the Quadruped class models. Notice that the Dragon, DragonBaby, and Elephant have a number in the top right corner. These numbers tell you how many more

choices you have.



If you click on the Elephant you will see the four models:



## Classes

These 3D models are **classes**. When you select one of these classes and place it in the scene you create an **instance** of that class. You can create many instances of a class. For example, you might want a whole parade of Elephants.

Every class has a way of creating or constructing a new instance of the class. It also has properties and actions that all instances of the class have.

Classes are arranged in a hierarchy: An African Elephant is an Elephant. An Elephant is a Quadruped. A Quadruped is a **class**. All Elephants have a trunk, but not all quadrupeds.

In everyday terms, a blueprint of a house has properties such as number of rooms, size of the kitchen and whether there is a fireplace. You can't walk into a blueprint and sit down. It is just a model. If a builder follows the blueprint, he can construct an **instance** of the house. The same blueprint could be used to construct many houses. Each homeowner could change some of the **properties** such as the color, or trim on the house.

## Crashing

Alice tends to crash, and this can be quite frustrating. The following will help to minimize this:

- Save often! You can quickly save using CTRL+S (Windows) or Command+S (Mac.) You can also **save as** and give a version number by appending 1, 2, 3, etc. to the

name. This will give you the last version if Alice crashes and you can't reopen the program.

- Crashing could be because there is not enough memory. Try closing other applications to save memory.
- If there are a lot of objects in the scene, try minimizing the scenery. Use just 3 trees to represent a forest instead of many, for instance.
- If the problem persists, try rebooting the computer.

## Experiment

You cannot learn to program by reading or watching a video. You need to open Alice, follow the instructions in the lesson videos, then try to create the example on your own. Next, use what you have learned to create different programs using what you have learned.