

Teacher Instructions

1. Preliminary Steps (do these before class)

Download Ren'Py onto a Windows computer: <http://games.renpy.org/>

Install Ren'Py by following the instructions at <http://www.renpy.org/doc/html/quickstart.html>

Download Paint.NET onto a Windows computer: <http://www.getpaint.net/>

Website for creating characters: <http://avachara.com/avatar/>

Watch the following videos to familiarize yourself with Ren'Py:

1. Basics, <http://youtu.be/h58CKf57YDk>
2. If Statements/Points, <http://youtu.be/3K3UA6U4PGI>
3. Customizable Names, <http://youtu.be/4CCc9K-Ptuo>

Copy the 'cs616' folder into the Ren'Py directory. You should see the project listed in the available projects to run in Ren'Py application. You can also click "Add New Project" in Ren'Py and click the cs616 folder.

2. Introduction

Explain briefly what computer programming is. If you are unfamiliar with programming, read the section "What is a computer program?" in the student handout to get familiar with the basics.

Display example Ren'Py game with projector. Play it to show the students what they can do with programming and Ren'Py.

Have the students complete exercise 2.1 (create an empty project in Ren'Py by running Ren'Py and clicking the "+ Create New Project" button).

3. Teach students variables, control structures, comments, and getting user input

Explain briefly what variables are. If you are unfamiliar with variables, read the section under the "Basic Programming Concepts" section titled "Variables" in the student handout. The students should follow along by reading the student handout section titled "Variables" in the

“Basic Programming Concepts” section. Have students complete exercise 3.1 (creating variables in Ren’Py).

Next, teach students the basics of control structures. If you are unfamiliar with control structures, read the section under the “Basic Programming Concepts” section titled “Control Structures” in the student handout. Students can follow along in the student handout titled “Control Structures”. Have students complete exercise 3.2 (practice with an if/else statement).

Then, show students the basics of using comments. If you are unfamiliar with how to use comments, see the section titled “Comments” in the student handout (which the students should read, too). Have the students practice making comments by having them do exercise 3.3 (where the students create comments in their Ren’Py project).

Finally, go over how to get user input. You can refer to the student handout section titled “Getting User Input” if you are unfamiliar with it. The students should follow along in the student handout, too. Have the students practice getting input from the user by doing exercise 3.4 (which has the students get user input in their Ren’Py program).

4. Check that students were able to meet learning outcome

Review the students Ren’Py projects and see if they were able to learn the concepts taught. The completeness of the projects (all these exercises were done and working correctly) will show if the students learned the concepts presented.