We recently developed a website for first-time programmers to learn Python in an easy and fun manner. What makes our website novel is the user experience: rather than a page of instructions and a separate programming environment, each webpage contains instructions intermingled with bite-sized exercises in a variety of flavors. This removes the hassle of installing an IDE at home or school. At the same time, the student really is programming: we use an auto-judge server to execute their code snippets on test cases, giving immediate feedback in the same browser window.

Since the goal is to make this a fun and interesting experience, we have used a variety of question types. For example in a Code Scramble problem, the program is already complete but its lines are in the wrong order, and the student must drag-and-drop the lines into the correct order before auto-judging.

This website, Computer Science Circles, is hosted by the Centre for Education in Math and Computer Science at the University of Waterloo. Currently there are 25 topics beginning with “Hello world,” moving on through math and strings, up to recursion and an introduction to algorithmic efficiency. URL: http://cemclinux1.math.uwaterloo.ca/~cscircles (Received September 22, 2011)