WeBWorK
- for programming fundamentals -

What is WeBWorK anyway?
WeBWorK is an open-source, web-based homework system, which was developed at the University of Rochester in 1994. It is designed to provide an online homework environment for instructors and students.

Why is it so special?
WeBWorK allows instructors to create, assign, and automatically grade homework problems. It is designed to be flexible and customizable, allowing instructors to create problems that are tailored to their specific needs.

How is it used?
Instructors can create problems and assign them to students. Students can then access these problems online and submit their solutions. The system automatically grades the solutions and provides feedback to the students.

What programming languages are WeBWorK problems written in?
WeBWorK problems are written in the open-source language called Problem Language (PL). PL is a subset of Perl and supports many features including LaTeX, PHP, and SQL.

Pencil and Paper vs. The computer and WeBWorK

Professor's Perspective
"I can get my students' grades right away!"
"I can choose from different question formats."
"I can figure out which problems my students are struggling with!"
"Once I know the system, I can use it for any of my different courses."

Student's Perspective
"I don't have to wait until I see my professor to get my grade!"
"If my professor allows multiple attempts, I can keep working on a problem and get helpful feedback."
"I work my way through a problem while grasping related concepts."

WeBWorK is interfaced with JUnit to evaluate Java code fragments.

Computer Programming
WeBWorK has been used so far for courses teaching Python, Java, and SML.