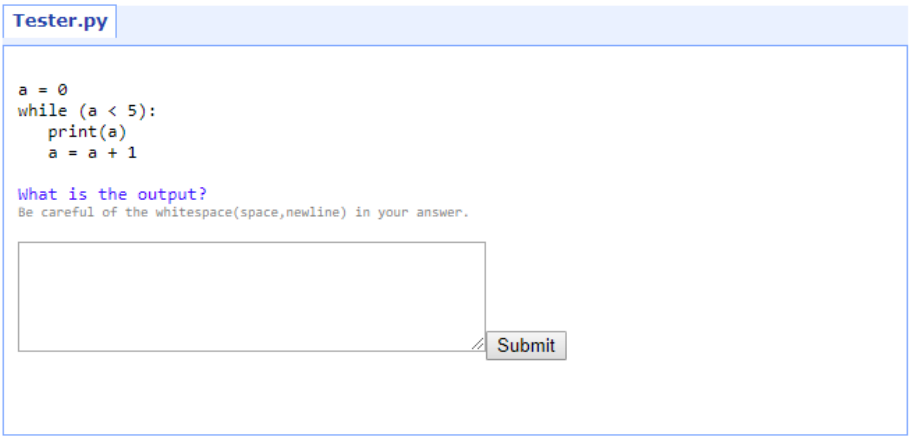
QuizPET (Parameterized Problems)

QuizPET (Quizzes for Python Educational Testing) is a system that serves parameterized problems for self-assessment of student knowledge of programming semantics (i.e., knowledge about how various programming constructs are executed). It randomly generates a question parameter, creates a presentation of the parameterized question in a Web-based quiz, compares student's input to the correct answer - which runs the parameterized code "behind the stage", and records the results into a server-side database. There are several assessment types deployed in QuizPET, including examining the final value of the variable and the printouts etc. The quizzes and questions can be authored through the unified Example Authoring interface, which is also used in other projects within our research group.

Available Domains

QuizPET smart content is available in Python.
For Java, see QuizJET.

QuizPET Interface



Publications

Hsiao, I-H., Brusilovsky, P. & Sosnovsky, S. (2008). **Web-based Parameterized Questions for Object-Oriented Programming**. Proceedings of World Conference on E-Learning, E-Learn 2008,Las Vegas, USA, November 17-21, 2008, p. 3728-3735.

Hsiao, I-H., Sosnovsky,S. and Brusilovsky, P. (2009). **Extending Parameterized Problem-Tracing Questions for Java with Personalized Guidance**. Proceedings of 14th Annual Conference on Innovation and Technology in Computer Science Education, ITiCSE'2009, Paris, France, July 3-8, 2009, ACM Press, pp.392-392 DOI

Hsiao, I-H., Sosnovsky, S. and Brusilovsky, P.(2009). **Adaptive Navigation Support for Parameterized Questions in Object-Oriented Programming**. In: Proceedings of 4th European Conference on Technology Enhanced Education (ECTEL), ECTEL 2009, Nice, France, September 29th - October 2nd, 2009, Springer-Verlag, pp.88-98 DOI

Hsiao, I-H., Sosnovsky, S. and Brusilovsky, P. (2010) **Guiding Students to the Right Questions: Adaptive Navigation Support in an E-learning System for Java Programming**, Journal of Computer Assisted Learning, Volume 26 Issue 4, Pages 270 - 283 DOI