Special Session Proposal
The ACM Java Task Force: Status Report

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SUMMARY

SIGCSE 2004 marked the official announcement of the ACM Java Task Force, which is working to develop a stable collection of pedagogical resources that will make it easier to teach Java to first-year computing students. The Java Task Force has received funding from the ACM Education Board, the SIGCSE Special Projects Fund, and the National Science Foundation (NSF Award DUE-0411905). This session offers an update on the work of the Java Task Force over the past year and provides an opportunity for community feedback prior to the publication of the final report in June 2005.

Categories and Subject Descriptors

K.3.2 [**Computer and Information Science Education**]: computer science education, curriculum.

General Terms

design

Keywords

Computer science education, CS1, teaching libraries, Java.

1. SPECIAL SESSION DESCRIPTION

Since its introduction in 1995, the use of Java as an instructional language has shown a steady increase. At the same time, those who have tried to teach Java have identified a number of problems in the language in terms of its suitability for students, particularly at the introductory level [1]. Concern about these problems prompted the ACM Education Board to create the ACM Java Task Force with the following charter:

> To review the Java language, APIs, and tools from the perspective of introductory computing education and to develop a stable collection of pedagogical resources that will make it easier to teach Java to first-year computing students without having those students overwhelmed by its complexity.

The Java Task Force was announced at SIGCSE 2004 and has been meeting throughout the past year. A paper outlining the rationale behind the task force [2] and a summary of the goals and timetable [3] appeared in the SIGCSE 2004 proceedings.

At this year's special session, we will give a brief presentation covering of the highlights of the preliminary Java Task Force report. The presentation will be followed by an extensive feedback session in which we will listen to comments from the SIGCSE community. The preliminary report will be out at the end of December 2004, which means that the audience at the special session will have had two months to read and reflect on the proposed design. The feedback that we get at the meeting will provide useful guidance for the task force as we prepare to publish our final report in June 2005.

The Java Task Force reports and associated materials are available from the following URL:

http://www.acm.org/education/jtf/

2. EXPECTATIONS

The intended audience for the special session consists of computer science teachers who use—or are planning to use—Java in first-year computer science courses. Although most SIGCSE attendees teach at colleges and universities, we believe that this special session will have particular relevance to high-school teachers.

The feedback that we get at SIGCSE is essential to producing a report that has the support of the community. In part, we expect the comments, questions, and concerns that come up at the

meeting will help us refine our proposals so that they better serve the needs of people who are, if you will, in the trenches teaching Java to novices. At the same time, having an open process and providing opportunities for feedback are essential to developing the community support that is essential to the success of the project.

REFERENCES

1. ACM Java Task Force. Taxonomy of problems in teaching Java, February 2004.

2. Eric Roberts. The dream of a common language: The search for simplicity and stability in computer science education. Proceedings of the 35th SIGCSE Technical Symposium on Computer Science Education, Norfolk, VA, March 2004.

3. Eric Roberts. Resources to support the use of Java in introductory computer science. Proceedings of the 35th SIGCSE Technical Symposium on Computer Science Education, Norfolk, VA, March 2004.