Tutorial: Introduction to the Team Software Process

1. Description

   The half-day tutorial provides an overview of the Introductory Team Software Process (TSPi). The TSPi was developed by Watts Humphrey at the Software Engineering Institute (SEI), and is based upon the Personal Software Process (SM) (PSP)(SM) [1] and the Team Software Process (SM) (TSP)(SM) [2]. The TSPi guides students through the steps of a team software project course. The pre-defined TSPi process enables students to begin working effectively as part of a team. Using an incremental development model, it provides detailed direction about team formation, team roles and tasks, and explicit process guidance and support for planning, requirements specification, design specification, implementation and testing. The TSPi provides a wealth of data and metrics that can be used for an in-depth quality analysis of the both product and the process, which in turn forms the basis for taking action to improve the effectiveness of the team.

   The TSPi tutorial concentrates upon planning, organization, and execution of a TSPi course. It examines the objectives of the TSPi and then introduces the TSPi process, student roles in the process, and the forms and scripts required for it. The presenters also share their experience in teaching the TSP, and discuss lessons learned and ideas and suggestions for course implementation.

2. Presenters

   Bob Cannon is a Professor of Computer Science at the University of South Carolina. As a Visiting Scientist at the SEI, Bob worked in technology transfer for PSP and TSP and also in PSP course development. He has taught PSP courses for the SEI, the South Carolina Research Authority, and at USC.

   Tom Hilburn is a Professor of Computer Science at Embry-Riddle Aeronautical University. Tom has been active in efforts to integrate software engineering, the PSP, and the TSP into academic computing programs. For the past year and a half Tom has been teaching the TSPi in a software project course at Embry-Riddle.

   Jorge Diaz-Herrera is Professor and Department Head of Computer Science at Southern Polytechnic State University. He spent four and half years as a senior member of the technical staff at the SEI. He has used the TSPi in teaching taught senior software engineering project class.

3. References


(SM) Personal Software Process, PSP, Team Software Process, and TSP are service marks of Carnegie Mellon University.