ABSTRACT

Education has a key role to play for disseminating the constantly growing body of Software Product Line (SPL) knowledge. Teaching SPLs is challenging; it is unclear, for example, how SPLs can be taught and what is the material available. This workshop aims to explore and explain the current status and ongoing work on teaching SPLs at universities, colleges, and in industry (e.g., by consultants). This second edition will continue the effort made at SPLTea’14. In particular we seek to design and populate an open repository of resources dedicated to SPL teaching.

1. SPLTEA

With around two decades of existence, Software Product Line (SPL) is now well-established in research and industry. The long-term goal of the community is to provide systematic engineering methods, languages, and tools to assist practitioners in building well-structured and customizable systems. The body of knowledge collected and organized by the SPL research community is still growing.

However, without any effort for disseminating this knowledge, engineers of tomorrow are unlikely to be aware of the issues faced when engineering SPLs (or configurable systems) – up to the point they will not recognize this kind of systems. In turn, they will not use appropriate techniques and face problems such as scalability that the SPL community perhaps already studied or solved.

We believe education has a key role to play. The teaching of SPLs can enable the next generation of engineers to build highly complex, adaptive, and configurable software systems. Also, research can benefit from teaching: students can be involved in controlled experiments and researchers involved in teaching can identify potential missing gaps of SPL engineering tools and techniques.

Teaching SPLs is challenging. Currently, it is unclear how SPLs are taught, what are the possible gaps and difficulties faced, what are the benefits, or what is the material available. To address this gap, we conducted a survey [1] with the purpose of capturing a snapshot of the state of teaching in our community. Our goal was to identify common threads, interests, and problems and build upon them to further understand and hopefully strengthen this important need in our community. The results of this survey, as well as the discussions in VaMoS’2014 [1], motivated us to propose a teaching workshop for the SPL conference community.

The first edition (SPLTea’14 [2]) attracted 30+ participants. This second edition will continue the effort made in SPLTea’14, with a special focus on the design and the population of an open repository of resources dedicated to SPL teaching:

http://teaching.variability.io

A working session will be devoted to the future of the repository. We plan to address a series of questions like: How to collect more resources (including slides, lecture notes, lab instructions, tools)? How to involve industry? How to advertise the existence of the repository? How to build a network of SPL educators? How to make it possible for people to browse and understand the SPL knowledge of the repository? What could be the desirable features, services, and underlying technology of such a repository?

2. REFERENCES
