ERCIM "Alain Bensoussan" Fellowship Scientific Report

Fellow: José Carlos dos Santos Danado

Visited Location: CNR-ISTI, Consiglio Nazionale delle Ricerche

Duration of Visit: 9 Months

I - Scientific activity

At CNR, my research programme included starting a project covering End User Development on touch-based mobile devices. The research includes the study of a framework and User Interface that enables the creation mobile applications in the touch-based device. Moreover, the framework is accessible and usable for mobile users that do not use programming languages in their daily work as well as motivates mobile users to playfully experiment and create applications. Initially, a literature review was performed covering the state of the art. Following, a set of prototypes were developed, supported by user tests to improve future developments as well as better target user expectations.

The research lead to submission into International conferences such as: EICS 2012 (long paper), EICS 2012 (short-paper), and VL-HCC 2012 (long paper). Submissions from EICS received relevant feedback to improve the research on-going and further evaluate the framework. Research is still improving in order to improved pointed weaknesses on the framework. The last submission is still under review and future submissions of the work performed are already planned. The fellowship at CNR opened up the possibility to further expand the current research through the application to a new fellowship to continue the research.

In the first trimester of the fellowship, I also engaged in the preparation of one FP7 ITN network and one FP7 Call 8 (STREP) proposal were CNR was the coordinator for such proposals. Participation on such proposals is relevant to gather experience and knowledge on how to support new and on-going research. Additionally, I was a reviewer and/or Program Committee member of EICS 2012, ISAmI 2012, IE 2012 and co-chair for ACE 2011 Tutorials.

II- Publication(s) during your fellowship

Danado, J., Paternò, F. "A Visual End User Development Environment for Touch-based Mobile Devices", VL-HCC 2012, Innsbruck, Austria, In review (2012).

Abstract.

Smart phones are increasingly allowing users to interact for various purposes every day. Nevertheless, users are restricted to using available applications without having the possibility of customizing them to their specific needs. In this paper, we present Puzzle, a visual environment for opportunistically creating applications in a touch-based mobile phone. The visual environment is designed to be accessible and usable for any mobile user as well as to motivate end users to playfully experiment and create applications that better fit their views. We report on the visual environment, its metaphors, and evaluation studies.

III - Attended Seminars, Workshops, and Conferences

Seminars

Lightweight Approaches to Highly Adaptive Web Interfaces, March 2nd 2012, ISTI - Aula C-29, Pisa, Italy, Michael Nebeling (ETH Zurich)

IV – Research Exchange Programme (12 month scheme)

Not filled (9 months scheme).