SAIR - Social-Aware IMS-Enabled Recommender

In recent years, smartphone market share has risen to more than 60% of the whole mobile phone market in Europe and USA. The explosive success of mobile platforms has boosted the development of specialized services, explicitly targeted at small-form devices. In addition, these new devices allow to profile user real-world context (exploiting phone sensors) and social context (exploiting social networking apps). SAIR (Social-Aware IMS-enables Recommender) is a general support platform that enriches the management of mobile services by exploiting collective socio-technical monitoring to enhance both social (recommendation of services of interest) and technical (resource optimization) point of view, so to improve the quality of experience of final users.

SAIR monitors service usage, associates it physical and social activities, and recommends it to users based on their location, interests and social links. In addition, it is informed of the technical requirements of mobile services, it also gives service providers the ability to promote services that can be optimized when used at the same time by many users (e.g. streaming services).

SAIR is based on the IP Multimedia Subsystem (IMS). IMS describes a powerful service delivery platform and service composing model, accurately designed to work well over all-IP next generation networks. IMS delegates service composition to a Service Capabilities Interaction Management (SCIM) component; at the current stage, however, SCIM is limited in two ways: it does not automatically monitor what are the most used services (built around user needs and behaviors) and it is a raw composer, thus can be fully exploited only by service administrators. Our project addresses both these limitations:

- it empowers SCIM with the ability of monitoring most used services, and of using collected data to recommend services to users;
- it provides a web interfaces that allows final users to simply compose services, that can then be recommended to other users.

SAIR (Social-Aware IMS-enabled Recommender) is a project developed at the Laboratory of Advanced Research on Computer Science, University of Bologna. More informations about the architecture of SAIR can be found in the architecture and documentation sections.

