Thursday 16th June 2011

Time: 11:00 - 11:30

Universities Go Mobile

1.   INTRODUCTION

Since 2007—when the first iPhone was introduced—smartphones have got into our lifes in a seamless way. Especially among young people (i.e. university students) these devices are widely used. Thanks to new technologies people can do things quickly and more efficiently like they never did before.

Within Italian universities however, unfortunately the current situation is not anyway similar to what we've just said. Students still do most of their daily basis tasks on paper or through the university's website. Websites can cover a lot of the services that a student may need, but in order to access it, students essentially need access to a computer.

The biggest portion of our day—when we don't have access to a computer—we could visit websites with our smartphones too, but this behaviour won't be as native and quick as possible compared to what we can achieve today with dedicated applications. Websites are designed in a different era for computers whilst mobile applications are designed today for mobile devices.

Put this from a different perspective, smartphones are also a prestige product. There's no doubt that university's branded mobile application will have a better appeal and larger impact on users. Unquestionably, mobile application platforms needs each and every university's presence, just like they do with their websites on the internet, they can't—and won't be able to—ignore it. University's message will reach to potential students, teachers, parents—also internationally—.

iUniversity definitely is in interest of students, but also teachers and other people who work in university facilities, like technicians, librarians, etc.

iUniversity is designed both for iOS and Android platforms seamlessly so they can share a common infrastructure. Individual functions can be activated as per University's needs.

Also, iUniversity is fully integrated with KION's students management system product so that all Universities who are already using KION's software can easily publish their own smartphone applications.

2.   SYSTEM ARCHITECTURE

All data used in iUniversity are transferred via dedicated RESTful application programming interfaces adding an abstract layer which will allow us to integrate also with other third–party infrastructures. When there's no need for real–time data access and a direct access to source data is available, iUniversity will use a replication layer not to overload the source system, therefore improve user experience. This replication layer will refresh its data with scheduling.

Replication layer is also useful when source data needs cleaning or has to be structured differently. When a direct access to source data is not available we will use restricted access layer where we ask data from the source system via its own access methods. In this layer we further abstract source data making it compatible with iUniversity.

Some operations has to be done real–time; for instance, students' exam booking is a real–time operation. In these cases we pass through real–time access layer. Usually we will wrap more complex operations into simple calls and simply pass data through source system.

3.   FUNCTIONS

3.1. FOR EVERYONE

These are operations that every user can benefit. Anonymous users can also access iUniversity with some functions disabled by default. Public functions include news, video and photo channels through integration with Youtube, Vimeo and Flickr, but also more specific functions as a fully featured course catalog and classroom schedules and timetables – integrated with Google maps.

3.2. FOR STUDENTS

In order to access these functions user—student—has to be authorized with the same credentials given by his university. A student can follow his own career, keep track of his grades, credits, as well as his/her fees, with the current payment status and deadlines for next payments. Eac student also has his/her personalised agenda where he/she will see his/her on classes and exams that he/she still has to pass.

In the "Exams" section students can book exams, review and change bookings: this function is particularly useful when students can check future exams to better plan their studies. iUniversity will also notify user automatically via "Push Notification" service when something changes with bookings (e.g. a previously booked exam is cancelled or a new exam data is available). iUniversity has also a built–in personal inbox where messages can be directly sent, so that students can be informed for specific purposes. This way universities will be able to talk back to students personally and be assured that they've got an important message. Inbox function is different from news, because instead of publishing an anonymous text for everyone you will be able to talk privately with single users.

There's also a remarkable economic benefit of this function if university has a short messaging contract with some provider. Universities can choose to cancel or lower the message quota and pay none or less to third–parties.

Finally, students are able to subscribe to specific newsgroups: this function is particulary handy for students' groups or some random event planning.

3.3. FOR TEACHERS

Teachers can also log on with their credentials. They are then able to add or remove new exams directly from iUniversity, register or accept students' votes or talk back to students who already attended any given exam session. They can also add or modify classroom hours so students will be informed with any changes in case an absence; and effectively add or modify their own teachings information, like course description, course materials and send bulletin announcements to students. With a special inbox teachers are able to talk to students, discuss for office hours, make an appointment, etc.