Yes, I am a Student. Give me a Discount!

1. INTRODUCTION

We need to authenticate and verify our staff and students in different situations, but how do we do it, and why? The obvious is to allow users to interact with our network and systems. We use user/password techniques or SmartCards with PIN-codes or whatever technology to let legitimate users use the institutions resources. But if we want to let others know that the user is a staff or a student at an institution (verification), how do we accomplish that? The traditional way is to allow other organisations or individuals to check with our student or staff registrar office if the person is a student/staff or not. This is a cumbersome activity for the institution. It takes staff time to fulfill the inquiry and the institution may also have doubts if they can or should give this information away.

How could we create this service for students and staff, to give them benefits such as discounts and advantages, related to the institution? We have to verify to the supplier of the service that the person who is claiming to be a student or staff really is that. And it has to be in a context that is reliable and available and cost effective. It is a matter of trust, and should be executed in an environment that is easy to apply as an e-service.

This is the story of the e-service "True Student", defined in the e-me research project and deployed as an e-service at the University of Umeå as the "Give Permission" – system. The system was developed during autumn 2010 and is up and running, and can be found in the portal for students at the institution. https://www.portal.umu.se/

Yes, I am a Student. Give me a Discount. **Author:** *Soren Berglund*

Page 1

2.   THE BACKGROUND OF "TRUE STUDENT"

In the E-me project, the need for a verification method for students were essential. The suppliers of services to students must trust the e-me client to be a true student. The quest for a solution involved two matters, a technical solution and a definition of a "True student".

The technical solution demanded a reasonable strength in security and also a convenient method that was not expensive and difficult to implement. Web-services became the selected method.

The definition of a student fell back to the official definition of a student. To be a legitimate student, you have to conform to two statements; - you must be a registered student with an institution and – you must be a member of the student union at that institution.

But that was not enough for the suppliers of services. They were pressing for a better definition that guaranteed that a student was a true student, I.e. "poor", and not someone employed (rich) that should pay full price for the service. The solution here was to develop an interface to the Swedish Board for Study Support to find out if the student was given a study grant. When students apply for study grants at the Swedish Board for Study Support they have to declare if they have an income, and if the income is above a certain level, no grant is given. The students income statement is checked with the tax authorities. This implies that there is enough confidence to make a conclusion that if there is a grant, this person is "poor", need a grant, and therefore is a true student.

Then, the combination of:
a) being a registered student
b) being a member of the student union
c) having a grant from the Swedish Board for Study Support

meets the criteria for the person to be an eligible student for discounts and will form the definition of a true student.

The connections to the institution was planned to be done as a web service to the Ladok system (the Student Register) at the institution, but was not implemented in the e-me pilot. The connection to the Swedish Board for Study Support was done as a web service to the Grant system and since the matriculation and registration data for a student in the Grant system comes from the Ladok system, there was no need to implement two web services. The connection to the student union was made toward the register of the student unions members.

3.   THE IMPLEMENTATION OF "GIVE PERMISSION"

In July 1st 2010, the compulsory regulation of membership in a student organization was removed by law. The consequence of this change was that the definition of "True student" also had to change. There was an obvious need to reconsider the current situation. Meanwhile, the student unions were moving ahead, concerned about losing members when it was not mandatory to be a member of a student union anymore. The approach was to develop and include more services for members. Now came the basic question back again; How do we verify that a student is a student? What´s the definition? After discussion with student union leaders, we agreed on using the university portal as

Yes, I am a Student. Give me a Discount. **Author:** *Soren Berglund*

Page 2

the verification platform. The suppliers who agreed on giving students a discount could use a web service to verify that the person in question really is a student. The connection to the Swedish Board for Study Support was dropped, there was no demand from the student unions for that information in the new context.

The administration of the business model was handed over to the student unions by agreement. The technical issues are managed by the university. This is a win-win situation for all parties involved.

The student union can now offer members (only) services and discounts not available by non-member students and then attract members to the union.

The vendors can rely on the university and the student unions that a person who claims to be a student also is a registered student and a member of the student union.

For the university, membership in a student union is a plus since all kinds of formal student influence in the university organisation is managed by the unions and a high membership rate mean that the student unions in fact represents the majority of students. It also implies that benefits and discounts, useful for students, are negotiated and implemented by the student unions, not by the university administration.

By autumn 2010, the verification system is planned for implementation for two organisations. The housing company for reduction of rent and for rebate of the Internet connection. https://www.kommunicera.eu/ It is also used for membership control for the fee for the usage of the sports center. The current installation is defined below. The Swedish name for the service is "Medgivande".

Overview-> Medgiv depend

Medgivande tjänsten is a service divided in to two parts:
- A students can give their permission that information if they are a true student or not will be sent to external organization.
- An external organization can get information if a student is a true student i.e.
  - * Student have giver permission to transfer information
  - * Student is registered for at least 8 points of courses
  - * Student is a member of the student union

The user must Give Permission by explicitly check a button that the external organisation is allowed to do the checking if the person really is a student. If the button is not checked, it is regarded as if the person is not interested in the service and is not given the discount. In other words, you refrain your discount.

Yes, I am a Student. Give me a Discount. **Author:** *Soren Berglund*

Page 3

Integrity and security issues has been high on the agenda and the solution was implemented as follows. Only suppliers with an formal agreement is allowed to do automated checking. There is a technical block that secures that only suppliers who are granted access can use the service. Access is locked down to specific ip-numbers. Also, all http-requests must be made against an url which includes an, for each supplier, unique key.

The student must perform an action that clearly indicates that the student allows the supplier to do the checking. If the student does not perform the action, no information is given to the supplier if the student is a student or not. The response is a simple "False", not "True" as it is responded if the student is a student and has "Give Permission".
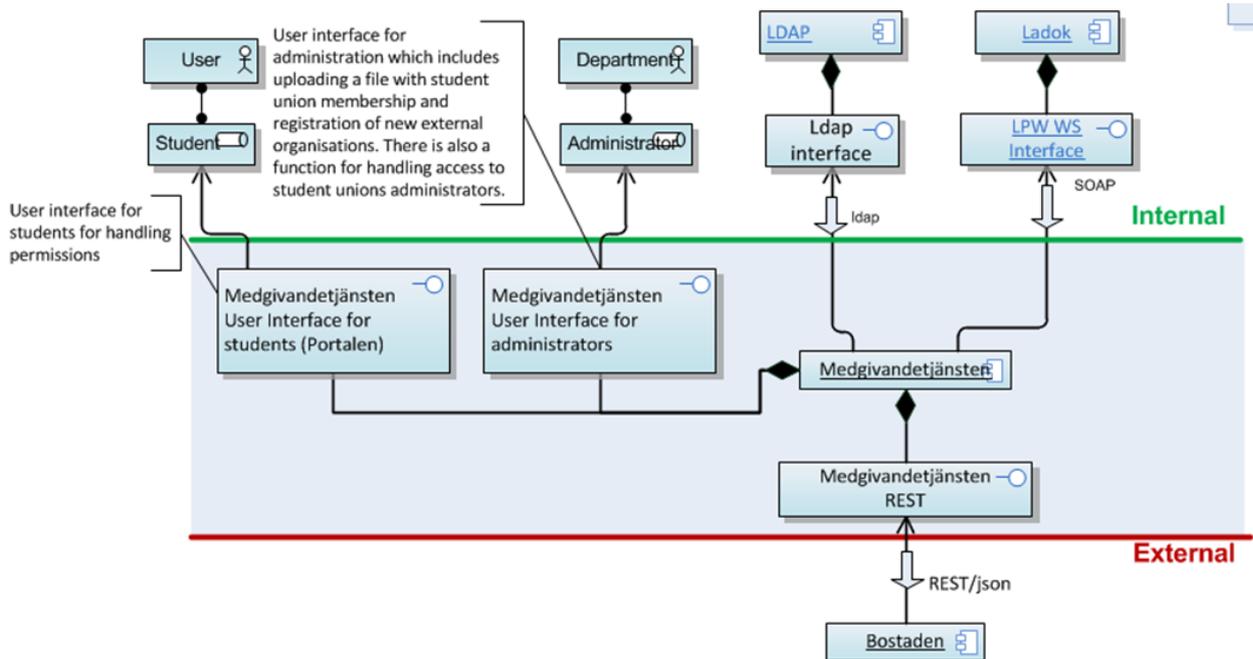
The "Give Permission" service is a part of the student portal and is included in the portal as follows:

Yes, I am a Student. Give me a Discount. **Author:** *Soren Berglund*

Page 4
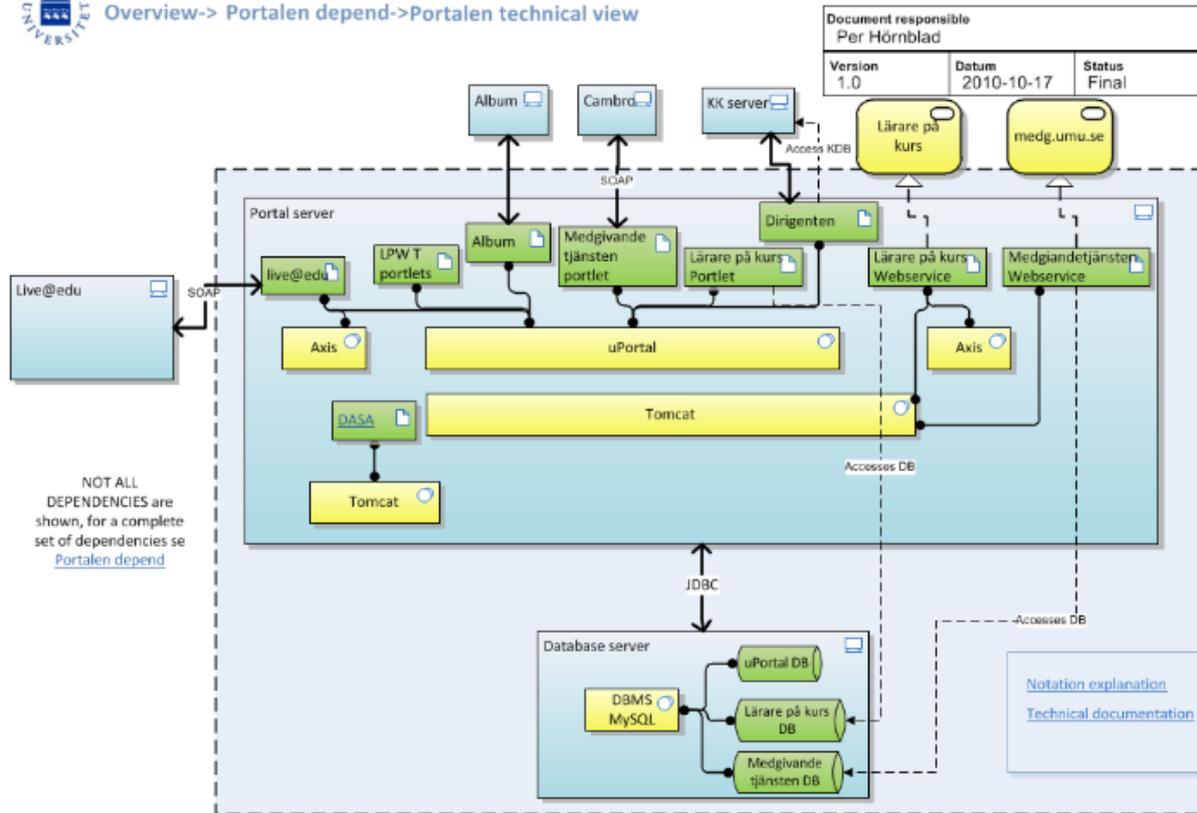
4.   SUMMARY

This verification system is now being expanded to university staff as well. The first implementation is planned for the Sports Center IKSU, http://www.iksu.se/, as it is planned for the students. The verification transaction checks if the person is an employee and then the agreed fee is charged monthly from the persons pay.

Smart, easy-to-use e-services, are more and more important for universities, as they reduce costs and improve service, and make the relation to the university reliable and always open for service. The verification system is a module that will be further utilized for external e-services that need the verification information, not only an authentification.

The University of Umeå is expanding the number of e-services for students and staff and also the network infrastructure – even outdoors on and off campuses and covering the whole city with Eduroam access. Federation with the local community deliver the university network to city libraries and other premises. Federation with the city network, Umenet, allows access to bus stations, railway stations and the airport. The services must be available in mobile devices and easy to connect to.

The motto is, e-services at your service, always and everywhere !

Yes, I am a Student. Give me a Discount. **Author:** *Soren Berglund*

Page 5

5.   REFERENCES

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Yes, I am a Student. Give me a Discount. **Author:** *Sören Berglund*

Page 6