Designing & Implementing a 'mobile European Student Card'

The Erasmus Student eCard

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Agenda

→ The StudIES+ Project

→ Student ID Card

→ Student ID Demo
StudIES+  
Student's Identification and Electronic Signature Services

11/06/19
Consortium

Freie Universität Berlin

Hochschule Harz

bdr.

FP

SixFORM

Co-financed by the Connecting Europe Facility of the European Union

2017 CEF Telecom Call - eIdentification & eSignature
Short Overview

- **Higher education institution processes**
  Facilitating and digitalizing workflows and processes.

- **Student identity**
  Keeping track of academic and nationals IDs across borders, institutions and devices.

- **Document signatures**
  Taking documents, signatures and security to the digital age.
Student ID Card
The Digital Student ID on the Smartphone
Student ID Approach: Secondary ID – Issuance Use Case

Member State A
(e.g. Erasmus Student)

Primary ID

Secondary ID

Student-ID-App

Member State B
(e.g. Guest University)

Identification

Validation / Registration

Internet

Primary ID

Secondary ID

Member State A
(e.g. Erasmus Student)

Primary ID

Secondary ID

Student-ID-App

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Primary ID

Secondary ID

Member State B
(e.g. Guest University)

Identification

Validation / Registration

Internet
Student ID Approach: Secondary ID – Online Use Case

Member State A
(e.g. Erasmus Student)

Internet

Member State „any”
(e.g. any online service)

Secondary ID

Identification

Acceptance

Student-ID-App

Online Service

Online Service

Student ID Approach: Secondary ID – Online Use Case

Member State A
(e.g. Erasmus Student)

Internet

Member State „any”
(e.g. any online service)

Secondary ID

Identification

Acceptance

Student-ID-App

Online Service

Online Service

11/06/19
Student ID Approach: Secondary ID – Local Use Case

Member State "any"
(e.g. Library at University)

Student-ID-App → Secondary ID → Identification → NFC → Service → Member State "any"

(e.g. Library at University)
Student ID Approach: Secondary ID – Attribute Management

**Primary ID**
(get Attributes from eIDAS-Network)

**Minimum Data Set (MDS):**
- Family Name
- First Name
- Date of Birth
- Person Identifier

**Optional Data Set**
- First Name at Birth
- Family Name at Birth
- Place of Birth
- Current Address
- Gender

**Implicitly known Attributes**
- Nationality
- ID-Document

**Secondary ID**
(put Attributes onto “Student ID Card”)

**Source eIDAS:**
- Family Name
- First Name
- Date of Birth

**Source HEI-DB:**
- Student Number (ESCN)
- Course of study
- Degree program

**Source Self-enrolled:**
- Portrait Image
- Local Address

**Other, e.g.:**
Public Transport data (Images, 2D Barcode)
Student ID Approach: Secondary ID – Trust Model

Trust via Recognition of Root-Certificates in the Domain of Higher Education
(e.g. PKD, Trust Lists)
Student ID Approach: Summary

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<table>
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<tbody>
<tr>
<td>1.</td>
<td><strong>Attributes are locally stored</strong> on the mobile device as Secondary ID via issuing service of HEI.</td>
</tr>
<tr>
<td>2.</td>
<td><strong>No Identity Provider</strong> at HEI required for online and local identification.</td>
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<tr>
<td>3.</td>
<td><strong>Authenticity of attributes</strong> is achieved by X.509 Certificates</td>
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<tr>
<td>4.</td>
<td><strong>Authenticity of Online Service</strong> is achieved by X.509 Certificates</td>
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<td>5.</td>
<td><strong>Trust Model</strong> relies on bilateral recognition of RootCA certificates in the domain of higher education.</td>
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Student ID Demo
Prototype for Android and iOS
Student ID Card: Overview

- Simple registration from home
- Online and offline use cases
- Secure and privacy-preserving
- Standalone app or module
- Open ecosystem for further services and ID cards
Student ID Card App: Registration & Issuance
Student ID Card App: Registration & Issuance

It looks pretty empty in here. Why not add a card?

To be able to use Mobile Student ID Card you need to verify your identity via an officially recognized Authentication system of your country (see below). For example in Germany this is a ID card / Personalausweis or a digital residence permit.

Your Nationality and Identification System

Please select

Germany (aID)
Austria (IDA)
Student ID Card App: Registration & Issuance
Student ID Card App: Registration & Issuance

Hello Sepp Obermeyer,

The following data have been transmitted:

Family Name: Obermeyer
First Name: Sepp
Date of Birth: 24.12.1980
Person Identifier: AT123456

Please provide your matriculation number (Matrículummer FU Berlin) so we can make sure it's you:

s3276432587

Continue
Student ID Card App: Registration & Issuance

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s53276432587

Continue
Student ID Card App: Registration & Issuance

123456

Please insert the TAN number into the Mobile ID verification page of your university.

Where can I find this page?

In the Student ID App, press the add card (plus) button and type in the TAN number that's shown on your device.

Continue
Student ID Card App: Registration & Issuance

Now please scan this barcode with your device.
Student ID Card App: Use Cases on Campus

![Student ID Card App Image]

Sepp Obermayer
Student ID Number: 123456
Library Number: QR012345
Student ID Card App: Use Cases on Campus
Student ID Card App: Use Cases on Campus

- Sepp Obermeyer
  - Student ID Number: 123406
  - Library Number: UR012345

- Sofia Moreno Suarez
  - Student ID Number: 123406
  - Library Number: UR012345

- Campuscard

- ESNcard
  - Freie Universität Berlin
  - Student ID Number: 123406

- e-exam
  - Schenkenloy mit Wissen C Card
Student ID Card App: Use Cases eExam Results

eExamResults

Freie Universität Berlin
E-Examinations
MENÜ

https://www.fu-berlin.de/Stv

Schnell-Login mit Student ID Card
Student ID Card App: Use Cases eExam Results

eExamResults
## Student ID Card App: Use Cases eExam Results

### eExamResults

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---|---
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Projektmanagement | 1.3
Kryptografie | 1.3
Student ID Card App: Further Use Cases

On-Campus

Off-Campus

Companies, eGov & eHealth

On-Campus Companies, eGov & eHealth
Thank You.


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Resources

1. eIDAS Logo: https://www.eid.as/fileadmin/eidas-files/img/logo-schriftzug.png
   German nPA: https://commons.wikimedia.org/wiki/File:Mustermann_nPA.jpg
   Portuguese ID Card: https://en.wikipedia.org/wiki/File:Cart%C3%A3o_de_Cidad%C3%A3o_Portugu%C3%AAs.jpg