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# How can I get my mobile student ID card?

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What is mObywatel (mCitizen)?

- **mObywatel** is free and official public mobile application. It is issued by the Polish government, the Ministry of Digitalization (MD) is responsible for its development and delivery.

- The app can carry various documents:

  - **mTożsamość** (mIdentity),

  - **mLegitymacja szkolna** (mSchoolIdCard),

  - **mLegitymacja studencka** (mStudentIdCard),

  - **mPojazd** (mVehicle),

  - **eRecepta** (mPrescription).
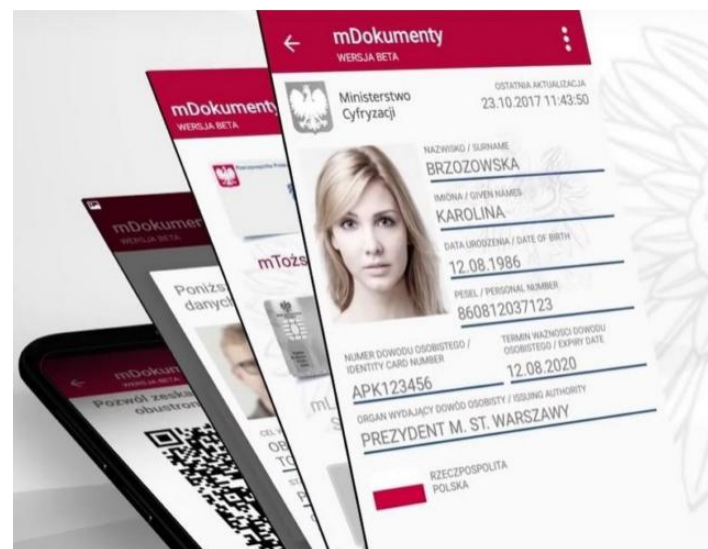
- It requires a **trusted profile** (an account at Polish **eID node** login.gov.pl), but that can be obtained online via electronic banking.

- More info: https://www.gov.pl/web/mobywatel/

What is mLegitymacja studencka (mStudentIdCard)?

- **mLegitymacja** is a student ID card in a smartphone.

- According to law on higher education it is an <u>additional</u> document and can only be issued to an <u>active</u> <u>student</u> who possesses a <u>valid</u> <u>plastic</u> student ID card (*pandemic may help in removing this requirement*).

- By showing it on the screen of the smartphone, the user confirms that he/she is a student, eligible to various discounts.
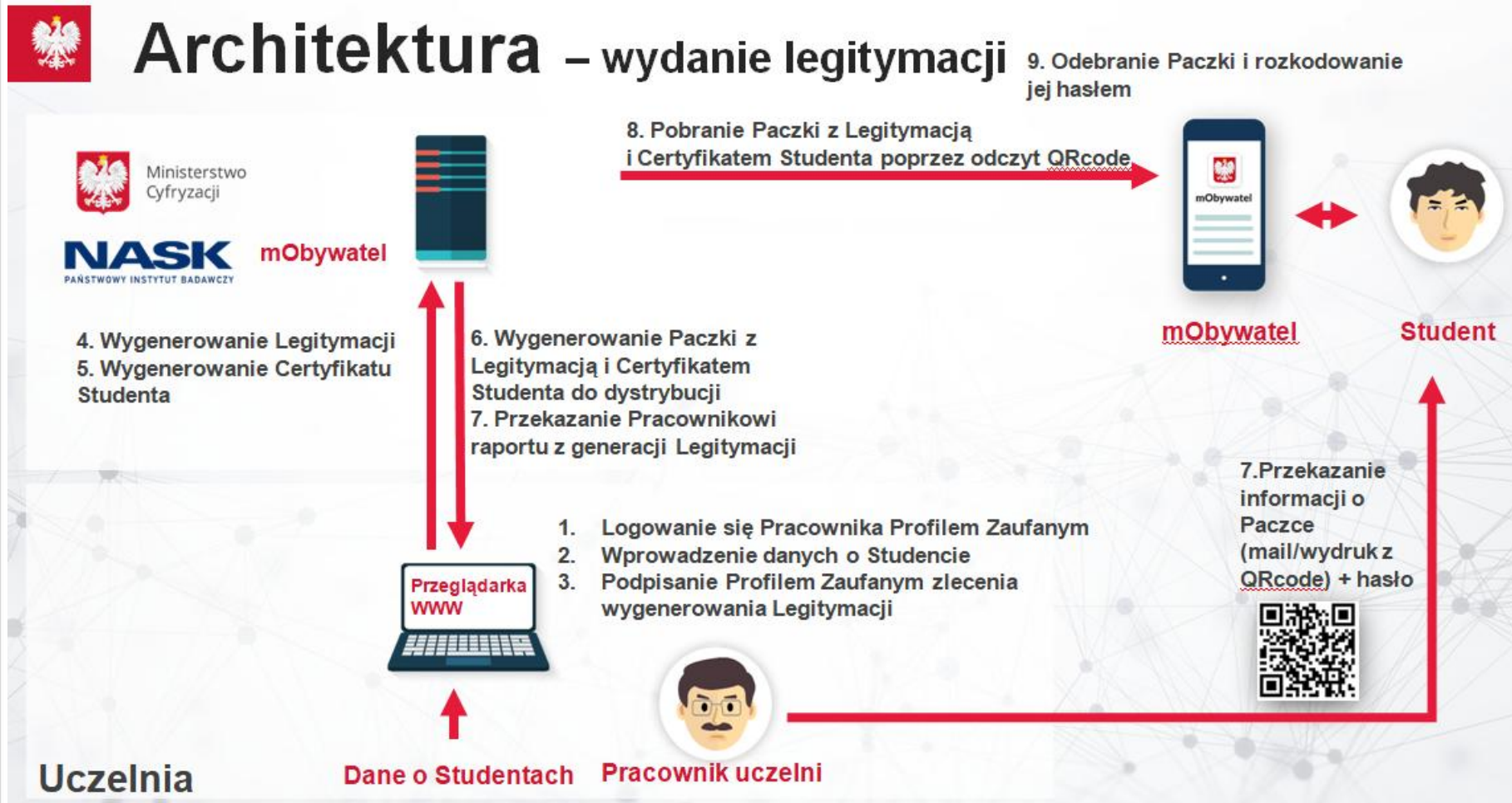
- More info: https://www.gov.pl/web/mobywatel/mlegitymacja-studencka
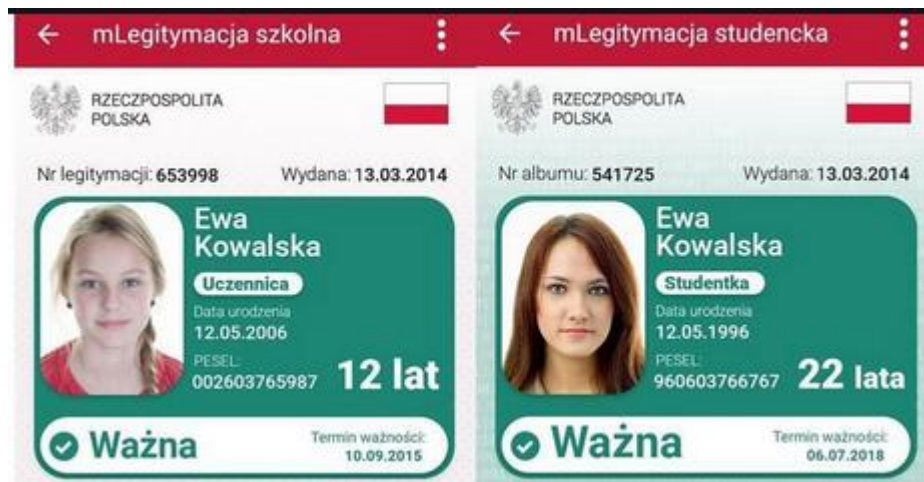
mSchoolIdCard   mStudentIdCard

How can a student get mLegitymacja?

- Process for schools and HEIs (2019)
  - Signing an **agreement** with the Ministry of Digitization.
  - Transferring to MD data of **active students** (student's photo, personal data, citizen number), who applied for mLegitymacja, via a dedicated web portal (responsible staff needs a trusted profile account).
  - Transferring information on issued mLegitymacja from MD to university SIS via a dedicated web portal.
  - Providing students with data needed to **download** mLegitymacja from MD to a smartphone (**QRcode**, **password**).
  - Transfering to MD data on invalidated student IDs via a dedicated web portal .
- mLegitymacja is valid as long as a plastic card, that is, for a semester, the above activities must therefore be **repeated every semester** and when the student or his plastic card change status.

Architektura – wydanie legitymacji

Ministerstwo Cyfryzacji

NASK
PAŃSTWOWY INSTYTUT BADAWCZY

mObywatel

4. Wygenerowanie Legitymacji
5. Wygenerowanie Certyfikatu Studenta

6. Wygenerowanie Paczki z Legitymacją i Certyfikatem Studenta do dystrybucji
7. Przekazanie Pracownikowi raportu z generacji Legitymacji

8. Pobranie Paczki z Legitymacją i Certyfikatem Studenta poprzez odczyt QRcode

9. Odebranie Paczki i rozkodowanie jej hasłem

mObywatel

Student

mObywatel

Przeglądarka WWW

1. Logowanie się Pracownika Profilem Zaufanym
2. Wprowadzenie danych o Studencie
3. Podpisanie Profilem Zaufanym zlecenia wygenerowania Legitymacji

7. Przekazanie informacji o Paczce (mail/wydruk z QRcode) + hasło

Uczelnia

Dane o Studentach

Pracownik uczelni

This process does not scale!

- In the period of March-November 2019 app. **3000** Polish primary and secondary schools used the dedicated web portal to get school mobile apps for their pupils.

- **Nobody complained**.

- The largest school in Poland has no more than **1500** pupils.

- The largest higher education institution in Poland, the University of Warsaw, has more than **44 thousand** students.

- **University of Warsaw complained**!

- The reaction of the authorities of the University of Warsaw was negative.

- They asked for the solution which would not put so much extra burden on the administrative staff.

The solution is API

- Ministry of Digitalization implemented **API** for transferring:
  - student requests for the mobile student ID card, with all relevant student data, to servers of the Ministry,
  - credentials for downloading and activating the student cards to servers of the university.
- It is up to the university to organize the process of gathering requests from students and passing them credentials.
- The architecture — compliant with the original solution — was chosen by the Ministry and was not negotiable.
- UW decided that:
  - university administration should not be involved in data flow,
  - a student himself should be fully in charge of the whole process.
- Students have access to **Mobile USOS**, the official university app, which can be fully trusted.
- In Mobile USOS a student is authorized by the **central authorization service** (CAS) of the university, and gets access to his grades, schedules, courses, and other data stored in the USOS database.

The tool is Mobile USOS

- From Mobile USOS the eligible student can **request** the mobile student ID card.

- The request is passed from USOS to MD. It is done by a **system daemon**, periodically.

- The same daemon gets information from MD about issued cards and sends **notifications** to students.

- The student gets the needed **credentials** (QR code and PIN) to Mobile USOS.

- Then uses them to **download** his personal mLegitymacja from MD to mObywatel, installed on the smartphone, and activate it.

- This is done by copying two strings from Mobile USOS and pasting them to mObywatel — these two separate mobile apps are installed on the same smartphone and the data between them can easily be transferred by copy-paste.

- The student is **in charge** and the whole process can take no more than a **couple of minutes**.

What is the task of university?

- The university system **keeps track** of all active mobile student ID cards.

- It sends the **deactivate requests** when the student's status changes, e.g. the student leaves the university or decides to deactivate the mobile student ID card.

- On a technical level the integration is based on **Mobile USOS**, which communicates with **USOS** via **USOS API**.

- The **notifier** installed in USOS API handles notifications to pass new information when it is ready.

- USOS system daemons wake up periodically to transfer data to/from MD using API.

- **VPN** installed between the two systems ensures secure communication.

- The **statistics** and **status of student requests** can be traced on the special web page of USOS available for the administrative staff.
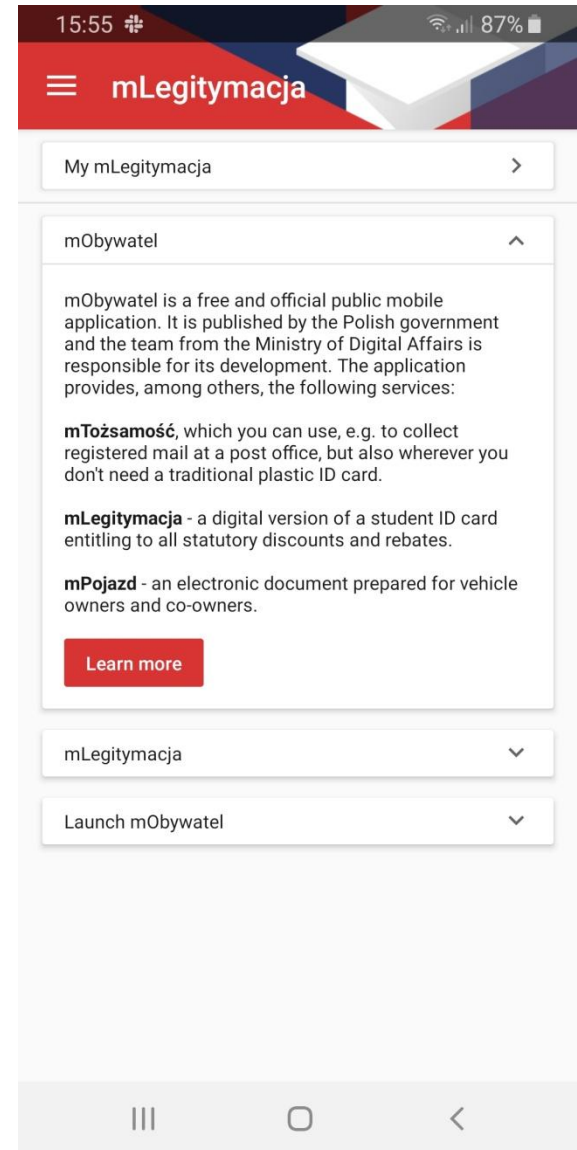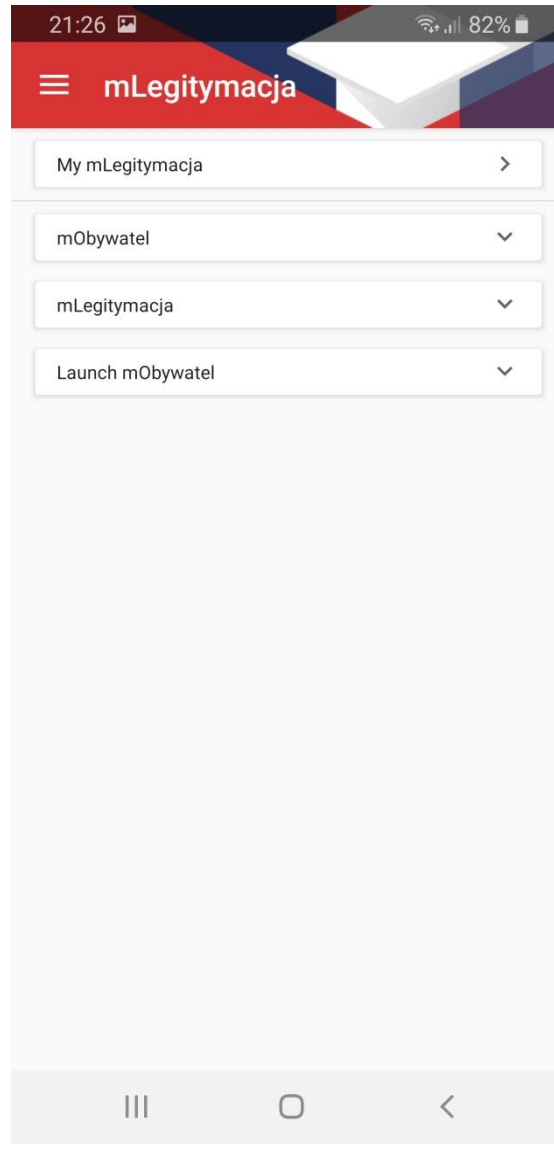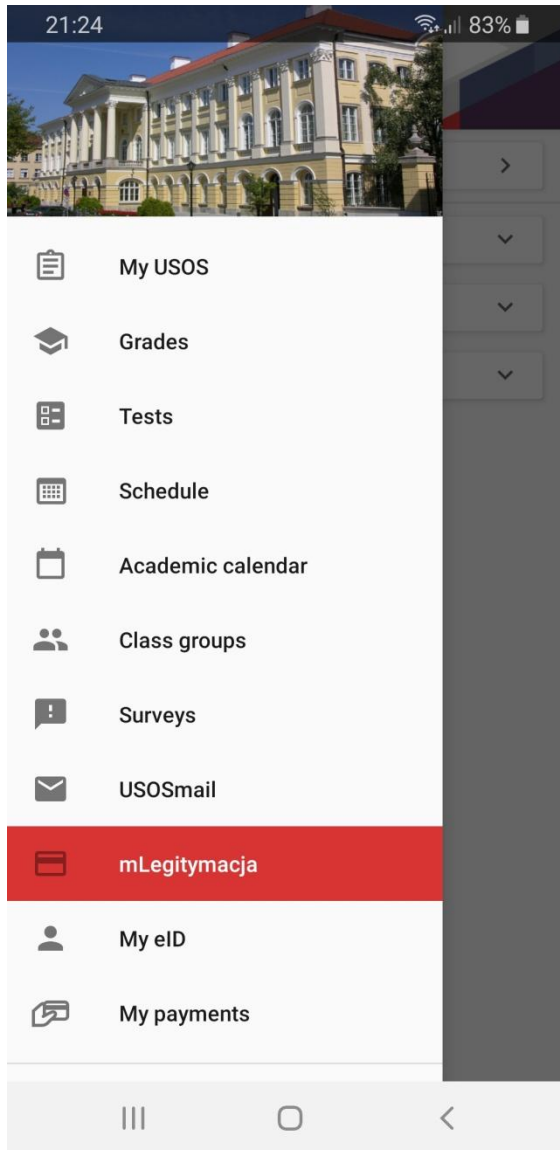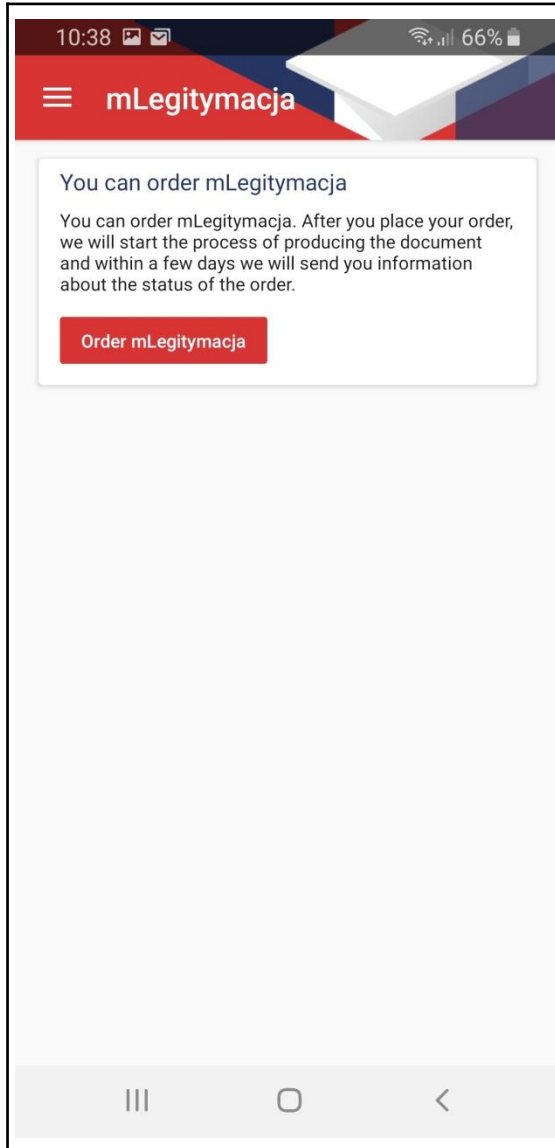
Mobile USOS

Mobile USOS checks if a student is eligible to order mLegitymacja. If not, an appropriate message is displayed:

- „Only students with a citizen number can receive an ID card";

- „No active plastic ID card";

- „No student number";

- „No photo";

- „You do not have the status of an active student";

- „Your photo/personal data has changed since the ID card was issued".

Data in the visual layer on the plastic ID card must be consistent with the information placed on the contact chip and with the information transmitted to the mObywatel system, which is why changing this data in USOS after the plastic ID card had been issued also prevents ordering mLegitymacja.
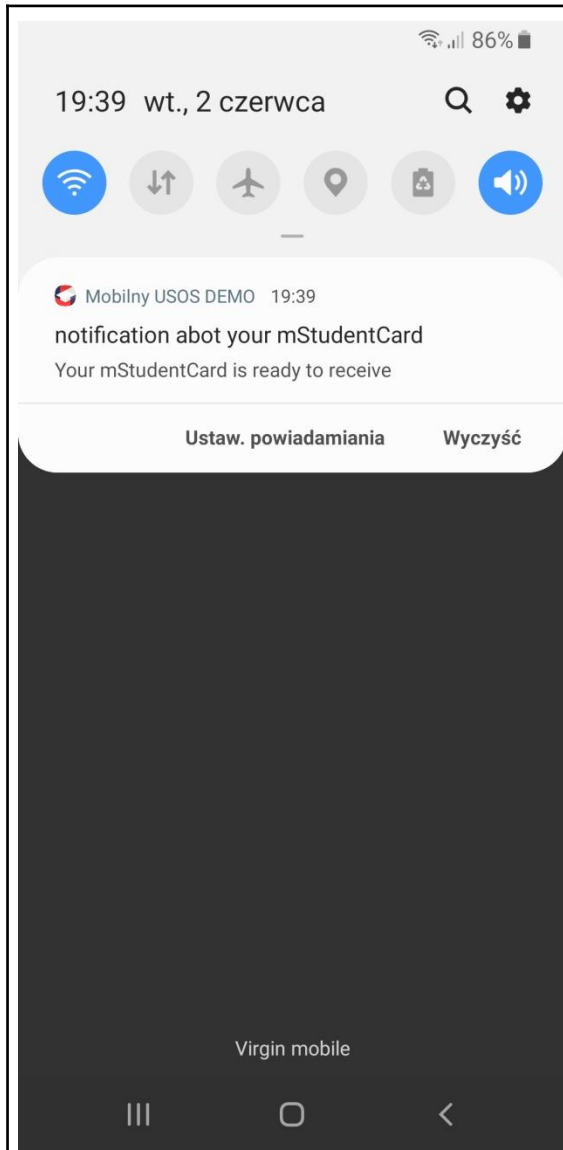
If a student meets the conditions entitling him to hold mLegitymacja, he may place an order.

Mobile USOS
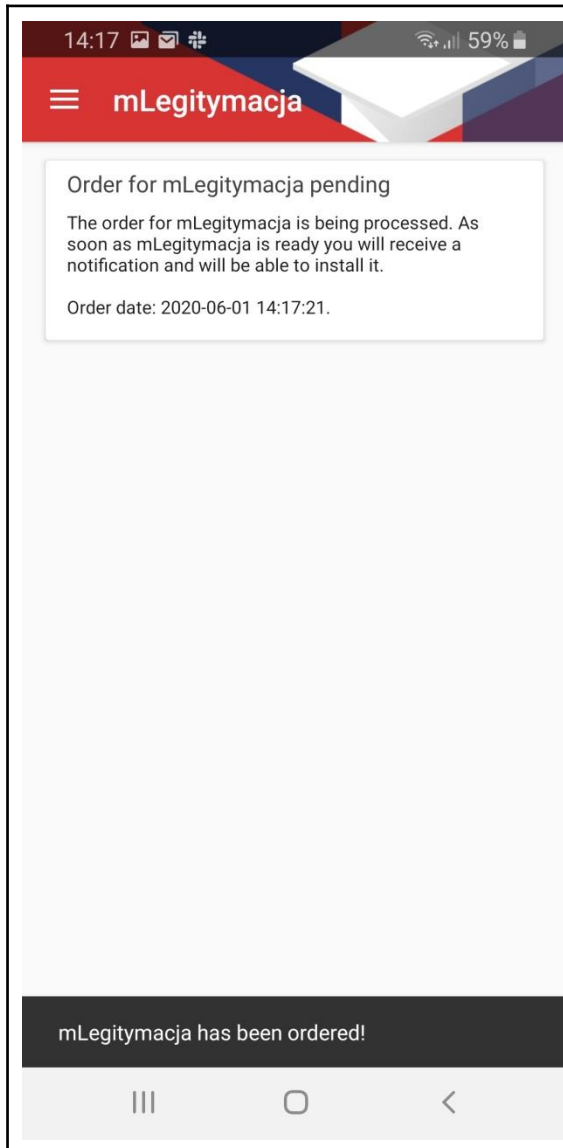
Mobile USOS displays a message about processing an order. Orders are forwarded by USOS to mObywatel successively, in packages, with a frequency depending on the university's decision (the script runs in the background, e.g. every hour).
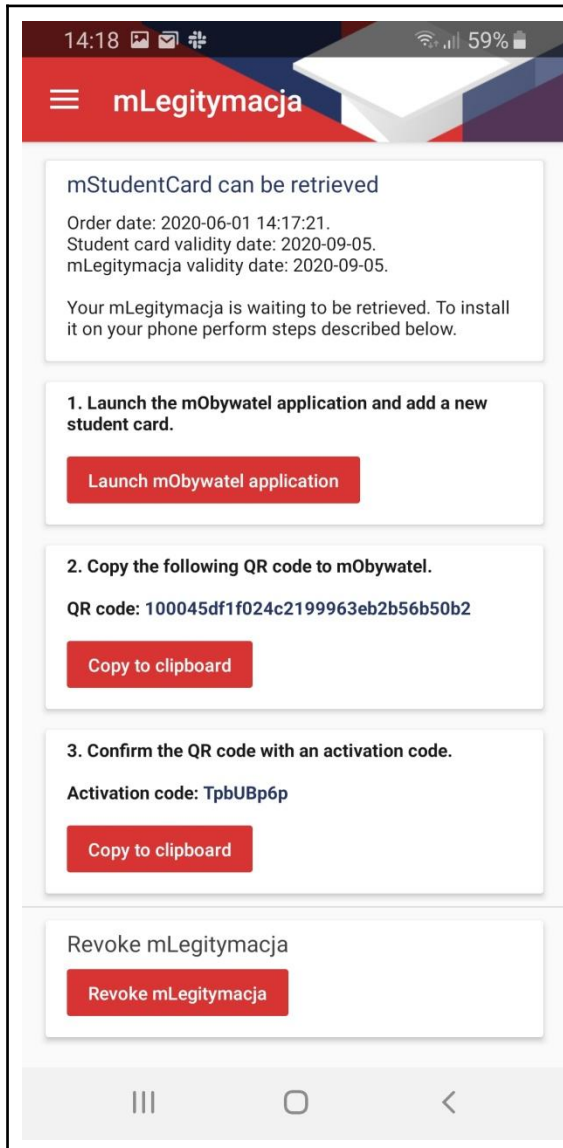
Mobile USOS

Also, successively (e.g. every 5 minutes) USOS checks the status of sent requests.

After receiving information from the mObywatel system about the completion of the request, USOS sends a relevant notification to the student.
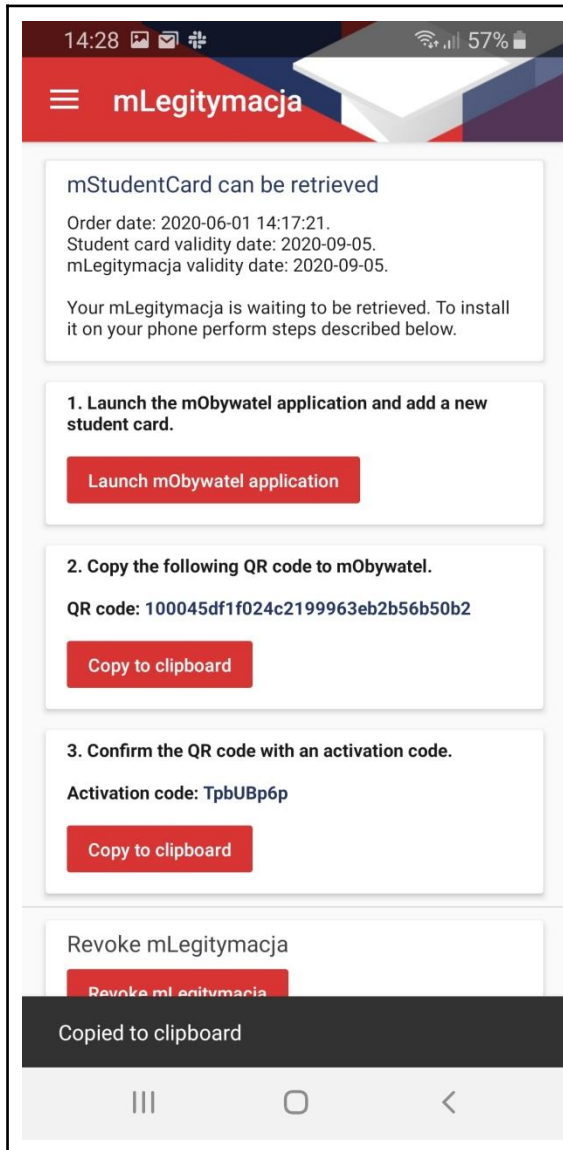
Mobile USOS

mLegitymacja is ready for download. The student can install it in the mObywatel application. Starts the mObywatel application (for this purpose can use the button available in step 1), adds a student ID to it (in a similar way it can extend an existing ID card, valid or invalid).

Mobile USOS
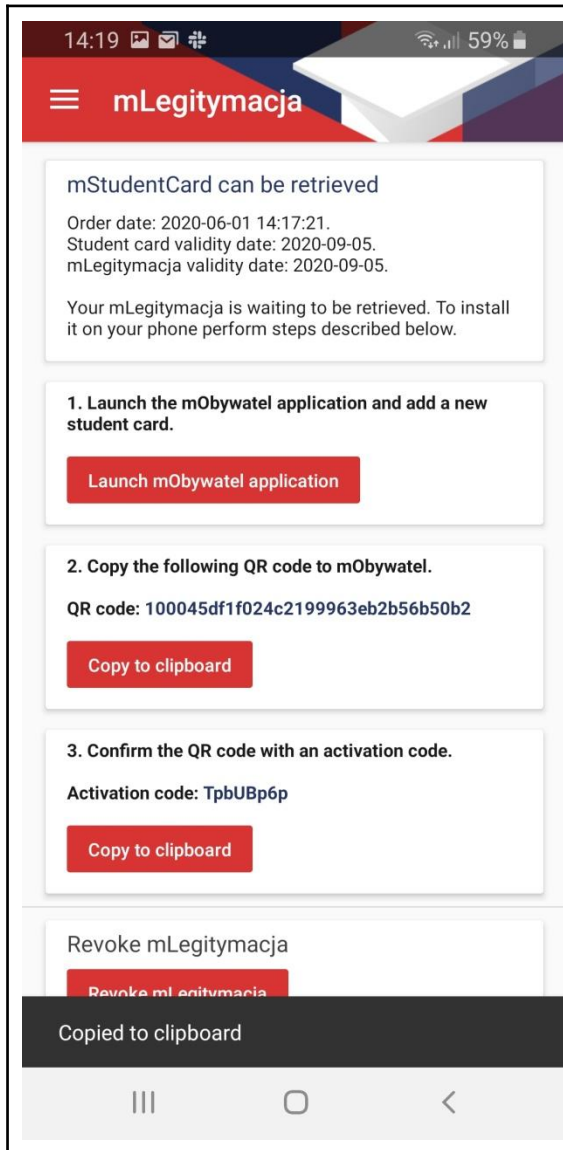
In step 2, the student copies the QR code to the clipboard. It goes to the mObywatel application and pastes this code into the appropriate field. It is easier than scanning the code.
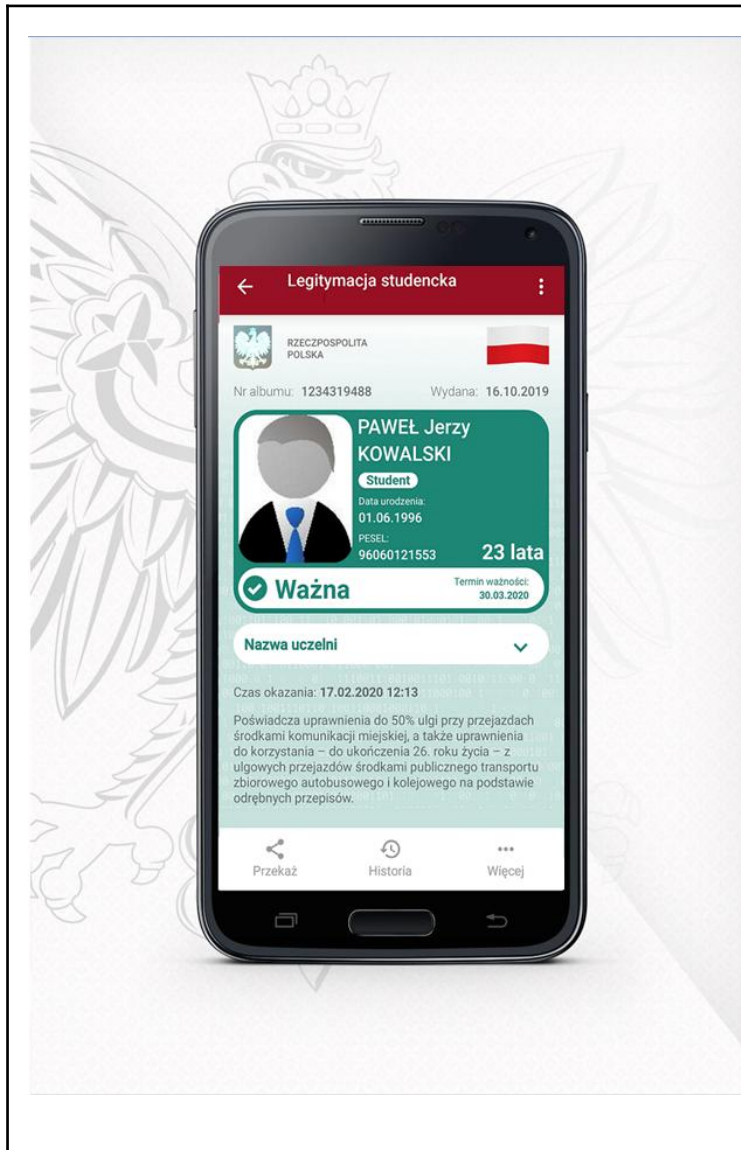
Mobile USOS

In step 3, the student copies the activation code to the clipboard. It goes to the mObywatel application and pastes this code into the appropriate field.
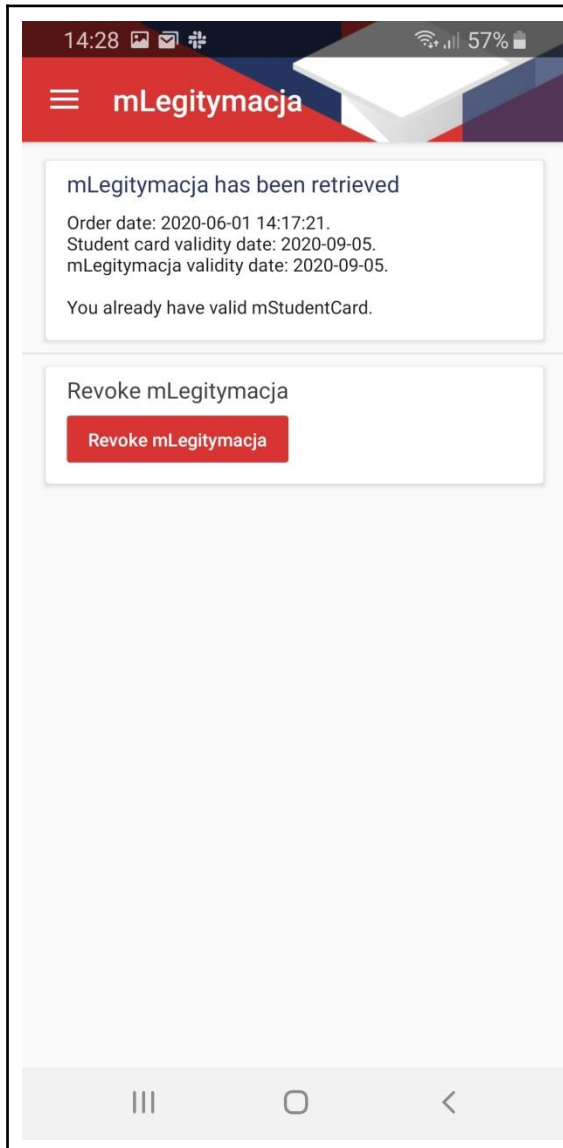
The ID card is now installed on the student's phone.

mLegitymacja is the full-fledged equivalent of the plastic student ID card.

Mobile USOS is able to distinguish the situation before and after installing mLegitymacja on the phone, therefore the message about the possibility to download mLegitymacja is displayed only when needed.

The mObywatel system will not allow a student to download mLegitymacja available through a given QR code and activation code more than once (the object created after downloading is removed from the mObywatel system).

Therefore, a student will not be able to install the same mLegitymacja on more than one phone.

Mobile USOS
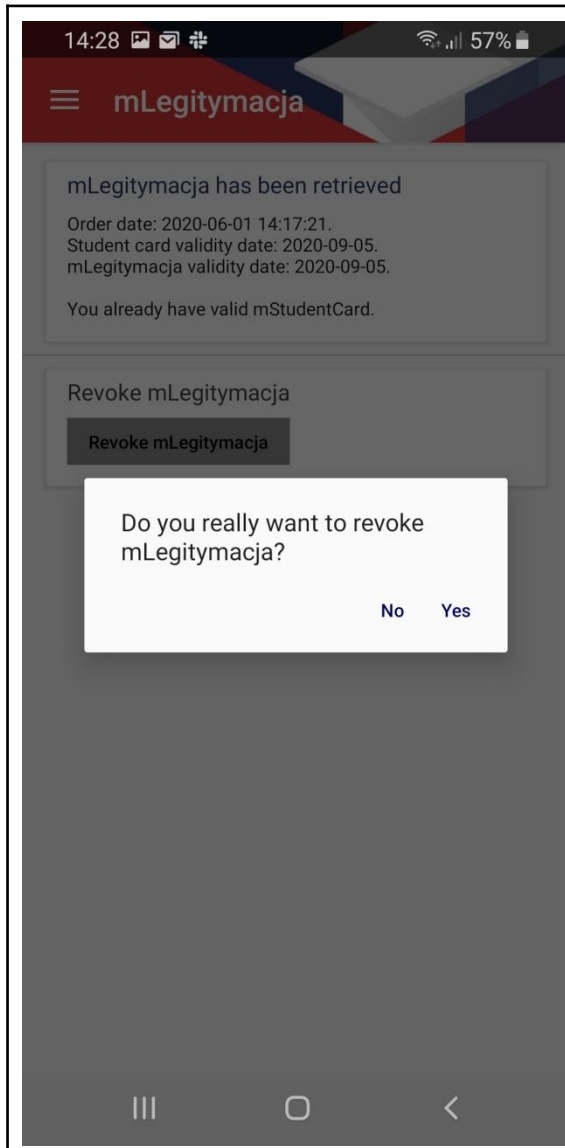
The student may at any time cancel mLegitymacja. Such a request is forwarded to the mObywatel system immediately, but for some time (no longer than a day) mLegitymacja may remain valid.

Mobile USOS will not allow a student to immediately submit another order – at least an hour must pass between two orders.

The future of mLegitymacja

1. The first barrier has been overcome.

2. Any eligible student can apply for the mobile student ID card, anytime, anywhere. The student logs in from the Mobile USOS, and if the conditions are met, sends the request.

3. University administrative staff is not involved in the process.

4. Student is the master of his own data — this approach is compliant with the **GDPR** regulation.

5. First mLegitymacja for students of the University of Warsaw have been issued in **February 2020**.

6. But plastic student ID cards carry additional functionalities – access to lecture rooms, to library, city ticket.

7. One of the ways to disseminate the mobile student ID card may be to provide authentication services based on mLegitymacja (secure transfer of student data to confirm his identity).

8. Ministry of Digitalization will deliver software supporting such scenario.

9. mLegitymacja may in the future become the **only valid** student ID card ☺

Acknowledgments

Mobile USOS has been implemented by Piotr Zalas and Dominik Murzynowski, University of Warsaw.

They also integrated Mobile USOS with mObywatel, run by the Ministry of Digitalization.

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