







DEVELOPING BIOBANK DONOR PORTAL PROTOTYPE BASED ON USER EVALUATION

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INTRODUCTION

Communication with donors is essential for biobanks:

- to establish trust
- to motivate donations of biological material and data
- to support necessary processes.

A portal where stakeholders receive specific and personalized information is considered as a tool to facilitate this communication.

As part of the **BBMRI.at** project we develop a prototype for the donor portal solution.

Goal: to elicit requirements and collect user feedback.

METHODS

For collecting user feedback, we used an iterative approach based on horizontal prototyping.

- · A first set of requirements was collected in interviews and a workshop.
- Then a mock-up portal was produced, presented to stakeholders who were then asked
 - to comment on the mock-up and provide additional information requirements, respectively,
 - provide arguments for and against the inclusion of the presented information items.

We made the version of the portal mock-up available to biobank administrators and distributed an educational video that presented a step-by-step guide to the interaction with the prototype.

The participants were asked to leave feedback on the quality of both the mockup itself and the educational video.

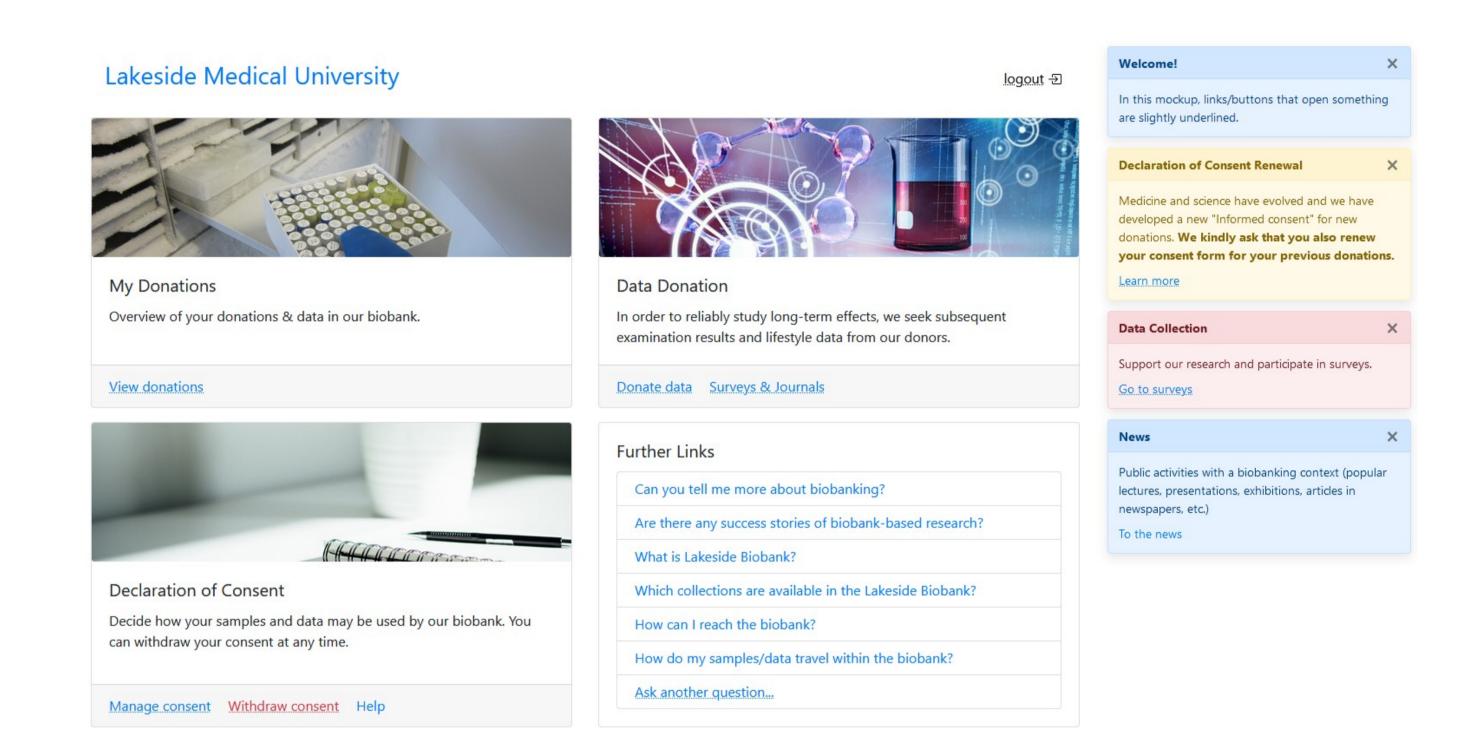
PORTAL VIDEO

The **educational video** which explains the portal interface is available at

https://www.youtube.com/watch?v=qhCwxyzHnUc



PORTAL INTERFACE



The Data Donation Portal Mock-up includes the mock-up user interface for the following portal sections:

- "My Donations": the users could see which of their samples are donated, or which projects or biobank collections used such samples,
- "Declaration of Consent": the users could specify how their data is going to be used by customizing the details of the informed consent
- "Data Donation": the users can give access to available data, e.g. from specific clinics or ELGA, treating biobank as a controller, and provide the lifecycle data from wearables.

Lifecycle data: the final version of the prototype supports collecting lifecycle data from wearables such as smartwatches or blood pressure measurement devices. It includes support for collecting data from **Google Fit** and **Fitbit**.

USER FEEDBACK

Feedback from the participants based on their experience with the biobank portal prototype and the educational video:

- available portal mockup received positive feedback, was considered useful
- importance and clarity in representing information were emphasized
- open issues addressed in the final versions of both the prototype and video.

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