Introduction

To be able to donate to a charity and deduct that donation from taxes, it is often required to provide evidence. The donor would have to present said evidence in form of a donation **receipt** which would include information about both the donor and charity. The donor may want to keep this information private and only provide a receipt that proves that a certain amount was indeed donated to a **recognized** charity.

Our main **goals** are to:
- protect the donor's **privacy**
- **prevent** donation **fraud**
- simplify the **verification** process

We developed the **Donau** to achieve all of the above goals. The Donau, written in **C**, is a supplementary service of **GNU Taler** while still being payment system independent. The Donau is expected to be run and maintained by the local **tax authority**.

Implementation

The Donau consists of a **REST** API and the corresponding backend implementation. The REST API provides endpoints for the charities and donors as well as for the administrators of the Donau.

The main API endpoints handle requests to:
- **manage charities** - used by Donau admin
- **issue receipts** - used by the charity for received donations
- **submit receipts** - used by the donor for summarizing all donations throughout the year in a single donation statement

The donor submits the donation statement as a QR code to the tax authority in order to claim the tax reduction.
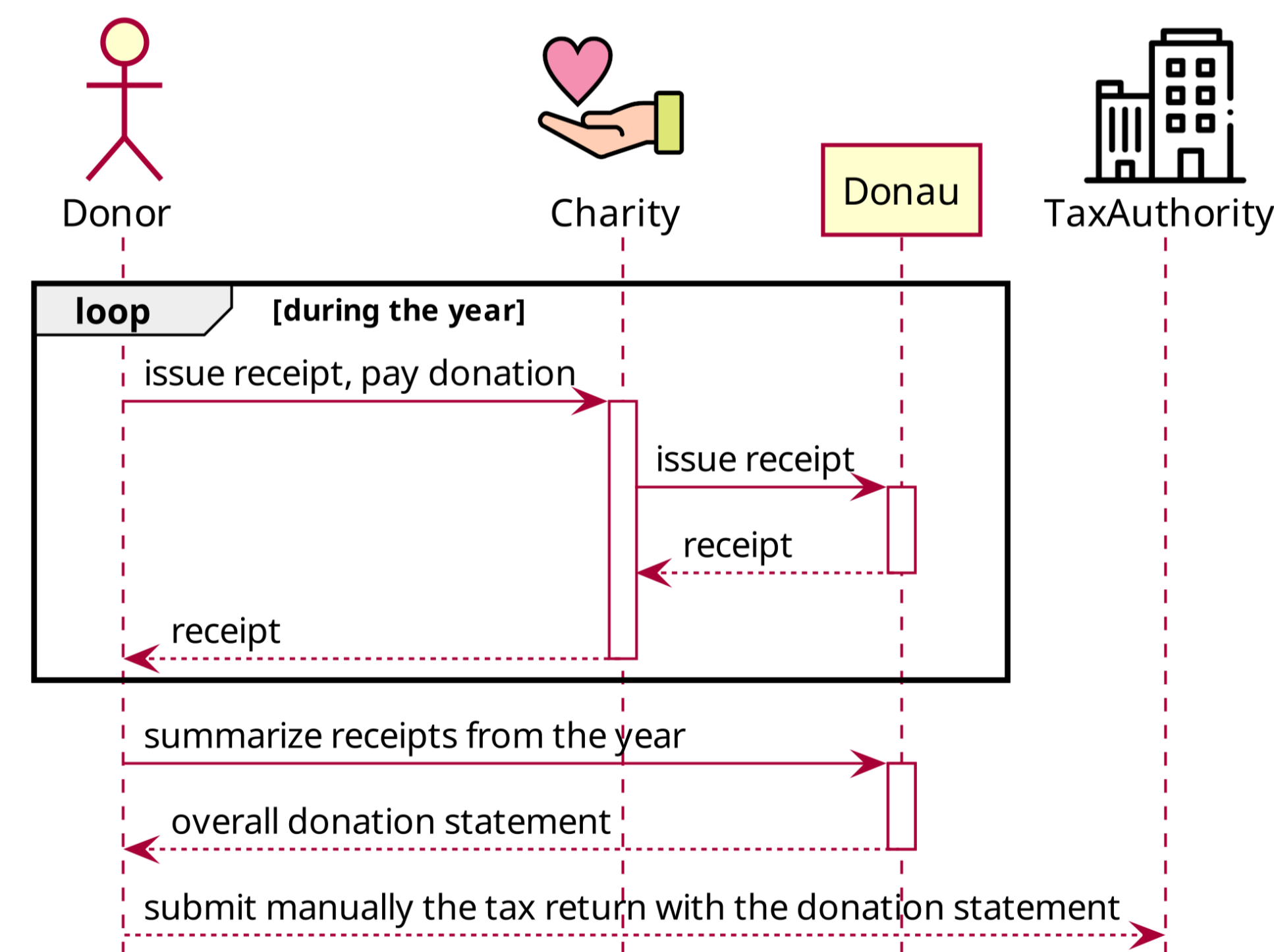
Results

The Donau is able to receive and verify donation receipts all while anonymizing the data and preserving the privacy of the donor. It further simplifies verification for the tax authority and prevents donation fraud by using signatures and keeping track of donations and charities.

Part of the thesis was an interview with the tax authority Zürich which has provided valuable insight in how donations are verified and important aspects that a system like the Donau should fulfil.

Future work

For the Donau to operate, a **charity backend** is needed together with a **wallet integration** for the Donor. Both of these components still need to be implemented in order to use the Donau system.

For more information about the thesis:

Donau: Donation Authority

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