Table of Contents

1   PREPARATIONS

1.1   Hardware Requirements

To run the 1CoinH App, you need to have a smart phone or laptop and about 50 MB of free memory. On www.1coinh.com you can download the onecoinh.apk file that you can install on your smartphone. For laptops, you can download .exe files or you can run the python3 script from our gitlab repository.

1.2   Save Your ID-Card Picture

The first thing you will do when you start the 1CoinH Peer-To-Peer personal money creation and payment app, is to create your ID-Card. You will use the 1CoinH app to create a 250x375 pixels png image with a picture of your face in the top part as shown here:

The personal picture that you will use for this, should be saved on your smartphone in a location that you are able to find using a File Manager program. The size of your picture with your face in it isn't too important because the 1CoinH app is able to scale, crop, rotate, position and even change the contrast, brightness and color-intensity of your image to make it fit perfectly on your ID-Card.

It seems sensible to use an image that has a proper resolution, so when you select the face, there is still a resolution available of about 250x250 pixels. So please look for a personal picture with your face in it and store it on your smartphone and remember the location where it is.

1.3   Install 'File Manager Plus' On Your Smartphone

Especially in the first releases of 1CoinH you will be asked to install, backup and transfer files. Using a proper file management program will be very helpful for these kind of tasks.

The Android "File Manager Plus" app is for example a file manager app that is very well suited for these tasks. So we would like to suggest you use this app, that is if you are working on an Android device and wouldn't have another file manager app already installed.
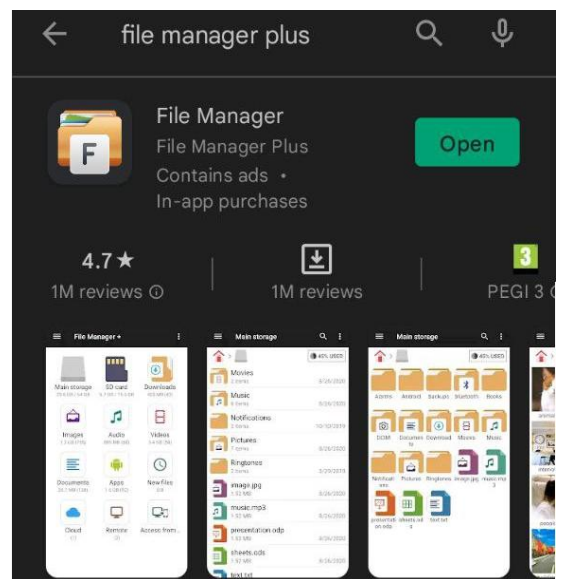
2   INSTALLING THE 1COINH SOFTWARE

2.1   Downloading The 1CoinH Zip File

Installation Instructions: Not available yet

2.2   Unzip the 1CoinH Software

Installation Instructions: Not available yet

2.3   Run The 1CoinH Program

Installation Instructions: Not available yet

3   Use The 1CoinH App

3.1   Main Functions

On the right you see the main screen (the home-page) of the 1CoinH app.

On top you see the main-menu with 3 items:

1. The "**Pay**" option to do payments;
2. The "**Receive**" option to receive payments from others;
3. The "**Cashflow**" option where you can see how many coins are in your possession and where you can see all the transactions that you did

Top Buttons
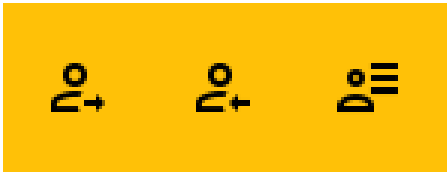
Pay | Receive | Cashbook

Bottom Buttons

Manual | About | Start

On the bottom of the screen, you find 3 additional buttons:
"**Manual**", "**About**" and a floating round button to "**Start"** creating your coins. Once you started creating coins, the "Start" button will be replaced by the "**Settings**" button in the shape of a cog.

You will see these buttons only on the home-page. So always return to this home page to find these 7 main buttons.

The first thing you want to do is go to "**Settings**" and set the language of the app and set your preferred color theme. After that, you need to create your **New IDCard** first, because your 1 coin per hour cashflow only starts once your IDCard is ready.

With the "Start" or "Settings" button, you go to "Settings". In the Settings screen you see 6 wide rounded buttons: "**User Data**", "**English**", "**Screen Color**", "**Backup**", "**Restore**" and "**Clear Data**". You also see a round "Home" button on the bottom of the screen, to take you back to the home page. The "**User Data**" button - that you need to start creating your own coins so you can do transactions - is explained in the next chapter (3.2).
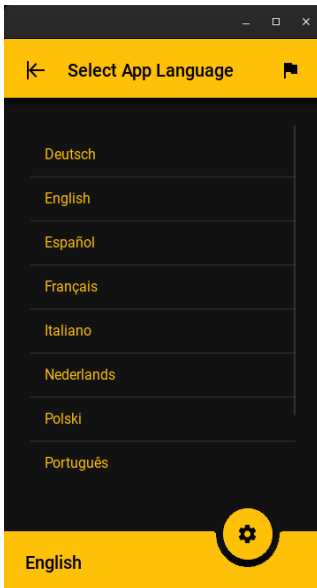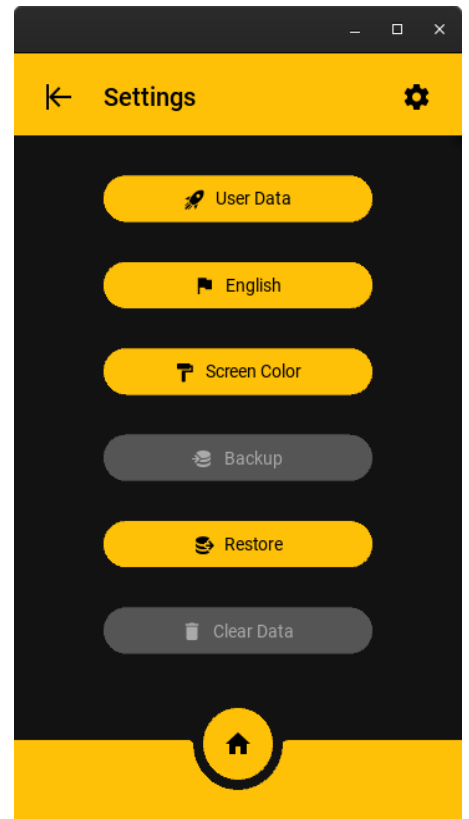
The "**English**"-button is used to set the language of the app.

The "**Screen Color**" button gets you to the Theme Color page, where you can select the color of your app.

The "**Backup**", "**Restore**" and "**Clear Data**" buttons will be described later in this document.
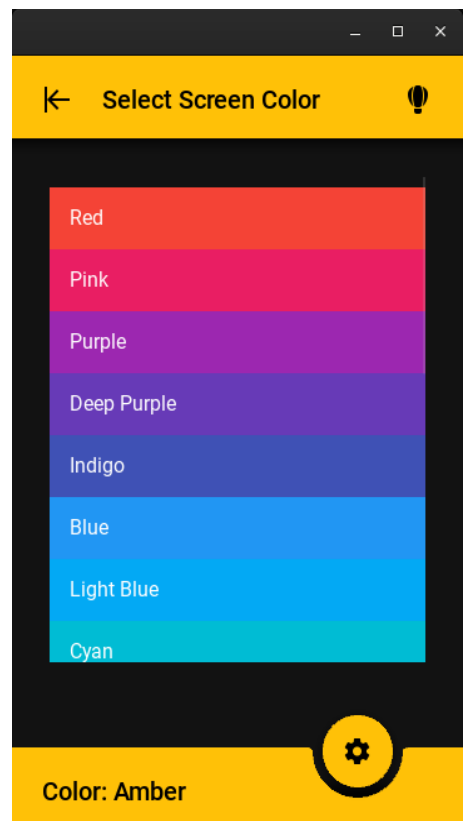
3.2 Enter Your User Data

The first step to create a system where each individual participates equally in the money creation is to establish a "Self-Sovereign Identity". A real "Self-Sovereign Identity" is nothing more than a digital identifier that can be created by any individual at any given moment with the information the individual decides is relevant. A real "Self-Sovereign Identity" identifier can be left behind and replaced by a total new one at any time by the owner when he feels like it. This means that it is up to the people around the person with the "Self-Sovereign Identity" identifier to determine if this person is or is not committing identity fraud (for example by creating multiple identifiers or using somebody else's identifier). To avoid fraud, you want to create trust. Because of that, it is better to make an identifier that leaves little doubt that it is actually you that created and owns it.

Before you can see how many coins you have and before you can do any transaction, you first need to create your personal identifier. This is how that is done:

You enter the "**User Data**" screen where you are asked to enter basic information about yourself. To make this easy, we created nine buttons where you can enter information that identifies you. The buttons range from "Name", "Birthday" to an 250x250 pixel jpeg image of your face. Once that information is entered, you click on the "**Save**" button on the bottom of the screen. The system checks then if the information is sufficient. If sufficient, this information will be stored in the ID-block of your personal blockchain that the app will make for you. Your User Data will also be "hashed". The hash is a 64 character string that makes sure the identifier you entered can not be changed. This means there is a very secure reference to your user data. This reference will be used in all the future transactions that you do. The last of a picture of your face. The App then combines all information in one 250x375 pixel png file which is then your personal "Self-Sovereign Identity" ID-Card.
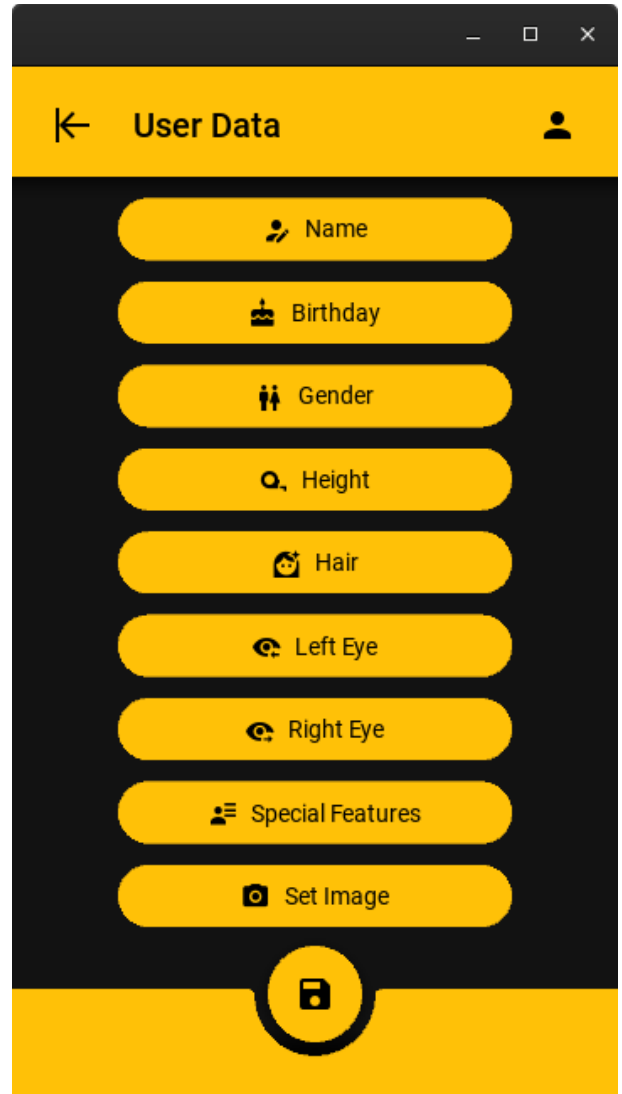
Changes
It is possible to change you user data in a later stage, but it is advisable to do this only when very important identifiers change. For example when you change from a baby into a toddler. Getting a new haircut is not a reason to change your identifier. Only when you think your User Data is really confusing people, you should update your user data. You can do this at any time you want. To update your identifiers is very easy. You simply change the items that must be changed and save your new User Data again with the "Save"-button.

Starting Over

It is also possible to start from scratch at any moment. The very important difference with changing your identity as described above, is that – when you just change your identifiers – your data keeps referring to your previous identifiers which means that you will keep your entire financial history. If you however delete all your data and create a complete new identifier, then you also lose your entire financial history and you will need to start from scratch. This is an option that should only be used by people that are forced to leave their communities because of for example violence or extortion. Once in a new society, these people can start a new Identity and make a new financial beginning. Starting over in your own community will cause you a lot of problems, because this means that all the transactions that you did with the people that trust you, become worthless in their wallets. This 'betrayal' of the people around you will follow you for a long time and will probably mean that a lot of people won't trust you to do transactions with them for a long time.

Now let's look at all these steps:

3.2.1 Name

You enter your name normally (First Name / Middle Name / Last Name). It is better to keep the name short and simple. So please don't add Mr., Mrs., Dr., Prof., MD., MBA or whatever other title you might have. It makes searching lists easier when all names are clean and short. It is required to use at least 2 words and to use a maximum of 32 characters. After entering your name, your name appears on the buttons of the IDCard page.
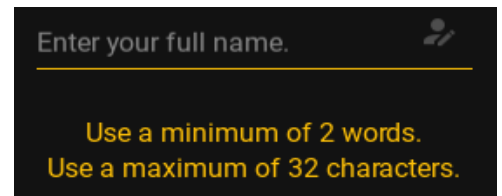
3.2.2 Birthday

The birthday can be entered by choosing the date in the calendar, or (when using the 'pen' icon, be typed in, using the indicated format: dd-mm-yyyy.
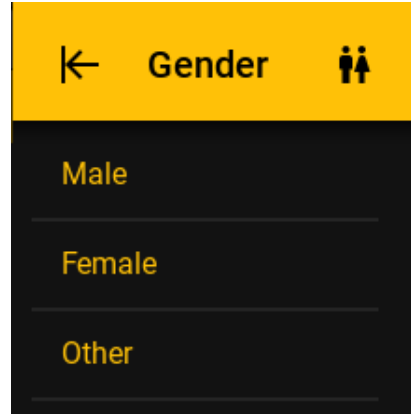
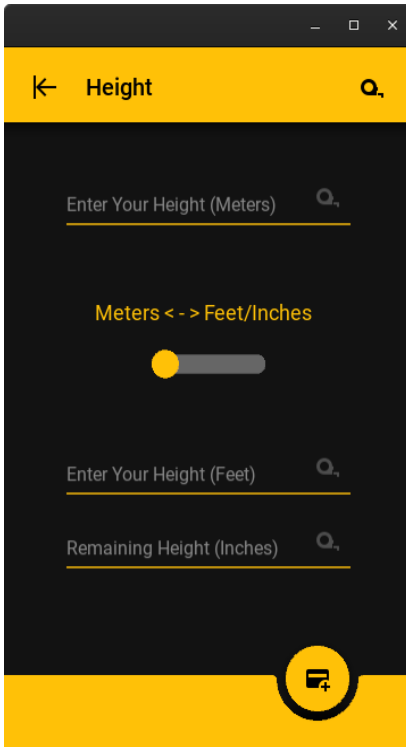After entering, you see the date you entered on the "Birthday" button on the IDCard Page.
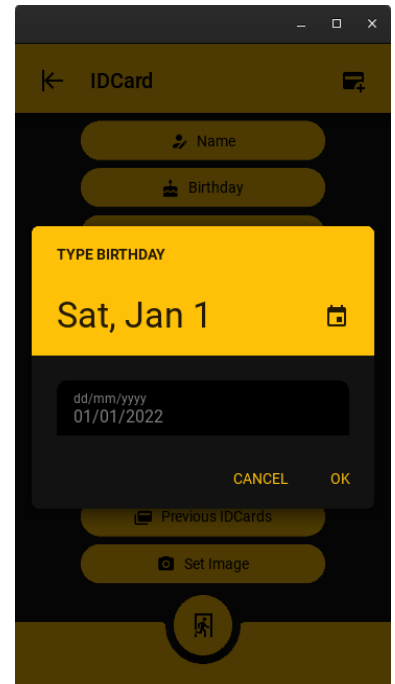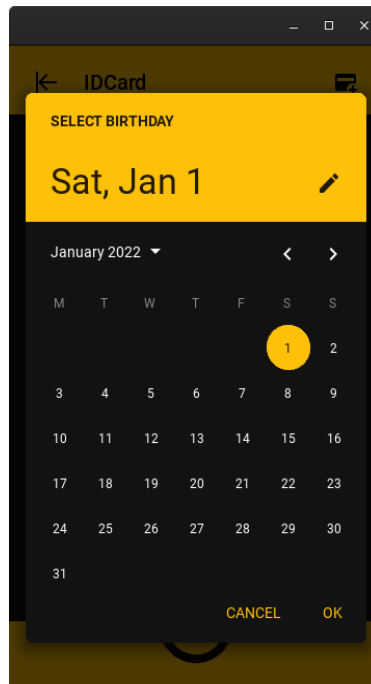
3.2.3 Gender

To make things not to complicated, you can choose between Male, Female and Other.

3.2.4 Height

For your height, you can use both the metric system or the imperial system. You select this with the switch widget in the middle of the screen.

With the metric system selected you need to type your length in meters: like 1.81

With the imperial system selected you need to enter your height in feet and inches. Like 6 in the "feet" box to indicate he number of feet. Next you enter for example 2 in the "Remaining Height (inches)" box. The app will add the "m", "ft" or "in" indicators where applicable.

3.2.5 Hair

For indicating your hair color, you can simply choose from the list that is provided in this page.
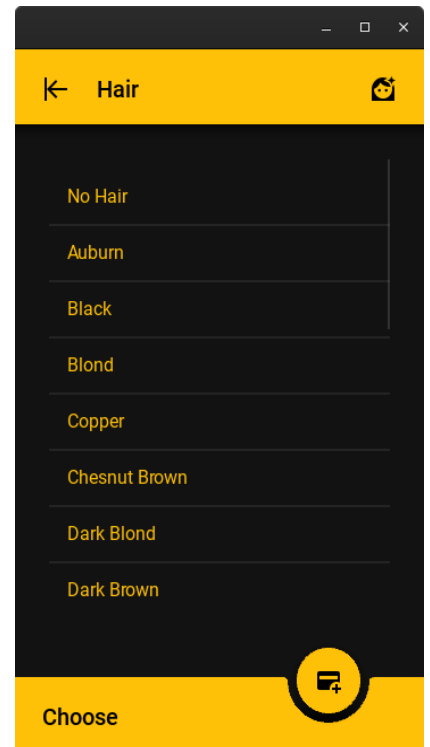
3.2.6 Eyes

Because some people have eyes where the left color differs from the right, or could miss one of their eyes, we made 2 screens to indicate the color of your eyes separately:
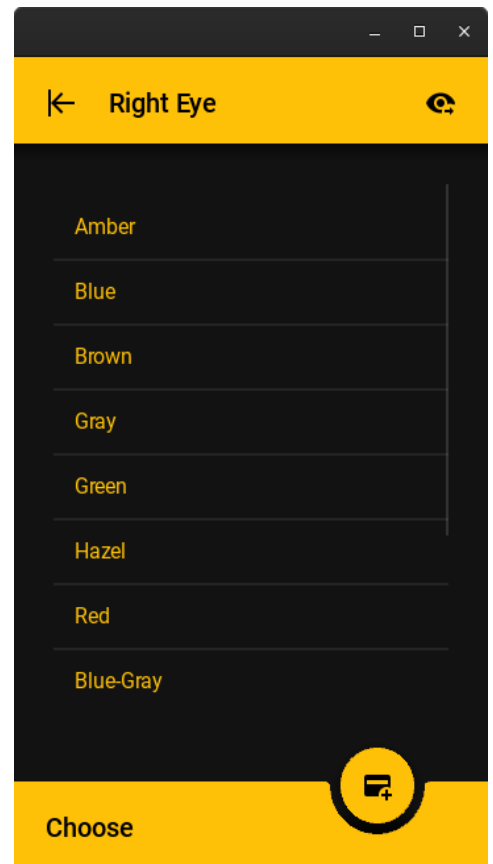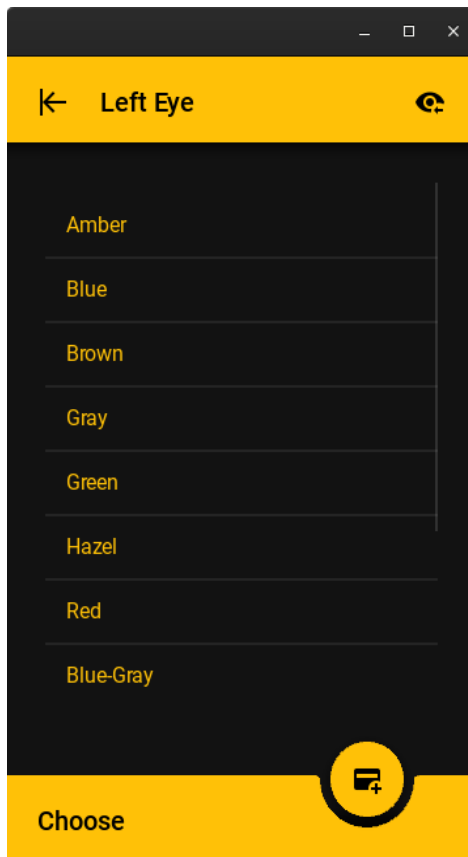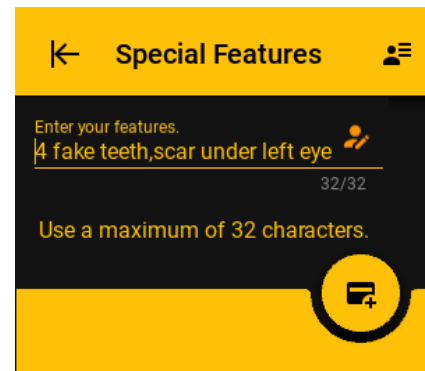

3.2.7 Features

Special features like a tattoo, scars or other features that are unique, will help other people to identify you:

3.2.8 Set Image & Generate ID-Card

After clicking the Set Image button, you see a small image manipulation feature where you can load, adjust and save an image of your face. With the download icon you go through the folders of your smartphone or laptop, to find one of your images that show your face. The image on the ID-Card is (wxh) 250x250 pixels. So it would be good to select an image of a resolution that is sufficient for you to crop out your face where the cropped part of your image is also around 250x250 pixels.
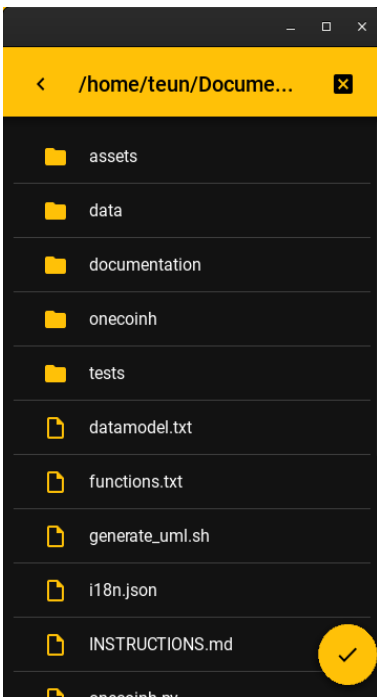
Once you selected your image, this image is presented in a part of the app where you can position, scale and rotate your image. This way you can quickly position, scale (and if needed rotate) your image in a way that your face is nicely centered in the 250x250 pixel window that is presented on your screen.

In the screen you see 1 slider. Based on the selection, the slider helps you to adjust the image:

- **Hor**: Use the slider to move the image horizontally
- **Ver**: Use the slider to move the image vertically
- **Scale**: Use the slider to scale the image
- **Col**: Use the slider to adjust the color level of the image
- **Scale**: Use the slider to adjust the brightness of the image
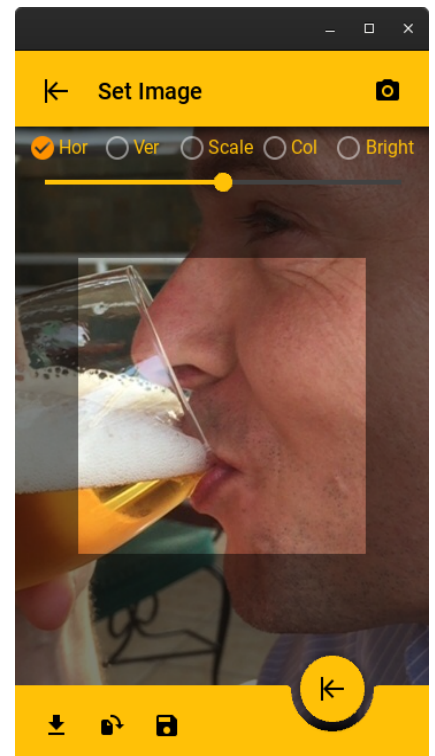
With the "**Rotate**" button on the bottom of the screen you can rotate the image. Once everything is set properly, you can save the image by using the "**Save**" Icon on the bottom of the screen.

Once you are happy with all the identifiers, you press the "**Save**" button, so the program will now generate your personal blockchain.

3.3   Manual

In the manual section you are simply referred to this PDF that you can download from the www.1CoinH.org website.

3.4   Settings

On the settings page there are a few options

you can choose:

The first option is to set your user data. You need to do this once to start creating your coins and be able to do transactions and inspect your cashbook.

You can also select the language of the app and the screen colors that are used in the app.

For security and support the "**Backup**" and "**Restore**" options are included on the Settings page. It can also help you to transfer the app from one device to another.

IMPORTANT!
Be very careful with restoring your data! When you don't have all transactions that you did, including the very most recent ones, and you still decide to restore your data, then others will consider your personal blockchain fraudulent.

If you want to secure your data by backing them up, it might be an idea to use two separate devices that you immediately backup after each transaction. In a later stage, the backup function will be automated to reduce issues with losing or corrupting your device massively.

It is also important to use the 1CoinH app on only one device. If you want to migrate your data to another device, the backup and restore options will be essential!

Clearing your local data
When you remove the 1CoinH software from a device (for example when you decide to start using another device for the 1CoinH app), you can clean your browser by using the "Clear ALL your local data" button, before you uninstall the 1coinh app from your device.

3.5   About

In the about section you find the version number of the software you are using and the references to the 2 websites where you can find additional information: www.1coin.com and www.gitlab.com/1coinh.
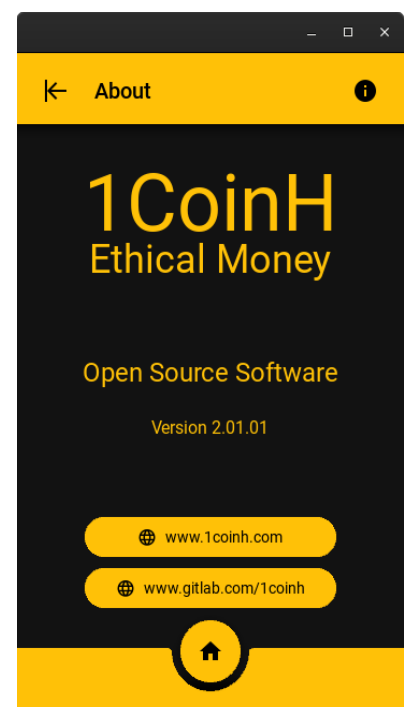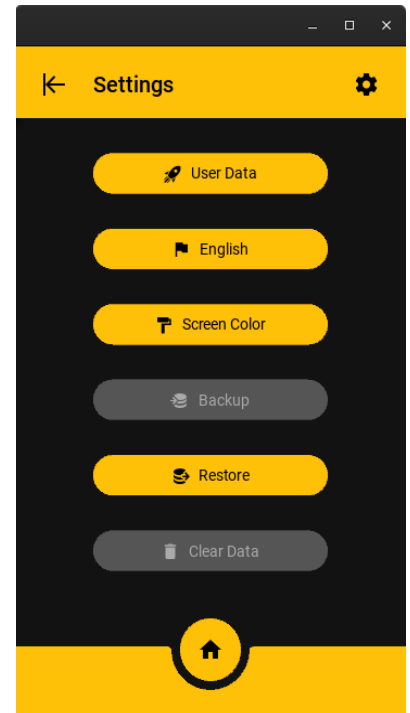
3.6 Cashflow

3.6.1 Overview

Now your ID-Card is ready, you can finally check how many coins you have. On this screen you can also see the depreciation of 35% per year at work:

The first thing you see is the current date. This is because the 1CoinH app depreciates all the created coins but also the totals of all coins you received and paid up to the current hour.

In gray you see the coins that are created on your behalf. These are equal to the hours that have passed between January 1st 2022 at 01:00 and the date and hour that is shown above it.

In white you see the present value of your self created coins. In this example you can see that you received 3,182 coins in 4 and a half month, but that you also lost about 278 coins due to the 40% yearly depreciation (that is being calculated proportional to every hour passed).

In the first red number you see how many of your own coins you have spent. Below that you see in white the amount of coins you have received from others and in red how many of those you have spent.

These amounts are all in present value, meaning that the time that has passed between the transaction and the now is used to immediately depreciates all the coins that are in your possession. This also means that the sum of all these depreciated coins result in the golden colored amount that is actually available to you in this very hour.

The "Transactions" button takes you to the individual transactions with a lot more detail.

3.6.2 Transactions

In this section of the 1CoinH program, you are presented the details of every transaction you did.

The first number you see is amount that was paid at the moment of the transaction. The second number gives you the present value of the amount that was paid. Next you see the date and time of the transaction. And the person that paid or received the coins.

With the buttons "Back" and "Forward" you can navigate through all your transactions.
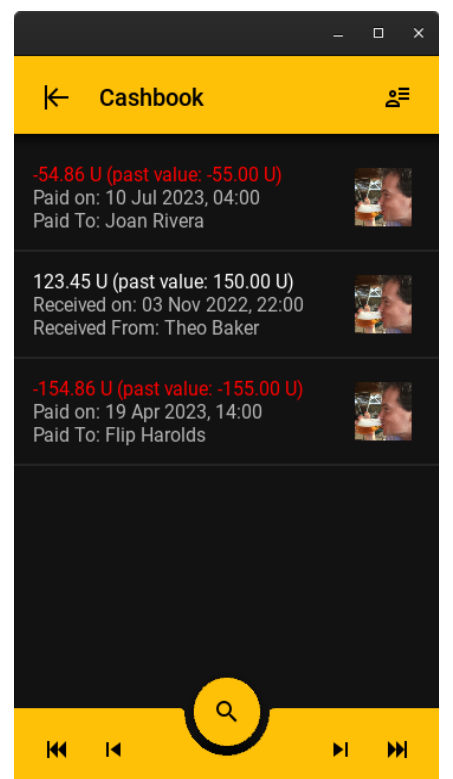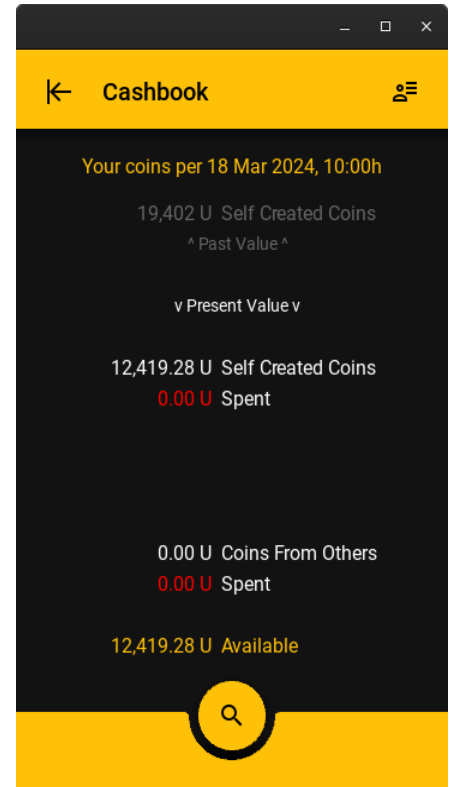
When you click on the transaction, the transaction details appear like shown here:

By using the "Magnify-Button", you are navigated to a page where all the (maximum 6) originators of the coins are listed. By clicking on the avatars, you get to a page where you see the IDCard of the person in the transaction list. If you have information that the coins of this person are not "legit" in any way, you can mark this person as "a fraud".
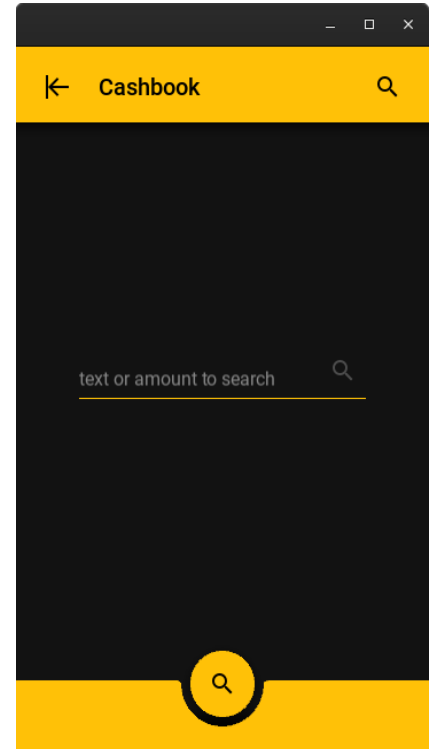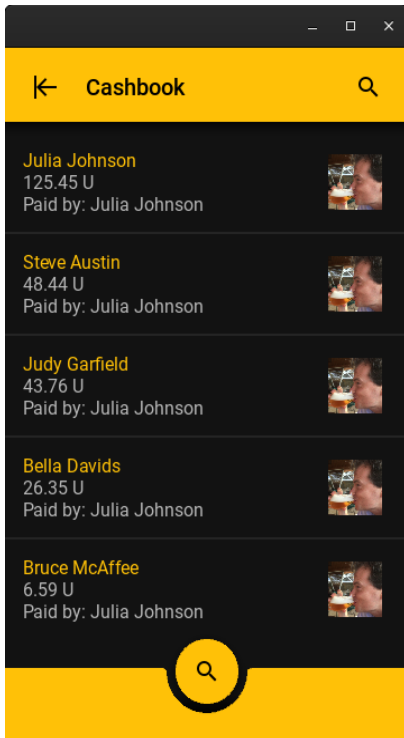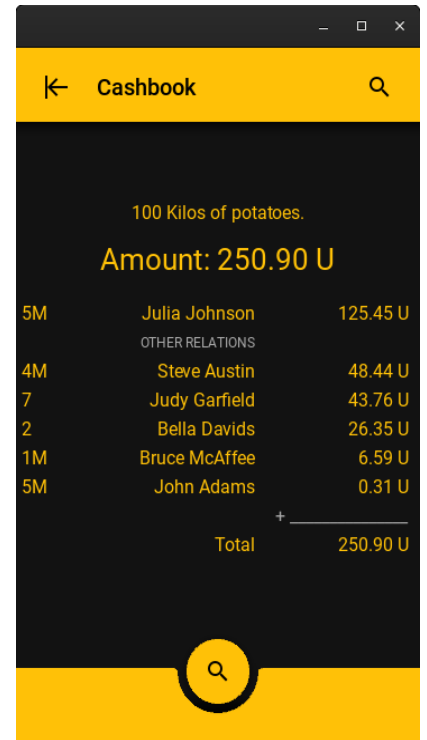
There is also a search screen where you can search through all your transactions and look for pieces of text or for specific numbers. The app will organize the search results in the window that is portrayed at the bottom of the previous page.

Cashbook

100 Kilos of potatoes.

Amount: 250.90 U

5M	Julia Johnson	125.45 U
	OTHER RELATIONS	
4M	Steve Austin	48.44 U
7	Judy Garfield	43.76 U
2	Bella Davids	26.35 U
1M	Bruce McAffee	6.59 U
5M	John Adams	0.31 U
	+	
	Total	250.90 U

Cashbook

Julia Johnson
125.45 U
Paid by: Julia Johnson

Steve Austin
48.44 U
Paid by: Julia Johnson

Judy Garfield
43.76 U
Paid by: Julia Johnson

Bella Davids
26.35 U
Paid by: Julia Johnson

Bruce McAffee
6.59 U
Paid by: Julia Johnson

Cashbook

Teun van Sambeek
13-Feb-1955   Male
1.80m   Dark-Blond Hair
Eyes: Blue-Green
Scar under left eye 4 fake teeth
1CoinH ID-Card01   19 Jun 2022

Mark As Fraud

Cashbook

text or amount to search

3.7   Pay / Receive

3.7.1 File Transfer Without Internet

After saving your identifiers, the 1CoinH App also creates your personal Blockchain. This files is stored locally in your device. When you do a transaction, this fully up-to-date file is shared with the person you transact with and obviously, the two personal blockchains are exchanged when you both agree on a transaction. These files can be exchanged for example by saving them directly to a mini-USB-stick that you stick into your smartphone and asking the person you transact with to load the file from the mini-USB-stick. But the files can also be exchanged by a direct connection between two smartphones using a Bluetooth or WiFi-direct connection. We can also use the internet for this exchange, but there is a very important reason why we insisted on a payment system that still works when there is no internet available.

Similar to your identity, that we made really self-sovereign, we are convinced that also the data communication must be fully self-sovereign. Self-Sovereign communication means that there always must be at least one way of exchanging your payment files without any other person or entity able to interfere or block that exchange. It means that the 1CoinH payment system must be able to operate without the internet. This is because we know that it is just a matter of time that the multinational telecommunication companies that run the internet and it's infrastructure including the internet service providers and satellites will force anybody that wants to use their infrastructure to accept their (non-self-sovereign) digital ID and will block anyone without their digital ID their access to the internet. When this happens (and its just a matter of time) than no payment system that is fully under their control will be allowed. It is to be expected that they will ban all crypto (they will say it is not safe because "too many people got hurt in the many crypto crashes") and will only allow the Central Bank Digital Currency to be traded on "their" internet.

This is the reason that 1CoinH is setup in a way that both your identifiers and all your Digital Transactions are all fully and pure self-sovereign. With this, 1CoinH is the only digital financial system out there that has these pure self-sovereign features. It is the only digital coin that can be traded when the internet is down.

3.7.2 Cumbersome manual file transfers

Once we achieve the 1CoinH App to establish direct communication between the two smartphones of people that want to do a transaction, the users of the 1CoinH app don't need to bother about which files to transfer in the payment process. But until that moment, the users need to exchange files manually to establish a transaction. It is obvious that realizing the direct connectivity will improve the usability of the 1CoinH app massively. we think it is however important to release the 1CoinH program with the somewhat cumbersome manual transfer of files. This way people can learn about the 1CoinH concept better, and look for ways to develop the direct connectivity later, but off course as soon as possible.

3.7.3 The Payment Process

The first step in the payment process it that the person who is about to pay creates a snapshot of the Transaction Partners (TP's) in his Personal Blockchain (PB).
Currently, the payment process works like this:

Step 1 (Payer)   The person that pays clicks his payment button in the home-screen. Automatically, the app takes a 'snapshot' from all data of the payers IDCard and Personal Blockchain that might be relevant for the transaction and shows that data in a QR-Code on his device.
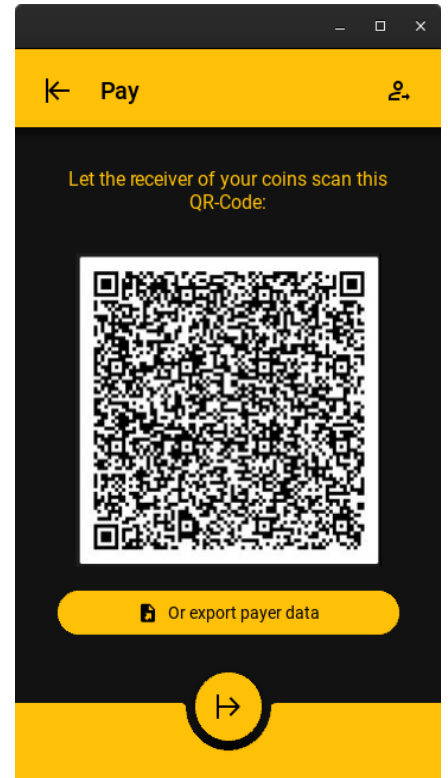
Step 2 (Receiver) The receiver of the coins clicks the receive button on the home-screen.The app automatically opens a QR-scanner so the receiver can use his phone to scan the transaction data from the payer.
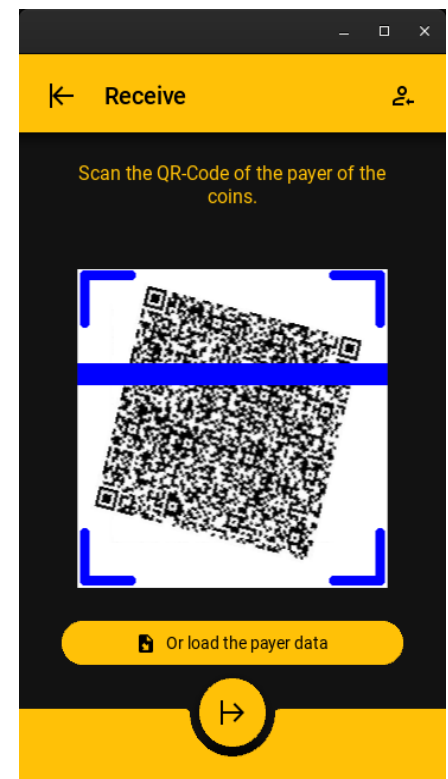
Step 3 (Receiver)

The app checks if the receiver has mutual contacts to the payer and makes a selection based on the sort settings. The receiver enters the description of the transaction, the amount of the transaction and uses the slider if he wants to change the part of the coins he wants to be originated by the payer himself.

By using the "Descending", "Ascending" or "Random" sort buttons on the bottom of the screen he can change the selection of the app. With "Descending" selected, the "Other Relations" that have the biggest amounts of coins in the Payers Personal Blockchain will be shown first. With "Ascending" selected, the relations of payers with the smallest amounts are selected first. With "Random" sort selected, the other relations are simply random selected.

There is also a 4th (manual) option. This is the button with the "Fountain Pen" Icon. When the receiver selects this option, he is led to 2 pages where he can do a manual selection from the list of "Other Relations" in the Personal Blockchain of payer.
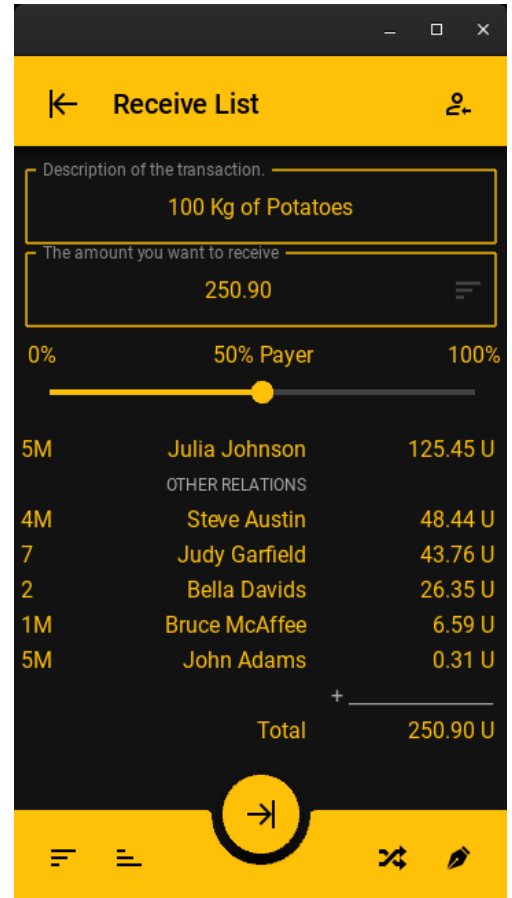
The number/letter combination in front of the names form a "Security Indicator". It is a combination of a number, which ranges from 0-9 where a person has:

- 0: 0-2 different transaction partners
- 1: 3-5 different transaction partners
- 2: 6-9 different transaction partners
- 3: 10-19 different transaction partners
- 4: 20-49 different transaction partners
- 5: 50-99 different transaction partners
- 6: 100-199 different transaction partners
- 7: 200-499 different transaction partners
- 8: 500-999 different transaction partners
- 9: 1000 or more different transaction partners

The "M" means "mutual transaction partner" which means that the originator of the coins is already present in both the Personal Blockchain of the payer and receiver. These codes are used to give you an indication of the confidence level of the people the app proposes you to accept as the originators of the coins you are going to receive.

A very important feature of the 1CoinH system is that the originator of the coins is always remembered. This allows receivers to refuse coins from people that (possibly) committed fraud or just are not well known.

The possibility to refuse coins will make every 1CoinH user aware that it is very risky to accept coins without checking the identity of a person properly and comparing relevant personal blockchains (which is done automatically by the app).

By refusing fraudulent coins and the fast (35%) depreciation, the value of these coins will disappear from the economy very fast. And because the blockchains always trail back to the people that committed fraud, people will understand very quickly that fraud or theft is quite pointless.

This decentralized defrauding system are together with the full decentralization, the internet independency and the only real Self-Sovereign Identity system the most important features of 1CoinH. It is why 1CoinH differs from all other digital financial systems that are all based on secrecy. Secrecy ultimately means that theft can't be prevented.

Set The Originators Manually
The receiver can change the list of 5 originators manually, using the fountain pen icon. Normally this would not be necessary because the advice of the app should be already close to the receiver of the coins choice. If the receiver still wants to intervene, this is how that looks like:
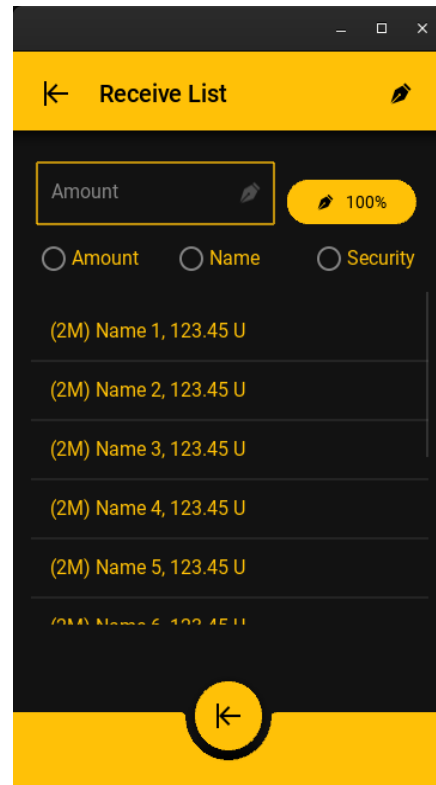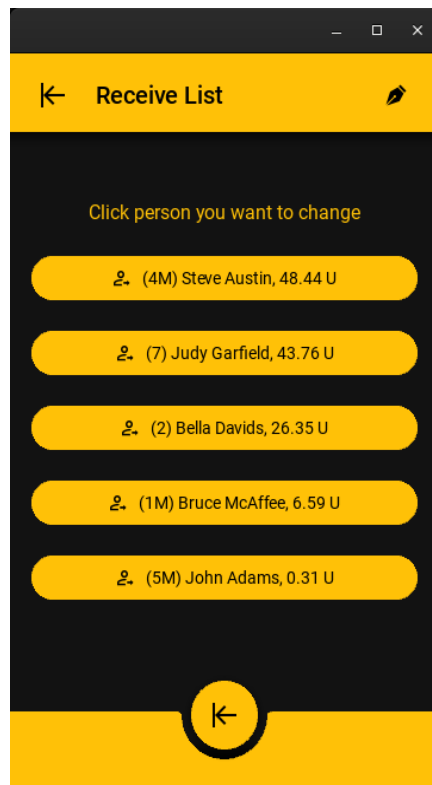
Step 4 (Receiver)   Once the receiver is ready with selecting the 5 other relations, he continues and the app shows the "Proposal-QR-Code":
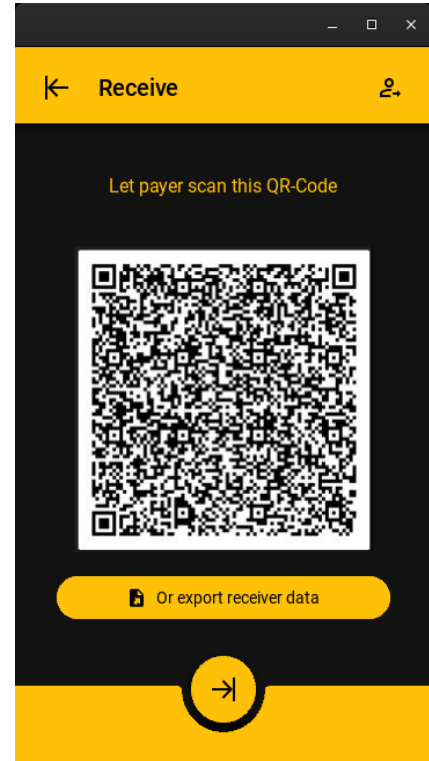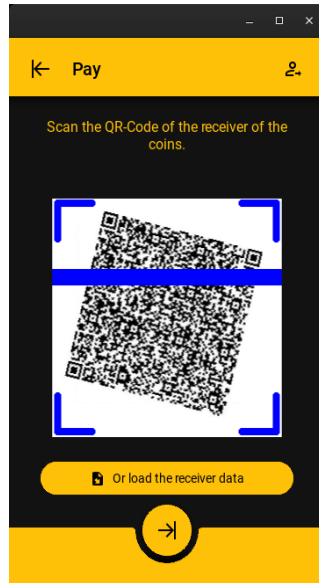
Step 5 (Payer)   The payer scans the QR above. The app shows the transaction data for the payer to check if everything is okay and press the accept button that starts the app to process the payment in the PB of the payer.

Once the payer informed the receiver that he accepted the transaction, the receiver presses the "Payer accepts your proposal" button and the app of the receiver processed the transaction in the PB (personal Blockchain) of the receiver.

Step 6 (Both)   Later the PB's of the Payer and Receiver are exchanged together with the relevant PB's of the other originated coins in the transaction so that both transaction partners can check the payment again and take the steps that are needed if everything is okay or when there are problems with the transaction.