Designing Lightning wallets for the Bitcoin user
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https://patestevao.gitbooks.io/lightning-network-ux-ux-research/
Usability and wallet security

• Usability: what and why?

• The Bitcoin financial revolution needs interfaces.
From Bitcoin to the Lightning Network
New complexities

To whom?
New complexities

To whom?

• Remove unnecessary complexities and don’t break the user’s mental model
Looking at the wallet

The one we need, not the one we deserve.
Pay

Address

Amount

Label

Priority
Channels
Open Channel
We couldn’t find a route for your payment.
Do you want to connect directly with your peer?

Connect

Cancel

SEND

Settings

$ CURRENCY

US Dollar

Bitcoin Unit (BTC)

$ $ EXCHANGE RATE

Bitstamp

SECURITY

Change PIN

See backup

Enable touch ID

LIGHTNING ACTIONS

Channels List

Open Channel

Network address

Settle Lightning Funds
## Channels Page

<table>
<thead>
<tr>
<th>Channel Name</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y'allis</td>
<td>0.0001</td>
</tr>
<tr>
<td>eclair</td>
<td>0.0001</td>
</tr>
<tr>
<td>my channel buddy</td>
<td>0.0045</td>
</tr>
<tr>
<td>transaction hub</td>
<td>0.0002</td>
</tr>
<tr>
<td>The Block</td>
<td>0.000001</td>
</tr>
</tbody>
</table>
Settle Lightning Funds

0.15 BTC available

Amount to settle

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BTC</strong></td>
<td>0.05</td>
</tr>
<tr>
<td>**US$$</td>
<td>323.30</td>
</tr>
</tbody>
</table>

Priority

- Low
- Normal
- High

Fee: US$ 1.15 (50 sat./byte)

Set custom fees

Cancel

SETTLE NOW
Channels Page

LIGHTNING ACTIONS

Channels List
Open Channel
Network address
Settle Lightning Funds

Channels

2.1543 BTC
2.0043 BTC
0.15 BTC

My network address

- Y'alls
  02212d3ec87188b284dbb7b2e6eb40629a9e
  0.0001

- eclair
  02212d3ec87188b284dbb7b2e6eb40629a9e
  0.000001

- my channel buddy
  02212d3ec87188b284dbb7b2e6eb40629a9e
  0.0045

- transaction hub
  02212d3ec87188b284dbb7b2e6eb40629a9e
  0.000002

- The Block
  02212d3ec87188b284dbb7b2e6eb40629a9e
  0.000001

OPEN CHANNEL +
Channels Page
Lightning cues
Lightning cues
Lightning cues

<table>
<thead>
<tr>
<th>Description</th>
<th>BTC</th>
<th>USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying socks</td>
<td>- 0.00065 BTC</td>
<td>- US$ 5.00</td>
</tr>
<tr>
<td>Received</td>
<td>+ 0.002 BTC</td>
<td>+ US$ 15.42</td>
</tr>
<tr>
<td>Pay back John</td>
<td>- 0.01298 BTC</td>
<td>- US$ 100.00</td>
</tr>
<tr>
<td>Sent</td>
<td>- 0.001298 BTC</td>
<td>- US$ 9.98</td>
</tr>
<tr>
<td>Paying rent</td>
<td>- 0.1 BTC</td>
<td>- US$ 762.7</td>
</tr>
</tbody>
</table>
## Lightning cues

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Amount</th>
<th>Date</th>
<th>Currency</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying socks</td>
<td>- 0.00065 BTC</td>
<td>13:34h</td>
<td>- US$ 5.00</td>
<td></td>
</tr>
<tr>
<td>Received</td>
<td>+ 0.002 BTC</td>
<td>06:30h</td>
<td>+ US$ 15.42</td>
<td></td>
</tr>
<tr>
<td>Pay back John</td>
<td>- 0.01298 BTC</td>
<td>Apr. 20th, 2018</td>
<td>- US$ 100.00</td>
<td></td>
</tr>
<tr>
<td>Sent</td>
<td>- 0.001298 BTC</td>
<td>Apr. 12th, 2018</td>
<td>- US$ 9.98</td>
<td></td>
</tr>
<tr>
<td>Paying rent</td>
<td>- 0.1 BTC</td>
<td>Jan. 15th, 2018</td>
<td>- US$ 762.7</td>
<td></td>
</tr>
</tbody>
</table>
Know your user

• I’ve been talking mostly about the general non-technical users, so far.
The user who understands just enough
Lack of usability can be a feature
TL; didn’t listen

- We can build Lightning tools that don’t necessarily break the user’s mental model.

- Lightning wallet interfaces don’t need to be very different from Bitcoin wallets, after all.

- It’s our responsibility as tech creators to deliver it.
Thank you!

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