



## Supported Self-Driven Learning Operating System

# Blockchain By Example

By example learning about the blockchain  
("on-chain") values & usage.

Version 0.3

### Disclaimer;

Some of the tasks require setting up an exchange account and using cryptocurrency. In no way is this to be considered financial advice. You need to consider all the risks on your own account and do your own research - always!

### Being safe;

**! Important;** Never give your wallet passwords or crypto seed-phrase (the list of words) to anyone, including us (we will never ask, but someone pretending to be us might) - no matter how much they appear to want to help you.

See the *Protecting Your Blockchain Assets* section for more tips.

**If you have any questions/clarifications about the blockchain now or in the future please email us at [team@selfdriven.cloud](mailto:team@selfdriven.cloud).**

## Background

We are using the Cardano Block chain; <https://cardano.org>, You will need ADA (the currency of Cardano) to pay for the usage of Cardano or to stake etc as we work through the tasks below.

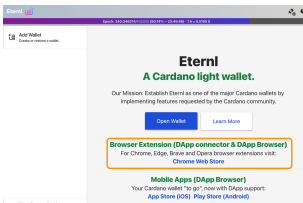
We recommend using the [Brave](#) browser (a version of Chrome with better privacy), but can use Chrome if you choose.

## Tasks

### Getting ADA;

#	Task	Notes
1	Create a <a href="https://www.coinspot.com.au">https://www.coinspot.com.au</a> account - or use an exchange you prefer. The main thing is that you can buy ADA. Going forward we will be refer to this as the Central Exchange (CEX).	For this learn by example you will need at least 10 ADA.
2	Log on to the CEX (eg CoinSpot). Follow the instructions to deposit \$AU dollar.	
3	Once you have the deposited funds can be seen, go to Buy and search for ADA and click Buy and enter 10 or whatever you prefer.	

### Setting up a Wallet;

#	Task	Notes
1	<p>You can use any cardano wallet you prefer. We will be using <a href="#">Eternl</a> for this learning.</p> <p>Using Brave or Chrome browser; Go to <a href="https://eternl.io">https://eternl.io</a> and <b>follow the instructions to install the extension.</b></p> <p>You must install the extension for the following steps to work, You can not use the webpage/app.</p> <p><b>! Important; Make sure you store your seed phrase (24 words) and the spending password in a safe place.</b></p> <p>You will need the <i>spending password</i> every time you do a blockchain transaction.</p>	 <p>The screenshot shows the Eternl website with the heading 'Eternl A Cardano light wallet.' Below this, there are buttons for 'Open Website' and 'Learn More'. A yellow box highlights the 'Browser Extension (DApp connector &amp; DApp Browser)' section, which includes instructions for Chrome, Edge, Brave and Opera browser extensions and a link to the Chrome Web Store. Below that, there is a section for 'Mobile Apps (DApp Browser)' with instructions for Android and iOS app stores.</p>

2	Create wallet by clicking on the extension and then clicking Add Wallet, Create Wallet	
3	Once complete click on the Wallet the Receive tab and copy the wallet address. It starts with "addr1".	

## Sending ADA to Wallet;

#	Task	Notes
1	Logon to your CEX (eg Coinspot) and click on the ADA wallet. Click Send and follow the instructions using the address as the one you copied about when setting up your wallet (it starts with <code>addr1</code> ).	
2	Once you have sent and confirmed the withdrawal from the CEX, you will see the ADA in your Eternl wallet.  It can take from 30sec to 10min for the ADA to appear, based on the usage of the Cardano blockchain at that moment.	

## Staking your ADA;

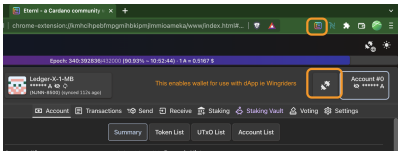
You can delegate your ADA to earn rewards as part of the blockchain validation process.  
Your ADA stays in your wallet under your control.

#	Task	Notes
1	Open Eternl, click on your wallet and click on the Staking tab.	
2	Select a pool to delegate to and follow the prompts	eg WYACO

## Putting your ADA to work;

You can provide liquidity to a Decentralised Exchange (DEX) in the for of ADA and another token traded on the DEX. In this example we are using [Wingriders](#) DEX, but you can use any Cardano based DEX. Just always check that it is legitimate. Email us if not sure.

**! important;** This requires your wallet to interact with a dApp, so you need to enable that within your Eternal wallet. To do so see step 1 below.

#	Task	Notes
1	<p>You will need to enable your wallet for use with dApps (like Wingriders).</p> <p>Click the power-lead icon to connect it together - it will go green.</p>	
2	Go to <a href="https://www.wingriders.com">https://www.wingriders.com</a> and familiarise yourself with how it works and the concept of Impermanent Loss.	
3	Once you are sure you want to proceed (recommend starting with a small amount of ADA as you can always add more later) go to <a href="https://app.wingriders.com">https://app.wingriders.com</a> .	
4	First thing you need to do is swap some of your ADA for another tradable token in this example we will use <a href="#">MELD</a> .	You may need more than 10ADA to cover fees etc - say 25ADA.
5	Swap 10ADA for MELD.	
6	Once swap complete; click "Pools" and for ADA/MELD click MANAGE and click MAX for MELD token, click ADD LIQUIDITY and follow the prompts.	You are now a DEX Liquidity Provider - help other people swap and collecting a fee.
7	<p>Now that you are a Liquidity Provider you will see LP tokens in your wallet, you can additional lock them in the exchange and earn more rewards. This uses a smart contract to hold the LP tokens, ie take them from your wallet. You then use harvesting to return them. But essentially you are trusting the DEX Smart Contract, so do your own research. We are using Wingriders in this example as they have a strong background in Cardano.</p> <p>Using <a href="https://app.wingriders.com">https://app.wingriders.com</a> click FARMING and for ADA/MELD select MANAGE and follow the prompts.</p>	Your LP tokens are now locked in the DEX and will earn you extra rewards if (for Wingriders) you leave them in there for a complete epoch (5 days). You are being rewarded for providing stability to the DEX as it needs liquidity to operate.

# Protecting Your Blockchain Assets

1. **Never give your wallet passwords or crypto seed-phrase (the list of words) to anyone**, including us (we will never ask, but someone pretending to be us might) - no matter how much they appear to want to help you.
2. **Consider getting a Hardware Wallet to store and protect your secret keys.** Two widely used hardware wallets are:
  - a. Ledger; <https://www.ledger.com>
  - b. Trezor; <https://trezor.io>
3. **Store your wallet seed-phrase using a device like the Billfodl;** <https://shop.ledger.com/products/the-billfodl>
4. Generally apply the rule “**if it looks too good to be true, it probably isn’t**”
5. **Watch out for “we can help you” scams**, they are very sophisticated.

## Restoring a wallet;

If you should lose your computer or want to set up an existing wallet on a new computer/device, you can do so using the 24 word seed phrase that you recorded when originally creating the wallet.

<b>If you have lost your spending password and you have your 24 word seed phrase</b>	After confirming you have the 24 word secret phrase, then uninstall the extension else using Chrome/Brave click the People menu item and then Add Person... - once person added then install the Eternl extension, and once installed, click <b>Add Wallet</b> and then select <b>Restore Wallet, Select 24 Word</b> and follow the instructions.
<b>Lost computer or want to install on new computer/device</b>	Install Eternal (as per instructions early in this document) and then click <b>Add Wallet</b> and then select <b>Restore Wallet, Select 24 Word</b> and follow the instructions

# References

- **Cardano Onboarding;**  
<https://www.essentialcardano.io/article/your-cardano-onboarding-guide>
- **Peter Bui - Learn Cardano Podcasts;**  
<https://cardanode.com.au/category/learn-cardano-podcast/>
- **Cardano Projects;**  
<https://www.cardanocube.io>
- **Scam Protection;**  
<https://medium.com/copiwatch/the-cornucopias-crypto-scam-prevention-manual-3090a174f728>
- **Gamified ADA Staking;**  
<https://metadams.io>
- **Crypto Glossary;**  
<https://ardana.substack.com/p/glossary>
- **The science and technology be find the shift in society;**  
<http://www.selfdriven.foundation/the-shift>