

ALEXANDER BABINETS

CRYPTO 101

A Beginner's Guide



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Disclaimer

Before we get started, a quick but important note:

This book is for educational purposes only. It is not financial, legal, or investment advice. I'm not here to tell you what to buy, sell, or do with your money. Everything you read in *Crypto 101* is meant to help you understand the basics of cryptocurrency—so you can make your own informed decisions.

Crypto can be risky. Prices go up and down, scams exist, and no outcome is guaranteed. If you decide to invest in any digital assets, you do so at your own risk. Please do your own research, be cautious, and talk to a qualified financial professional if you're unsure.

In short: I'm here to educate, not to promise results. What you do with the information is entirely up to you.

Now that we've got that out of the way, let's get to the good stuff.

First edition

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Preface

Hi there—glad you’re here.

If you’re holding this book, chances are you’re curious about crypto but maybe a little overwhelmed. I get it. The world of Bitcoin, Ethereum, and digital coins can sound like a foreign language. That’s exactly why I wrote *Crypto 101*—to make sure it doesn’t have to be.

This book is a **very simple, step-by-step manual**. No complicated words. No techy jargon. No hype. Just plain English and real explanations that anyone can follow, even if you’ve never bought a single coin or opened a crypto app before. It’s written for everyday people—like you and me—who just want to understand what crypto is, how it works, and how to avoid the mistakes so many others have made.

My name’s Alexander Babinets. I’ve been in the crypto world for a while now. I’ve seen the good side—yes, crypto changed my life over the years—but I’ve also seen the ugly. People losing their savings to scams. Friends getting tricked by fake “experts” online. One lost \$10,000 overnight. Another handed over her rent money to someone who promised big returns. It’s painful, and it happens way too often.

That’s why I created this book. Not to sell you something. Not to convince you to go all in. Just to give you a clear, honest starting point so you don’t fall into the traps. Think of it like a safety guide and roadmap rolled into one. You’ll learn what crypto is, how to try it out safely, how to protect your money, and how to avoid being fooled by hype or scams.

If you’re ready to put in \$20 to test the waters, great. If not, that’s fine too—just read along and learn first. There’s no pressure here. I’m not promising riches, and I’m definitely not here to push you into anything. I’m just here to walk you through it, one easy step at a time.

This isn't a flashy book. It's a friendly one. Like having a chat with someone who's been there, made some mistakes, and learned how to do it right. And now? I'm passing that on to you.

So grab a coffee, get comfortable, and take your time. The next section is your starting line. I'll meet you there.

Let's keep it smart. Let's keep it safe. Let's keep it simple.

—Alexander Babinets

Introduction

Hey there—and welcome to *Crypto 101*. I’m Alexander Babinets, and I’m genuinely glad you’re here.

If crypto feels confusing, risky, or just plain overwhelming, you’re in the right place. I wrote this book for people who want to *understand*, not gamble. I’m not here to sell you anything. I’m not pushing coins, promising fast money, or trying to rope you into a scam. That’s not what this is about.

This is a beginner’s guide—a *really simple one*. No fluff, no tech talk, no hype. Just clear steps and real-life advice from someone who’s been through it.

Let’s walk through a few key checkpoints before we dive in:

Checkpoint 1: This Is Not a Sales Pitch

Let’s be clear up front—this book is not here to convince you to buy crypto. It’s not a funnel to get you into some “investment club.” I’m not selling courses or coins. My only goal is to teach you how crypto works so you don’t make the same costly mistakes I’ve seen others make.

Checkpoint 2: I’ve Seen Too Many People Lose Everything

I’ve been around crypto long enough to see both sides of it. Yes, some people made money—me included. But too many others lost everything.

One friend of mine threw \$10,000 into a flashy coin in 2023. It vanished within days. Another woman I know was tricked by a “get-rich-fast” scam on TikTok and lost her rent money. It’s brutal to watch. Real people. Real pain.

That’s why this book exists—to help you learn before you leap.

Checkpoint 3: Learn Slow, Learn Smart

Crypto moves fast. Headlines scream about big gains. People chase the next coin like it’s a lottery ticket. That’s not the way.

This book teaches the slow and steady path. You'll learn what crypto is, how it started, why it matters, what coins are worth knowing, how to buy safely, how to avoid scams, and how to move through it all with caution and confidence. One step at a time.

Checkpoint 4: Stay Out of the Traps

Crypto can feel like a casino—big wins, big crashes, and lots of noise. But we're not playing games here. I'll show you the common traps, the scam tactics, the fake influencers, and the risky apps. You'll learn how to protect your money before you ever think about spending a cent.

Checkpoint 5: Make 2025 the Year You Get It Right

It's March 2025. Crypto's still growing, still changing, still filled with both potential and danger. This is your chance to understand it for real—not through hype, but through clear, honest knowledge. Whether you want to invest \$20 or just read along, this book gives you a safe place to start.

I've done well with crypto, yes—but I didn't get lucky. I learned. Carefully. Slowly. You can too.

Checkpoint 6: You're In Control

No pressure. No deadlines. No "act now" countdowns. You're the one in control here.

If you want to try a small purchase, Chapter 6 will walk you through it. If you'd rather just read and learn, that's great too. This book is about giving you the knowledge to decide *if* and *when* crypto makes sense for you.

Let's start your crypto journey—safe, smart, and scam-free.

—Alexander Babinets

Chapter 1: What Is Crypto?

What Is Crypto?

Welcome to the Crypto World

Imagine you're sitting in a cozy coffee shop, about to pay for your favorite latte. Instead of pulling out a crumpled five-dollar bill or swiping your card, you take out your smartphone. With a simple scan of a code, you send "digital money" to the barista. There's no need for a bank or anything physical; it's just a swift transfer of funds that happens in the blink of an eye. This concept, known as cryptocurrency, is becoming a staple of modern life, and since its inception in 2009, it has garnered significant attention. But what exactly is cryptocurrency, and why should you find it relevant? Let's unpack this concept in an accessible manner, just like we would if we were enjoying that coffee together.

Cryptocurrency, often abbreviated to "crypto," is essentially digital cash that exists in the online world. Unlike the physical dollars or euros you might carry in your wallet, cryptocurrencies are not issued or overseen by any central authority like a government or a bank. Instead, they rely on advanced technology designed to ensure security and the capability to send payments anywhere across the globe, instantly and with minimal fees. While it might seem like magic, this is simply a novel approach to handling money—an approach that comes with certain risks and rewards that we will discuss further.

The Big Idea: Money Without Middlemen

When you think about transferring money to a friend who lives far away, the

usual method is to go through a bank or an app such as Venmo. These services often come with transaction fees, a waiting period, and various regulations that they must follow. Cryptocurrency, however, enables you to send money directly from one person to another without any intermediary involved. This is akin to physically handing someone cash across a table, except it happens online and in just seconds. How does it work? The backbone of this system is called a blockchain, a concept we'll dive deeper into shortly. For now, simply understand that blockchain eliminates the middleman from the transaction process.

Why is this significant? Banks and governmental bodies impose rules—some of which protect consumers and some that can feel quite frustrating. Crypto operates outside of this traditional framework, which can be both liberating and perilous. Freedom from such constraints means that you have more control over your money, but it also comes with the responsibility of ensuring you don't fall victim to scams or errors—the digital landscape can be unforgiving.

Where It All Started: Bitcoin's Big Bang

The story of cryptocurrency didn't just emerge from nowhere; it began with Bitcoin, which is often referred to as the first cryptocurrency. In 2008, the global financial landscape was in turmoil. Institutions like Lehman Brothers were collapsing, the market was teetering, and many people were losing their jobs and homes. In the midst of this chaos, an anonymous figure (or possibly a group of individuals) using the pseudonym Satoshi Nakamoto introduced the idea of Bitcoin. They published a white paper outlining a decentralized digital currency that would operate without oversight from any central authority. By January 2009, Bitcoin was launched.

The fundamental intention behind Satoshi's vision was to create a monetary system that enabled everyday people to conduct transactions without the interference of banks and financial institutions. Bitcoin relies on cryptography—essentially complex mathematical techniques—to ensure transactions are safe and that anyone can participate in the network. The identity of Satoshi Nakamoto remains a mystery, as they stepped back from the scene by 2011,

allowing Bitcoin to evolve independently. What began with a value of just a few cents saw astonishing growth, reaching \$1 by 2011 and peaking at around \$60,000 in 2021. As of March 2025, Bitcoin continues to reign supreme among cryptocurrencies, though its price remains highly volatile.

More Than Just Bitcoin

While Bitcoin was the spark that ignited the cryptocurrency movement, it has since given rise to a vast and diverse ecosystem. Today, there are thousands of cryptocurrencies, each designed with distinct functionalities and purposes. For example, Ethereum, which is one of the most popular cryptocurrencies, goes beyond mere transactions; it enables the creation of “smart contracts.” These are self-executing contracts with the agreement directly written into code, allowing for automatic payment processes when certain conditions are met. Then there’s Dogecoin, which started as a playful nod to internet memes featuring a Shiba Inu dog but has developed a passionate following.

By 2025, the cryptocurrency universe is vast, encompassing over 20,000 distinct digital currencies, as reported by CoinMarketCap. However, not all of these currencies are created equal; some may be outright scams designed to trick unsuspecting investors. We will address the red flags of fraudulent cryptocurrencies in subsequent sections. For the time being, it’s important to recognize that the world of cryptocurrencies is expansive and continuously evolving, with Bitcoin sitting at the forefront.

How’s It Different from “Normal” Money?

To understand cryptocurrencies better, it’s helpful to compare them to traditional forms of money. Your everyday dollars or euros are known as “fiat” money, which derives its value from the trust placed in the issuing government—essentially, the government asserts, “This currency is worth something.” In contrast, cryptocurrencies don’t have this governmental backing. Their value comes from trust in the underlying technology and the community that supports it.

- Physical Presence: Traditional currencies can exist in physical forms, such

as coins and paper bills. In contrast, cryptocurrencies are purely digital.

- **Control:** Fiat money is governed by banks and governments, which can impose regulations and intervene in the monetary system. Cryptocurrencies? They operate independently of any central authority—just code and community make the rules.

- **Transaction Process:** Sending money traditionally involves costs, time delays, and third parties. With cryptocurrency, transfers are typically more rapid, direct, and cost-effective.

- **Safety Net:** Traditional banking systems provide safety nets, including insurance for deposits. In the world of cryptocurrency, you bear the full weight of responsibility—if you lose access to your crypto wallet, your funds may be gone forever.

The takeaway here is that cryptocurrency offers a unique form of currency characterized by its digital nature and the absence of a safety net. The appeal lies in its potential and freedom, but it's crucial to be aware of the risks involved—such as the possibility of losing access to your investments or falling victim to scams.

The Blockchain: Crypto's Secret Sauce

Now, let's break down the technology that underpins cryptocurrency: the blockchain. Picture a public notebook—a large ledger—where every transaction is meticulously recorded. Each page serves as a snapshot of transactions, like “Joe sent \$10 to Mia,” and everyone involved in the network has a copy of this notebook. The information, once inscribed, cannot be altered or erased. This is the core principle of the blockchain: it operates as an immutable, publicly accessible record.

The blockchain is composed of individual units called “blocks,” which you can think of as pages in the notebook. These blocks are linked together through complex mathematical functions, ensuring their integrity. To maintain and add to this chain, computers around the world—known as “nodes”—validate and keep copies of the data. This decentralized system is robust against deceit and allows for transparency, meaning no one participant can manipulate the information without detection.

Additionally, there's a process known as "mining," which is how new blocks are added to the chain. This involves individuals or groups utilizing powerful computers to solve complex mathematical puzzles. When they succeed, they receive a reward in the form of new cryptocurrency. While it might seem technical, at its heart, mining is fundamentally about contributing to the blockchain's security and integrity.

For you, this means that cryptocurrencies can be trusted—there's no single bank or entity in charge, and the decentralized nature protects the system from fraud. Conversely, it's essential to genuinely understand the implications of your ownership; for instance, losing the unique access keys to your cryptocurrency wallet results in losing your digital assets since no one can simply revert the transaction.

Why People Love It (and Hate It)

Cryptocurrency has stirred passionate opinions—there are both enthusiastic supporters and vocal critics. Let's examine some of the common sentiments on each side:

Supporters Say:

- **Freedom:** With cryptocurrencies, you enjoy the liberty to manage your funds without bank intervention.

- **Speed:** Sending money across the globe can occur within moments, unlike traditional banking, which can take days.

- **Potential for Growth:** Many early adopters have seen significant returns on their investments. For example, individuals who bought Bitcoin for just a few dollars could see their holdings become worth thousands, if not millions.

Critics Say:

- **Risky Nature:** The values of cryptocurrencies can fluctuate wildly. One day you may be up, and the next, you could lose a considerable amount of money.

- **Complexity:** The concepts of wallets, private keys, and transaction processes can feel overwhelming for newcomers.

- **Shadiness:** Some individuals use cryptocurrencies for illegal activities,

which tarnishes the perception of the entire system (although it's worth noting that traditional cash can also be used for such purposes).

As of 2025, the divide on opinions continues. Some businesses integrate cryptocurrency as a payment option, while certain governments or regions impose strict bans. Ultimately, you'll have to determine where you stand in this emerging paradigm.

A Real Story: The Pizza Guy

To lighten the mood, let's share a bit of history from the early days of cryptocurrency. In 2010, a programmer named Laszlo Hanyecz made headlines when he purchased two pizzas for 10,000 Bitcoin. At that time, the price of Bitcoin was quite low—his purchase was worth only \$41. Fast forward to 2021, the same Bitcoin would become valued at approximately \$600 million. While Hanyecz views this purchase as a humorous anecdote, it serves as a stark reminder of how unpredictable and volatile cryptocurrency valuations can be.

This story encapsulates the wild nature of digital currencies; something that seems minor today could be monumental tomorrow. Cryptocurrency, with all its twists and turns, has introduced a new chapter in how we view and engage with money. And as we continue to explore this landscape, the lessons learned will be invaluable for anyone considering entering this digital realm.

As you digest the concepts outlined above, reflect on this: While cryptocurrency represents a pioneering evolution in how we understand and manage money, it also demands that you stay informed and cautious in navigating its intricate world.

Chapter 2: The Risks You Need to Know

Understanding the Landscape of Cryptocurrency

Before delving into the various aspects of cryptocurrency, it's crucial to acknowledge a central reality: investing in crypto is risky. This isn't meant to deter you but rather to empower you with knowledge so that you can make informed decisions and avoid dire pitfalls. Many individuals have watched their savings evaporate in an instant, and the online community is rife with cautionary tales. While the allure of crypto can be strong, it's not a guaranteed pathway to wealth.

Picture this: investing in cryptocurrency is akin to participating in a high-stakes game. You might be fortunate and win big, but you need to be aware that the house always has its tricks. In this chapter, we will explore five significant risks associated with cryptocurrency: volatility, scams, security issues, hype traps, and the absence of a safety net. By understanding these risks and learning how to navigate them, you will be better equipped than many other beginners.

Risk #1: Volatility—Prices Are a Rollercoaster

Cryptocurrency prices are anything but stable. Imagine owning an asset that can swing \$100 up or down in a single day; this is a common occurrence in the crypto world. For instance, Bitcoin, the most well-known cryptocurrency, reached a staggering price of \$69,000 in November 2021. By June 2022, it had plummeted to \$20,000. This kind of volatility can be alarming. People who bought Bitcoin at its peak might have lost significant amounts of money, including homes and life savings.

What drives such rapid price fluctuations? Unlike traditional currencies, cryptocurrencies are not backed by any government or central authority that can intervene to stabilize their value. Instead, prices are determined solely by supply and demand, often influenced by market sentiment and news events. For instance, when a major company announces its intention to purchase a large amount of Bitcoin, the demand surges, leading to a price spike. Conversely, negative news, like rumors of regulatory changes or a significant hack, can lead to dramatic declines.

For someone new to the cryptocurrency market, this volatility can be disconcerting. Imagine investing \$1,000 in a cryptocurrency only to watch it tumble to \$200 the next day. This experience can cause panic and lead to hasty decisions, such as selling at a loss. As a guideline, consider only investing what you can afford to lose—this way, you can withstand the ups and downs without compromising your financial stability.

Example: The 2022 Crash

Consider the story of Jane, a single mother who, captivated by the promise of Bitcoin in late 2021, invested her entire emergency fund of \$5,000 when the price was around \$60,000. When the price collapsed to \$1,500 by mid-2022, Jane faced a difficult decision. Feeling despondent, she sold her Bitcoin, tragically missing out on the subsequent rebound. Jane's experience underscores an important lesson: cryptocurrency should not be treated as an easily accessible piggy bank; it carries inherent risks.

Risk #2: Scams—They're Everywhere

The world of cryptocurrency can be a haven for scammers, precisely because of its unregulated nature. Without strict oversight and consumer protections, malicious actors exploit unsuspecting investors. A notable example occurred in 2023, when a fraudulent coin named "SafeMoonX" circulated, luring thousands of investors with promises of guaranteed profits. The creators vanished with an astonishing \$12 million, leaving many investors with nothing to show for their money.

Several types of scams are prevalent in the crypto space:

- Fake Coins: Some cryptocurrencies appear legitimate but serve no real

purpose and vanish overnight.

- Giveaways: Scammers often promise to multiply your investment, such as saying, “Send me 1 Bitcoin, and I’ll send you 2 back!” Unfortunately, you lose your original investment and receive nothing in return.

- Phishing Scams: These are deceptive attempts to acquire your personal information through fake emails or websites that mimic legitimate services. A single click may lead to your funds being stolen.

Example: The Twitter Trap

Take Mike, for instance. He saw a post from what he believed to be a verified source on social media, claiming, “Elon Musk is giving away Ethereum!” Trusting this information, he sent \$500 to the provided wallet address, only to discover that the post had been made by a bot. Scams like this were rampant in 2024, with losses amounting to approximately \$1 billion that year. A helpful principle to remember: if something sounds too good to be true, it probably is.

Risk #3: Security—No Reset Button

When it comes to cryptocurrency, the responsibility of securing your assets lies entirely with you. There is no bank or financial institution to turn to if you encounter issues. Your cryptocurrency wallet is accessed using a “private key”—a long string of characters that function like a password. If you lose this key, you lose access to your funds forever.

Consider the case of James, who in 2013 accidentally discarded a hard drive containing 7,500 Bitcoin. At the time, these coins were worth only about \$7.50. Fast forward to 2021, and that same stash had ballooned to a staggering \$450 million. James is still searching for a way to retrieve that drive from a landfill. Additionally, hackers frequently target crypto accounts. Weak passwords can easily be cracked, resulting in empty accounts.

Example: The Lost Key

Sara invested \$2,000 in Ethereum in 2020 and hastily stored her private key in her phone’s notes app for convenience. When her phone crashed, she had no backup. Consequently, her investment worth \$50,000 at its peak in 2021 disappeared forever. A valuable lesson: prioritize keeping your keys safe offline, such as in a physical document, rather than relying on digital storage.

Risk #4: Hype Traps—FOMO’s a Killer

In the fast-paced world of cryptocurrency, the fear of missing out (FOMO) can lead to impulsive decisions and regrettable financial outcomes. For instance, consider the hype surrounding Dogecoin, which surged from merely a meme to a price of \$0.70. Many newcomers jumped on the bandwagon, only to see their investments plummet in value shortly after.

This phenomenon is often referred to as a “pump and dump,” where groups artificially inflate the value of a coin, selling it at a high price and leaving uninformed investors holding worthless tokens. Be aware that trends can shift rapidly; what seems like a surefire investment today may be a poor choice tomorrow.

Example: The TikTok Hype

A 22-year-old named Tom encountered a TikTok video promoting a cryptocurrency called “ShibaRocket” in 2023. Excited by the buzz, he invested \$3,000 at its peak. Just two days later, the price collapsed to a mere \$300. It was later revealed that the influencer promoting the coin had been compensated to create hype. The best strategy here is to conduct thorough research before making any investment decisions; don’t just rely on trends or social media buzz.

Risk #5: No Safety Net—You’re Solo

While banks typically provide insurance for your savings, the cryptocurrency market offers no such safety net. If a cryptocurrency exchange where you bought your digital assets gets hacked or goes out of business, your funds could very well be lost. A notorious incident in 2014 involved Mt. Gox, a major exchange that lost \$450 million. Unfortunately, many users received only a fraction of their funds back, if any. This issue remains relevant in 2025, with smaller exchanges continuing to shut down unexpectedly.

Example: The Exchange Bust

Take the example of Liam, who deposited \$10,000 in a questionable exchange in 2022. During a market crash, the exchange unexpectedly went offline. Whether due to theft or bankruptcy, Liam was left without access to his funds. To avoid a similar fate, always choose large, well-known exchanges,

and consider transferring your crypto assets to a secure wallet.

Tips to Protect Yourself

As we wrap up this section on risks, remember that awareness is key to navigating the cryptocurrency landscape safely. Here are some practical tips for initial steps:

Start Small: Consider beginning with a modest amount, like \$20, rather than diving in with thousands of dollars.

Skepticism is Healthy: Constantly question everything you hear—especially unsolicited promises from self-proclaimed “experts” or hype surrounding new assets.

Secure Your Keys: Treat your private keys as you would cash—store them securely and keep backups in safe locations.

Success Story: The Early Bird

Meet Erik Voorhees. In 2011, he snagged 10,000 Bitcoin at \$3 each—\$30,000 total. He saw its potential when it was a nerdy experiment. By 2017, Bitcoin hit \$20,000; his stash was worth \$200 million. He sold some, built a crypto company (ShapeShift), and kept winning. Luck? Sure. But he researched early, held steady, and dodged scams. Not every beginner gets rich—but Erik shows what’s possible with timing and smarts.

Cryptocurrency is not inherently dangerous; it simply exists in a raw and unregulated state. By understanding the risks involved, you have already positioned yourself ahead of many others entering this arena. It’s critical to approach this landscape with caution, knowledge, and a readiness to learn.

Chapter 3: How Crypto Works

Let's peel back the curtain on cryptocurrency. It might feel like magic or something out of a sci-fi movie—digital money racing around the internet without the traditional banks we're all familiar with. But don't worry; we will steer clear of complex codes and math. Instead, consider this explanation a backstage pass to understanding the basic mechanics of cryptocurrency. It's similar to walking through a simple recipe instead of building a kitchen from scratch. By the time we finish, you'll appreciate both the brilliance and the challenges of this technology, all laid out in clear, straightforward language.

The Heart of It: The Blockchain

At the very core of cryptocurrency lies something called a blockchain. Imagine a huge notebook that is shared among everyone involved. When someone makes a transaction, it's written down in this notebook: "Mia gave Joe \$10 in Bitcoin on March 7, 2025." That entry records the transaction, and once it's written, it can neither be erased nor altered. This is a secured record, which is pretty fascinating.

Now, picture that instead of just one notebook, there are thousands of identical notebooks spread across computers around the world. These computers are known as "nodes." They might seem complex, but at their core, they're just regular computers or servers. When Mia sends that \$10, every single notebook updates at the same time. This means that there is no central authority like a bank that controls everything; rather, the entire system is maintained by the collective agreement of all participants. This decentralized nature is what makes cryptocurrencies unique.

The notebook is organized into “blocks”—like individual pages in the notebook. Each block contains a collection of transactions. When a block fills up with transactions—say, 500 of them—a new block is created, and they are linked together, hence the term “blockchain.” You can think of it as a secure chain of diary entries that cannot easily be tampered with. If someone attempts to slip a false entry in—such as “Mia gave me \$1,000”—the other notebooks will quickly reject it, stating, “This doesn’t match the records.” This collaborative effort is what keeps cryptocurrency honest and reliable.

So, what makes this system secure? It’s something called cryptography, which involves secret codes that lock each block. Only the correct mathematical problems can add new entries to the blocks, and changing any old blocks would require altering every copy of the notebook worldwide. This is virtually impossible. For you, it means that your \$10 remains yours unless you decide to send it elsewhere—or make a mistake, which we’ll talk about later.

Mining: Who Writes the Notebook?

You might be wondering who actually adds these transactions to the blockchain. This is where “mining” comes into play. The term might conjure images of pickaxes and gold, but in cryptocurrency, it involves computers. Miners are individuals or groups running powerful computers designed to solve complex puzzles. Think of it like playing Sudoku but at a level of complexity that pushes your brain to its limits.

Here’s how the process works: when Mia transfers \$10 to Joe, miners compete to verify that the transaction is legitimate. They check that Mia actually has that \$10 and that it hasn’t been duplicated or counterfeited. The first miner to successfully solve the puzzle gets to add Mia’s transaction to a new block, seal it up with a metaphorical digital lock (thanks to cryptography!), and announce to all the nodes, “Update your notebooks, this transaction is valid!” As a reward for their effort, the first miner may receive a prize, often a sum of cryptocurrency, such as Bitcoin. For example, in 2025, this reward might be 6.25 Bitcoin, which could be worth approximately \$250,000 if the price of Bitcoin is around \$40,000.

But mining isn’t as easy as it sounds. It requires significant resources.

Mining rigs—specialized machines designed for this task—consume a lot of power. In fact, by 2021, Bitcoin mining was reportedly consuming more electricity than some entire nations! A decent mining setup can easily cost over \$5,000, and miners are often competing against mining farms—vast warehouses filled with many machines located in energy centers like Texas or Iceland. In 2025, getting rewards for mining becomes even more challenging due to a mechanism called “halving,” which reduces the rewards miners receive every four years.

For beginners, trying to mine cryptocurrency isn’t necessary at all. It’s like panning for gold; while some people work hard to find nuggets, you can simply buy the gold pieces that others have already mined.

Wallets: Your Crypto Piggy Bank

You might be asking, where does your cryptocurrency actually live? In a digital wallet. Unlike a traditional wallet made of leather, a crypto wallet exists in digital form—either as software you can download on your phone or as a physical device that holds your cryptocurrencies. Think of this wallet as an account for holding your digital money.

There are two main types of wallets you should know about:

Hot Wallets: *These are wallets that are connected to the internet. They can be apps or accounts on exchanges where you can buy and sell cryptocurrencies, such as Trust Wallet or Coinbase. They are user-friendly and generally easy to access. However, they come with risks—just like keeping cash in your pocket makes it handy but also exposes it to theft. While you can easily spend from a hot wallet, you should be aware that they can be hacked. For instance, in 2022, hackers were able to steal \$600 million from hot wallets on exchanges, showcasing the vulnerabilities associated with them.*

Cold Wallets: *These are wallets that don’t connect to the internet, making them much safer from hacks. They can come in the form of USB drives (such as Ledger Nano S) or even paper wallets where you physically write down your keys. This is like having a safe at home—unless someone breaks into your house, they can’t access your money. However, the downside is that if you lose your cold wallet or*

the piece of paper with your keys, your cryptocurrency may be unrecoverable. A cautionary tale: a man in 2023 lost access to \$100,000 worth of Bitcoin just because he misplaced his seed phrase—a security measure that allows access to a wallet.

Your digital wallet comes with two essential keys:

- **Public Key:** This is like your email address; you can freely share it with others so they can send you cryptocurrency. It's a long string of characters, resembling something like "1A1zP1eP5QGefi2DMPTfTL5SLmv7DivfNa."

- **Private Key (or Seed Phrase):** This is your secret; it consists of 12 to 24 random words that unlock your wallet—much like a password. If you lose this key, your cryptocurrency is essentially locked away forever. Likewise, you must never share it with anyone; otherwise, they can take full control of your funds.

Wallet Example: Hot vs. Cold

To illustrate, let's say you buy \$50 worth of Bitcoin. If it's in a hot wallet like Coinbase, your funds will be available to spend almost immediately. However, with cold wallets like Ledger, the Bitcoin would be kept offline, making it much safer from outside threats. If you choose to hold it in a USB stick and that device gets lost without a backup, accessing your funds could become impossible. Always remember: write down your seed phrase and store it securely—don't keep it on your phone where it can be hacked.

Transactions: Sending Crypto 101

Transferring cryptocurrency is similar to sending money through email, but with a key difference—the transactions are permanent.

Here's a straightforward guide on how it works:

Open Your Wallet: For example, you might use Trust Wallet on your smartphone.

Get the Address: Request Joe's public key to which you want to send money. It might look something like "3J98t1WpEZ73CNmQviecrnyiWrnqRhWNLy."

Enter the Details: Input the amount you want to send—let's say 0.001 BTC (which might equal about \$40 in 2025)—and paste Joe's public address into the appropriate field.

Double-Check: Before you hit the send button, take a moment to double-check

everything. If there's a single typo, you could accidentally send your funds to the wrong address, and there are no refunds in this system.

Hit Send: *Once you're sure, press send. What happens next? The miners will verify the transaction, which will take around ten minutes for Bitcoin, but only a few seconds for other types of coins. The fee for the transaction is usually minimal, ranging from \$0.50 to \$5, depending on how busy the network is.*

The whole process is speedy—Joe will receive the funds anywhere in the world without the usual delays from banks. However, remember this: there is no “oops” button in cryptocurrency. A glaring example from 2024 involved someone mistakenly sending \$10,000 to the wrong address—once sent, those funds simply disappeared. A good tip is to test the waters by sending a small amount, like \$1, to ensure everything works as it should.

Understanding this process helps to demystify cryptocurrency as it's not as intimidating as it seems when viewed step by step.

Why It's Tricky (and Cool)

Cryptocurrency is appealing because it gives you full control of your funds—no bank has the authority to freeze your assets. However, it also comes with its challenges:

- No Refunds: If you make a mistake, there's no chance to reverse the transaction.

- Power Hungry: The environmental impact of mining, especially with all the resources required, has become a significant point of discussion and debate.

- Learning Curve: The concepts of wallets and keys can be intimidating for newcomers, and missteps can be costly.

Despite its potential pitfalls, it's a system that anyone can participate in—there are no identification checks and no borders affecting transactions. For many, that accessibility is a key attraction.

Q&A for Beginners

Here are some common questions that beginners often have:

- “Can I touch crypto?” No, cryptocurrency is purely digital—it exists on

the blockchain and does not have a physical form.

- “Why are there no refunds?” The nature of the blockchain makes it permanently immutable; this is part of what contributes to the appeal of having complete control, but it also means that mistakes can be costly.

- “Do I need to mine to get cryptocurrency?” No, you don’t have to mine. It’s perfectly acceptable to purchase cryptocurrency as you would any other stock or investment.

Success Story: The Ethereum Whiz

Let’s look at the story of Vitalik Buterin, who founded Ethereum. Back in 2013, this 19-year-old programmer envisioned a cryptocurrency platform that could facilitate “smart contracts.” These are self-executing contracts with the terms directly written into code, eliminating the need for intermediaries. He officially launched Ethereum in 2015 and raised \$18 million in Bitcoin by selling Ethereum’s native cryptocurrency, Ether.

He didn’t just hold onto it; he kept a significant portion. By 2021, when the price of Ether soared to around \$4,000, his original investment was valued at over \$1 billion. As of 2025, Vitalik Buterin remains a prominent figure in the cryptocurrency space, continuing to innovate and expand the capabilities of blockchain technology.

This story emphasizes that while many enter the crypto world simply as investors, there are immense opportunities for innovation and contribution. It’s not just about buying cryptocurrency; it’s about building and creating new possibilities.

As you learn about cryptocurrency, remember that while it may seem complex, each concept can be understood step by step, and there’s a vibrant community out there ready to welcome you.

Chapter 4: The Big Names

Meet the Crypto Rockstars

You may have heard the term “cryptocurrency” floating around, but how do you know which ones truly matter? With thousands of cryptocurrencies out there—over 20,000 as estimated in 2025—it’s easy to get lost in the sea of options. However, just like any group, there are a few that really stand out, the ones everyone is buzzing about. Think of these cryptocurrencies as the popular kids in school: they grab headlines, have devoted followers, and have been around for a while. In this chapter, we will dive into the major players in the cryptocurrency world—Bitcoin, Ethereum, and a couple of others that are currently making waves. We’ll keep it light on technical jargon and focus on making everything as clear as possible for beginners.

Bitcoin: The Original Boss

If you imagine the cryptocurrency landscape as a lively party, Bitcoin is undoubtedly the one who started it all. It was the first cryptocurrency, the biggest in terms of popularity and impact, and likely the one you’ve heard about the most. Let’s take a step back to 2009 when an enigmatic figure known as Satoshi Nakamoto launched Bitcoin. Who is Satoshi? It’s still a mystery! Many speculate it could be one person or a group of tech-savvy individuals, but what we do know is that they sought to create a decentralized money solution that didn’t rely on traditional banks. This innovative idea laid the foundation for the entire world of digital currency.

So, what is Bitcoin like? Picture it as digital gold. People buy Bitcoin with the intention to hold it, hoping that its value increases over time. However, it

isn't commonly used for everyday purchases, like buying a coffee, although some shops do accept it. To illustrate its value trajectory: in 2010, Bitcoin was practically worthless; it's famous for a transaction where someone paid an astounding 10,000 Bitcoins for two pizzas! Fast forward to 2021, and Bitcoin reached the jaw-dropping price of \$69,000 each. By March 2025, prices have varied wildly — hovering around \$40,000 or even higher. It's like a rollercoaster ride, full of unpredictability.

But why has Bitcoin become such a big deal? Its fame comes from a combination of factors: it's the first cryptocurrency, it has accumulated a level of trust among users (though it's a work in progress), and there's an artificial limit on its supply—only 21 million Bitcoins will ever be created. This scarcity is similar to how gold is prized due to its limited quantity. Nevertheless, it's essential to note that Bitcoin is noted for its volatility. One day, your investment could see tremendous gains, and the next, it could significantly drop in value.

Ethereum: The Smart One

Now let's shift our focus to Ethereum, which is often referred to as the “Swiss Army knife” of the cryptocurrency world. Ethereum isn't just about transactions and digital currency. Launched in 2015 by a bright young developer named Vitalik Buterin, Ethereum introduced a whole new level of innovation with its coin known as Ether.

Think of Bitcoin as a basic calculator that does one straightforward job: it helps you perform arithmetic. In contrast, Ethereum is more like a sophisticated smartphone that can perform a multitude of tasks. One of its standout features is something called “smart contracts.” To illustrate this, let's say you bet a friend \$10 that it will rain tomorrow. Instead of arguing afterward about whether it actually rained, a smart contract can automatically check a reliable weather source and pay the winner without any disputes. Ethereum makes these automatic agreements possible.

Moreover, Ethereum has become a platform for an array of new coins and applications, such as Non-Fungible Tokens (NFTs) and various decentralized applications (dApps). By 2025, Ethereum is well-integrated into digital

business and entertainment, with its coin priced around \$2,500; however, it also shows significant price fluctuations like Bitcoin.

For those just starting out in the cryptocurrency world, Ethereum can offer exciting opportunities, but it also poses additional complexities. Buying Ether is similar to purchasing Bitcoin, but the multiple utilities that Ethereum provides can make it a more intricate investment, heightening both the potential rewards and risks involved.

2025 Hotshots: Who's Trending Now?

While Bitcoin and Ethereum are the heavyweight champions of the crypto world, new contenders are constantly emerging. As we look into 2025, a few fresh and intriguing players are gaining attention among cryptocurrency enthusiasts. These names are subject to change due to the fast-paced nature of the market, so let's explore two that are making headlines now.

First up is Solana, often dubbed the “speed demon” of the cryptocurrency world. Launched in 2020, Solana boasts impressively fast transaction speeds—processing transactions within seconds, unlike Bitcoin, which can take several minutes. This speed advantage has attracted many developers looking to create decentralized applications and games, contributing to its popularity. You might find Solana priced around \$150 in 2025, but its market value has experienced highs of \$260 in the past. With great speed, though, comes risk; dramatic price fluctuations and technical issues can lead to significant downturns in value.

Another noteworthy contender is Cardano, often known for its “slow-and-steady” approach. Launched in 2017, Cardano was designed with careful planning and research, almost like constructing a sturdy house. It takes pride in being eco-friendly, consuming significantly less power than Bitcoin. By 2025, it has experienced steady growth, possibly valued at around \$1. Many beginners are drawn to Cardano due to its thoughtful development approach, but investing in it still carries inherent risks.

As you can see, the landscape of cryptocurrencies is continually evolving. What might be a popular choice today could change rapidly within the span of a month. In the world of crypto, staying informed is crucial.

Why So Many Coins?

If you think about the cryptocurrency market, you might compare it to an ice cream shop filled with a wide variety of flavors. While Bitcoin represents the classic vanilla—simple and widely loved—Ethereum could be seen as chocolate with sprinkles that offers additional features and fun. Other cryptocurrencies exist to fill niches, some quite unique, while others may seem bizarre and experimental. Take Dogecoin, for instance, which began as a joke based on a meme featuring a Shiba Inu dog. In 2021, it surprised everyone by soaring to a value of \$0.70, showcasing how wild this market can be.

The sheer number of cryptocurrencies can be overwhelming, and while some are innovative and offer real value, many are simply attempts to capitalize on the hype. Unfortunately, this means that there are also numerous duds or scams lurking among the genuine innovations. We'll delve into the risks of such dubious tokens in following discussions.

How Do They Get Value?

As a newcomer, you may be wondering, “What determines the value of cryptocurrencies, anyway? Why is Bitcoin worth \$40,000 while Solana is just \$150?” The answer lies in market forces. Unlike traditional money, which is backed by governments or precious metals, cryptocurrencies derive their value from what people are willing to pay for them. If a vast number of people express interest in and purchase Bitcoin, its price will naturally climb. Conversely, if interest wanes, it can plummet.

External factors such as news stories, market trends, and social media posts can heavily influence prices. For example, in 2021, a tweet from businessman Elon Musk about Dogecoin led to a sudden spike in its price, proving how sentiment can drive market fluctuations.

Picking One: What Beginners Should Know

Now that you're familiar with some of the big names, you might feel prompted to invest in Bitcoin—it's the biggest player, right? While it may seem like a straightforward decision, there are several points to keep in mind:

- 1. Price Swings:** All cryptocurrencies are subject to volatility. Your invest-

ment of \$100 could quickly drop to \$50 due to market fluctuations.

2. *Hype Can Be Deceptive:* A cryptocurrency that is popular today might not be as sought after tomorrow. For instance, Dogecoin faced a significant decline in value after its initial wave of popularity in 2021.

3. *Start Small:* If you're just beginning your investment journey, consider investing a modest sum, like \$20, rather than throwing in \$2,000 right away. This will allow you to gain experience without taking on excessive risk.

While many cryptocurrencies may seem like rockstars in the making, it's essential to remember that even the biggest stars can face setbacks. That's why in the coming sections, we will discuss strategies to help you navigate this volatile market safely.

Success Story: The Dogecoin Dreamer

Let's take a moment to share a remarkable story about Dogecoin. Meet Billy Markus, one of the minds behind the creation of Dogecoin in 2013. Originally, it began as a light-hearted joke—a meme coin centered around a Shiba Inu dog. In the early days, Billy sold his holdings for just \$10,000—enough to cover the expense of a used car. However, fortunes changed for Dogecoin as its popularity surged over the years. By 2021, its price skyrocketed to \$0.70, rewarding loyal fans who had held on to their coins.

One user, who we'll call "Dave," invested \$5,000 in Dogecoin back in 2014 when its price was just \$0.0002. At Dogecoin's peak, his investment ballooned to a staggering \$3.5 million. Billy might not have reaped the massive financial rewards, but Dave's journey serves as a testament to how investing in a seemingly silly coin can, with fortunate timing, result in significant gains.

As the world of cryptocurrency continues to evolve, countless stories will emerge—some joyous and others cautionary—reminding us that anything can happen in this bustling financial playground.