Cornell
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Sniping with Integrity:

A Deliberation on Governance and Accountability for Solana-Based Crypto Trading Bots

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Introduction

Solana is one of the fastest platforms in the crypto space. Its low fees and quick confirmation times have made it a go-to chain for new token launches. But with that speed comes risk. Many projects launch with little oversight, and unfortunately, a large number of them are scams designed to take advantage of early investors. The most common version of this is the rug pull, where developers build hype, drain the liquidity pool, and disappear.

Before I even took this course, I started building tools to address that problem. One of my earliest blockchain projects was a crypto trading bot designed specifically for Solana. It was influenced by conversations I had in a private Discord community focused on identifying and avoiding scam tokens. I saw the damage that rug pulls were causing and wanted to build something that could help people avoid them.

At the time, I was focused on function. I wanted the bot to be fast, reliable, and effective at filtering out bad tokens. What I did not consider until taking this course was how much responsibility comes with building a system that makes autonomous decisions. Our class on governance and accountability helped me reflect on what the bot actually does, how it communicates with users, and how it can and should be improved.

Target Setting:

This bot was built to serve one purpose: to help users avoid fraudulent token launches. It monitors new contracts, checks for wallet history, tracks liquidity behavior, and blocks trades that raise red flags. It does not chase every new opportunity. It waits, observes, and only acts when the conditions look safe.

The bot acts as a kind of digital analyst. It scans data, makes a judgment, and takes action. Because of this, it holds a speaking role. It communicates through its behavior and through the logs it generates. That means it has an obligation to be clear, accurate, and helpful. It is not just a trading tool. It is a system that influences decisions, and that role carries weight.

This course helped me realize that by assigning this bot a role, I also assigned it responsibilities. It must protect the user, avoid causing harm, and communicate in a way that builds trust.

Key Concerns:

The first concern is **accuracy**. The bot could block a token that is actually legitimate. Over time, this could cause users to miss good opportunities and lose confidence in the tool. On the other hand, if the bot fails to catch a scam, it could expose users to the very risks it was built to prevent.

Another concern is **transparency**. If a user does not understand why a trade was rejected or executed, they may not know whether the bot is functioning correctly. Without clarity, even a good decision can feel like a mistake.

There is also the issue of **overreliance**. Some users might start trusting the bot too much and stop thinking critically about their trades. If the bot makes an error, the user may not catch it.

Finally, there is a **broader market** concern. If many bots use the same logic, they might begin to unintentionally suppress legitimate projects that do not fit the usual mold. This could lead to unfair outcomes across the ecosystem.

Inputs Into Deliberation

The bot connects directly to the Solana blockchain and reads live data. It evaluates token creation events, scans developer wallets for past behavior, checks liquidity locks, and measures token concentration. If anything looks risky, it avoids the trade.

By giving the bot access to this data and control over trading decisions, I also gave it influence. It needs to use that influence responsibly. Based on what we discussed in class, the bot must provide relevant and accurate signals. It must be understandable, avoid harm, and serve the person who depends on it.

To meet those expectations, I designed the bot with adjustable risk settings and decision logs. These features were originally built for practical reasons, but I now see how they support ethical obligations too. They make the bot easier to evaluate, easier to trust, and easier to hold accountable.

Recommendations

Based on what I have learned in this course, there are several ways I plan to improve the bot and make it more accountable and user-friendly:

1. Expand decision explanations.

Each trade action should be paired with a clear explanation. Users need to understand why a trade was approved or blocked in order to build trust and learn from the process.

2. Add user feedback tools.

Users should be able to flag trades they disagreed with. This feedback loop can help improve the bot's logic over time and surface edge cases that were not initially considered.

3. Invite community collaboration.

The project was originally inspired by a tight-knit Discord group, but I want to open it up further. I have several other DeFi and decentralized app projects hosted on my GitHub at github.com/mohama56, where others are welcome to contribute, review code, or suggest improvements across multiple tools I've developed.

4. Provide customizable risk settings.

Different users have different comfort levels with risk. The bot should allow users to choose between more conservative or more aggressive trading behaviors to fit their individual goals.

5. Reinforce responsible use.

This bot is designed to support decision-making, not replace it. Users should be reminded that while it helps reduce risk, it cannot eliminate it. Thoughtful human judgment should remain part of the process.

Cautions & Reflections

Developing this Solana trading bot gave me my first real experience with blockchain development, but what I gained from this course changed how I understand its value and its risks. At first, I saw the project as a practical solution to a real problem. I had seen too many scams in the crypto space, and I wanted to create something that could help others avoid them. I built the bot to identify those scams faster than any person could, using on-chain data to stay one step ahead. That was the goal. But the more I learned about accountability systems in this course, the more I realized how much more was at stake.

One important realization is that any system that makes decisions on behalf of someone else carries real responsibility. Even though the bot does not have feelings or intentions, it still impacts people's money, trust, and behavior. If it flags the wrong project or misses a red flag, that can lead to consequences that ripple out far beyond a single trade. I came to understand that speed and accuracy are only part of what makes a system reliable. Clarity, fairness, and transparency matter just as much.

Another area I have become more cautious about is user behavior. A tool like this can easily create a false sense of security. If users believe it is flawless, they may stop asking questions and simply follow whatever the bot does. That kind of overreliance can be just as dangerous as having no protection at all. No matter how smart a system is, it should never replace thoughtful human judgment. It should support it, inform it, and give users a better foundation to make their own calls.

There is also a broader issue to consider. If tools like this become more common and begin behaving in similar ways, they could start to shape the market in unexpected ways. For example, if multiple bots all avoid certain types of token structures, even legitimate projects might struggle to gain early support. What starts as a risk filter can turn into a form of exclusion. That is why ongoing evaluation and input from a diverse community are so important. No single perspective is enough to govern systems that operate in fast-moving and open markets.

Reflecting on this project through the lens of the course gave me something I did not expect. It gave me language and structure to evaluate not just what I had built, but why it mattered. I now think about automation in terms of the relationships it creates. A bot like this is not just a tool that runs in the background. It becomes part of someone's decision-making process. It influences how they see risk, how they act, and ultimately, how much they trust the system around them.

I am proud of what I created, but I know that building responsibly is an ongoing process. The next phase of this project will not just be about optimizing the code or adding new features. It will be about making sure that the values behind the project, such as protection, transparency, and trust, remain central to everything it does.

Sources

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