

**Rating**

8/10 ☆

Note: All metrics are from 12/22/21

Snapshot	
Ticker	JEWEL
Current Price:	\$14.22
Market Cap:	\$878,813,140
Circulating Supply:	61,583,050
Token Type:	HRC-20
Sector:	Gaming

Executive Summary

DeFi Kingdoms (DFK) is a blockchain-based game built on the Harmony One blockchain. Actually, it's more than just a game – it's also a decentralized exchange, an NFT marketplace, and a soon-to-be multi-blockchain ecosystem. DFK combines decentralized finance, metaverse gaming, and NFTs all into one experience.

Axie Infinity is typically the first game mentioned when blockchain gaming comes up, and for good reason. Axie pioneered the blockchain gaming space by becoming the first game to draw in massive user counts and by allowing users, specifically many in the Philippines, to earn more than they were earning at their usual jobs. Axie's AXS token briefly reached a market cap of over \$10 billion in November.

Why am I bringing up Axie Infinity in a report about DFK? Because DFK, in the last seven days, has done more volume than Axie while having about 1/8 the market cap. According to DappRadar¹, Axie has done \$180 million in volume in the past seven days; DeFi Kingdoms has done **\$312 million**. This not only speaks to the massive growth in users/volume that DFK

has seen recently, but it also speaks to the fact that it is, in the eyes of many, simply a more enjoyable game than Axie. This, combined with the monetary incentives that we will discuss later, has drawn many new users into DFK.

DFK has become the largest application, by far, on the Harmony One blockchain. In fact, Harmony just approved a \$1 million grant to DFK to help with an initiative program designed to help grow the ecosystem and bring in new users. Harmony is not home to many other major applications – it is ranked 20th in TVL (total value locked)² – but it does provide DFK with a good low-fee (a fraction of a cent for each transaction) and high-speed (2 second block times) blockchain to run on.

DFK and, by extension, its JEWEL token look to be in a perfect position to capture additional market share in the blockchain gaming industry in the coming months. There will also be multiple opportunities to get in on the ground floor of new tokens when DFK expands to other blockchains. We'll go deeper into that later, but first let's discuss the game itself.

Game Overview

The setting of DeFi Kingdoms is Serendale, a fantasy realm featuring pixel art, text dialogue, and nostalgic music (see **Figure 1** on the next page). Players can perform tasks to collect, buy, and sell various tokens and items, the latter of which are represented as NFTs. All of these reside in the player's wallet; the player has full ownership and control over them.

I don't want to turn this into a fully immersive guide into every minute detail of DFK's gameplay, but it's worth at least going over each in-game location because each of them presents a way to make a return on your investment.

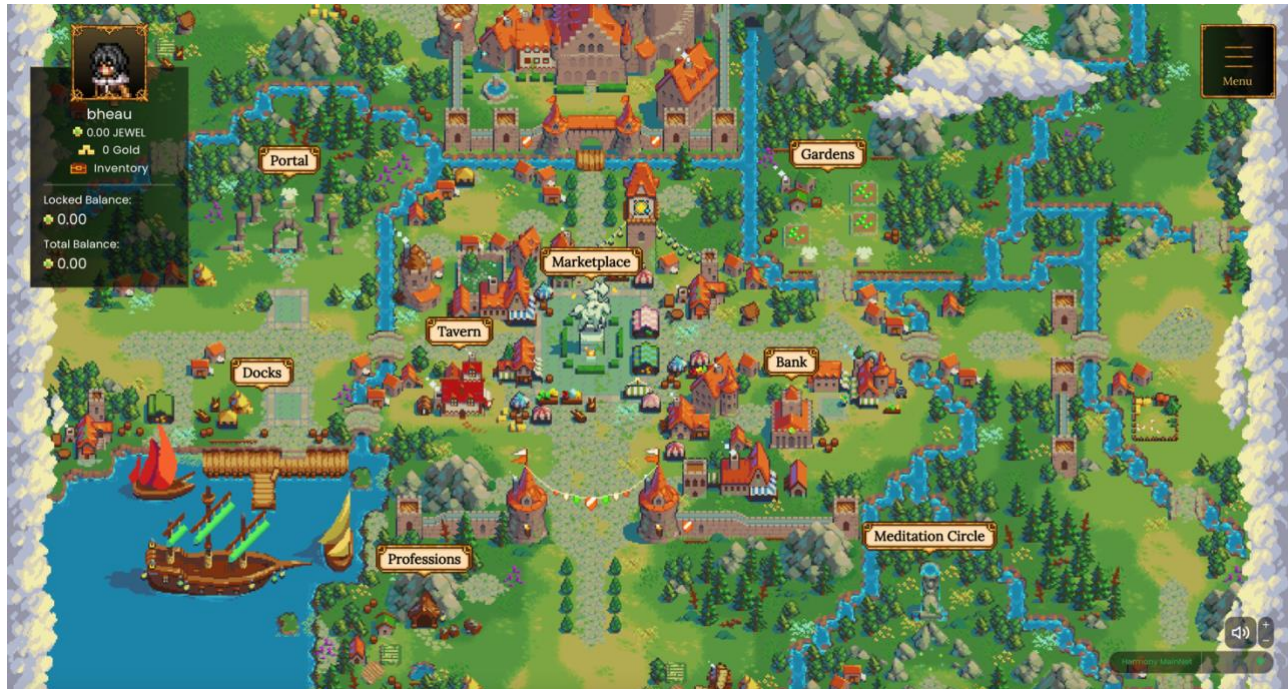


Figure 1: DFK In-game Home Screen

Marketplace

Remember that DFK runs on the Harmony One blockchain. So, you may come into the game holding only ONE, Harmony's native token. That's totally okay, because the Marketplace is actually a decentralized exchange! Here, you can swap tokens, including swapping ONE for JEWEL, provide liquidity to receive LP tokens in return (described in more detail soon), and buy or sell certain items for gold. Gold is just another in-game currency that has a relatively small use-case right now – JEWEL is the main currency. So, the marketplace is essentially a DEX built into the game.

Gardens

The Gardens incentivize users to provide liquidity and facilitate trading. Say you take some ONE and some JEWEL tokens and, in the Marketplace, provide liquidity to the ONE/JEWEL trading pool. In return, you get LP tokens representing your share of that pool. In DFK, these are called **seeds**.

What you'd want to do is bring those seeds to the Gardens and "plant" them by clicking on the Seed Box (see **Figure 2**).



Figure 2: The Gardens

Planting the seeds allows you to earn more JEWEL; for instance, by planting the ONE/JEWEL LP tokens (seeds), you currently earn over 600% APR in JEWEL. This rate was higher when the game first came out, as less users were in the pool and more rewards were given out early. However, some of the rewards are locked up for multiple months, and you have to pay a high

fee if you withdraw too quickly. We will discuss all of this further in *Tokenomics*.

As always, when providing liquidity, beware of impermanent loss! If you aren't sure what that is, check out our "DeFi Basics: Part 2" Education section. You should understand this before participating in liquidity providing; otherwise, the Bank is a better option for you.

Bank

DFK's Bank is pretty simple. Here, you can deposit (stake) JEWEL tokens to receive xJEWEL in return. Stakers in the bank get 1/3 of all trading fees generated by the game, which grows your balance; as the bank earns more fees, the amount of JEWEL your xJEWEL can be redeemed for grows! This rate varies based on in-game transaction volumes. Currently, it sits around 24% APR, and you can check the historical rates [here](#). Another interesting stat: there is currently about 2x the dollar value in the Gardens as there is in the Bank.

Bank rewards are lower than the high APRs earned in the Gardens, but there are three distinct advantages: you are not at risk of impermanent loss, you can withdraw whenever you'd like with no lockup or time-based fees, and, perhaps most importantly, **staking JEWEL in the bank makes you eligible for airdrops** (free items). This will be expanded on in *Tokenomics*.

Docks

The docks allow you to bring in tokens from other blockchains. For instance, if you had some AVAX on the Avalanche blockchain that you wanted to bring over to provide liquidity to the ONE/AVAX pool, you could visit the docks to "bridge" your AVAX from Avalanche to Harmony. In the future, the docks will serve a larger purpose, which we will discuss later in *Crystalvale Expansion*.

Tavern, Professions, Summoning Circle, Portal

All of these locations have to do with **Heroes**. Heroes are NFTs that you can buy, sell, and use for various in-game actions such as going on quests to earn tokens or even summoning more Heroes.

Every Hero is different. When DFK was first released, 2,000 gen 0 (generation 0) Heroes were released. These are very rare and have the special ability of being able to summon an infinite number of new heroes – summoning means creating a whole new Hero. Every current Hero (there are currently over 77,000) has descended from these original 2,000. Currently, the cheapest gen 0 Hero on sale costs 4,500 JEWEL (see **Figure 3**), which is equivalent to about \$64,000. This goes to show just how valuable gen 0's are in DFK. The cheapest Hero in the entire marketplace costs 36.9 JEWEL, or \$524.

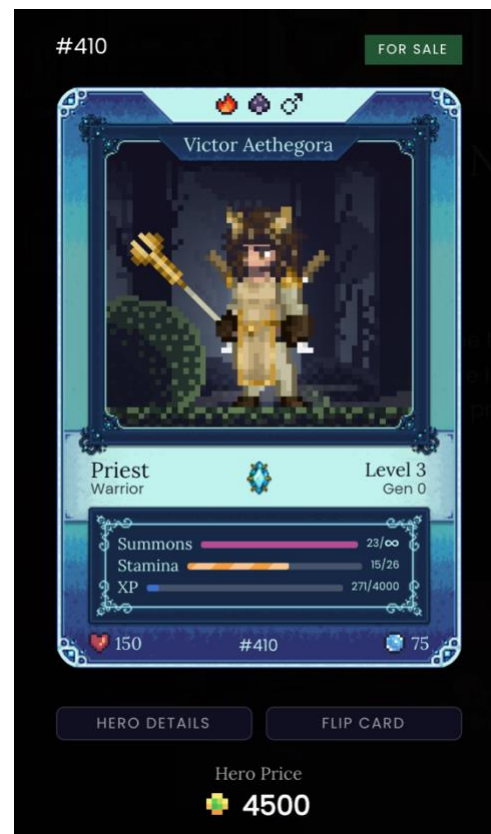


Figure 3: A Gen 0 Hero, For Sale in the Tavern

Every Hero's makeup is determined by a combination of it's summoners' (basically, its parents') traits and some randomness. This logic is written directly into the game's smart contracts, and it provides every summoned Hero a chance at getting ultra-rare parts that would fetch a high price in the Tavern.

Each Hero also has a variety of traits. Without getting too far into this (you can learn more [here](#)), each Hero has a primary and secondary class, a generation number, an experience level, a maximum number of summons, a rarity and rank, a variety of stats, and much more. Some have special abilities that can boost rewards. Rarities range from Common to Mythic; only about 1,000 of the more than 77,000 total Heroes are Mythic rarity.

The **Tavern** is where you can buy and sell Heroes. This is where you would go to purchase your first Hero or to sell one you no longer want. All transactions are paid in JEWEL, and the person listing the Hero sets the price.

Professions is where you can go to do quests with your Heroes. You can currently send your Hero on fishing and foraging quests, and gardening and mining are being added before 2022. These can earn you JEWEL or other items based on your Hero's skill, as well as ranking up your Hero. The **Summoning Circle** allows you to level up your Heroes once they're ready.

Finally, the **Portal** allows you to summon new Heroes using two current Heroes, some JEWEL, and some Gaia Tears, which are an in-game item earned from quests. That's all the locations in the game so far!

Tokenomics

Despite all of the other cool aspects of DFK, this report is focused on the JEWEL token specifically. The game mechanics themselves matter because they can increase demand for

JEWEL, but let's dive deeper into the token itself.

JEWEL had no presale and no VC investors. Of the 500 million total supply, only 10 million were "pre-minted", and these went to the team, promotions, game development, and providing initial liquidity for trading ONE for JEWEL. All of these have vesting schedules; they were not all unlocked at once. A small number of JEWEL tokens were also sent to very early Discord members to reward early participants and jumpstart the game economy.

Now, since such a small amount of JEWEL was given out at first, where is all the rest going to go? Well, it is being distributed via the Gardens (liquidity mining), quest rewards, and future treasury distributions for things like paying contributors or other initiatives.

JEWEL has a fully diluted valuation of \$6.5 billion, so it's important to look at *when* these additional tokens will be released. Since the vast majority of them will be released via the Gardens, let's look at the Gardens' token distribution schedule.

To encourage longer-term participation in the Gardens, the withdrawal fees start high. It costs 8% to withdraw for the first hour, and the fee gradually decreases until hitting 0.01% after a month or so. The most important thing to know about the Gardens, however, is that **some JEWEL rewards are locked until mid-2022** (see **Figure 4**).

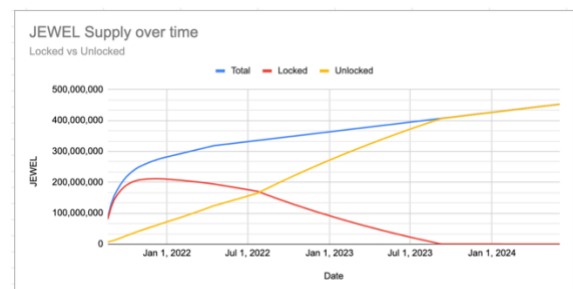


Figure 4: JEWEL Release Schedule³

Early DFK users were eligible for the highest rewards, in terms of APR, from the Gardens. However, they also had the highest amount of their rewards locked: 95% of earned JEWEL was locked if you were participating during the first week. Over time, until about July 2022, a higher percentage of new rewards claimed from the Gardens will be unlocked. Then, once that percentage reaches 100%, all locked rewards will begin unlocking over the course of a year. Hence, the full unlock by July 2023.

A quick example may make this make more sense: if you start providing liquidity in the Gardens right now, about 37% of your claimed JEWEL rewards would be unlocked right away. The rest would be locked until sometime in July 2022 and then released over the course of the next year. So, if you want to invest in DFK long-term, the best way to keep up with supply inflation is to participate in the Gardens. If you want to trade it shorter-term, maybe until many tokens start unlocking in July 2022, the Bank makes more sense.

Overall, the name of the game for JEWEL is utility. This is not designed to be just another token that you buy and can't do anything with (unless you don't want to, of course). Rather, just like the in-game Heroes, there are a variety of use-cases for JEWEL.

JEWEL is required for summoning new Heroes, purchasing Heroes, depositing into the Bank to get xJEWEL (which also entitles you to governance rights), providing liquidity to get seeds for planting in the Gardens, and will also be required for a variety of future features such as purchasing in-game land or entering tournaments to win tokens from other players. Users who stake JEWEL in the bank are also, as we mentioned earlier, eligible for airdrops. So far, plots of in-game land, amulets (the first piece of in-game equipment), and heroes have been airdropped to random stakers who had deposited a certain amount.

JEWEL will even be required to earn the tokens for future cross-chain expansion games, which we'll go over next!

Crystalvale Expansion

As mentioned in *Tokenomics*, the earliest DFK users were able to get the best rewards. Even though many of these were locked, they still got the highest APR, the cheapest prices for Heroes, and more time to accumulate resources. Wish you could be one of these early users? Well, you've got another chance to be soon.

DFK is expanding to the Avalanche blockchain sometime in Q1 2022. This expansion, titled "Crystalvale", will be the first of multiple "expansion realms", and it's exciting for a couple reasons. First, Avalanche has a much higher user count than Harmony does and over 20x the TVL. This could mean more eyes on the game, more eyes on the token, and more money flowing into the DFK ecosystem.

Second, there will be a **new token**: CRYSTAL. If you're anything like me, your first question is probably "Won't this hurt the price of JEWEL?" or "Why would I buy JEWEL when I can just wait for CRYSTAL?". Both very intelligent questions, I must say, but CRYSTAL is being designed to *increase* the demand for JEWEL.

The initial supply of CRYSTAL (and possibly new gen 0 heroes) will be earned by staking JEWEL. That's right: you must hold and stake JEWEL to earn CRYSTAL!⁴ This should increase the demand for JEWEL, especially because early CRYSTAL holders will be able to take advantage of the highest APR rewards just like early JEWEL holders were able to. What will probably happen is users will be able to go to the Docks and bridge JEWEL to Avalanche. Eventually, Heroes and other items will be able to travel between realms too. Once your JEWEL is on Avalanche, you'll be able to stake it to earn CRYSTAL. Additionally, current JEWEL stakers

may get airdrops of Crystalvale-related tokens, Heroes, equipment, and more.

The Future of DFK

Unless DFK wants to meet a similar fate to Axie and see declining volumes, it must continue to innovate and expand (tokenomics may need to change after 2023 too). That's exactly what the team plans on doing (see **Figure 5**).

While Crystalvale will begin with just a Marketplace, Gardens, and Bank, there is much more planned. Additionally, the Harmony game will be constantly receiving the newest features first. According to DFK's docs, "Harmony will always be our home. When we expand, it will be by bridging JEWEL, heroes, and other tokens. We will not set up a new DEX or dilute the supply of JEWEL on new chains."

There are many other exciting plans in DFK's future, including expanding to even more blockchains, in-game land sales, ways to develop and earn from purchased land, PvP combat, PvE adventure quests, pet NFTs, new items and equipment, and more.

Team Summary

The DFK team is currently still anonymous, but they have shown an incredible track record of hitting deadlines and being transparent with the community. The team does an AMA ("ask me anything") every Monday, and they consistently update users on development progress. For instance, gardening quests were supposed to be added last week, but some issues came up during thorough testing and economic simulations. The team promptly informed everyone via Discord and set a new date for the release.

The community is also very active. The DFK Discord⁶ sees discussion 24/7 and was very receptive to some questions I had about the Crystalvale expansion. There are currently over

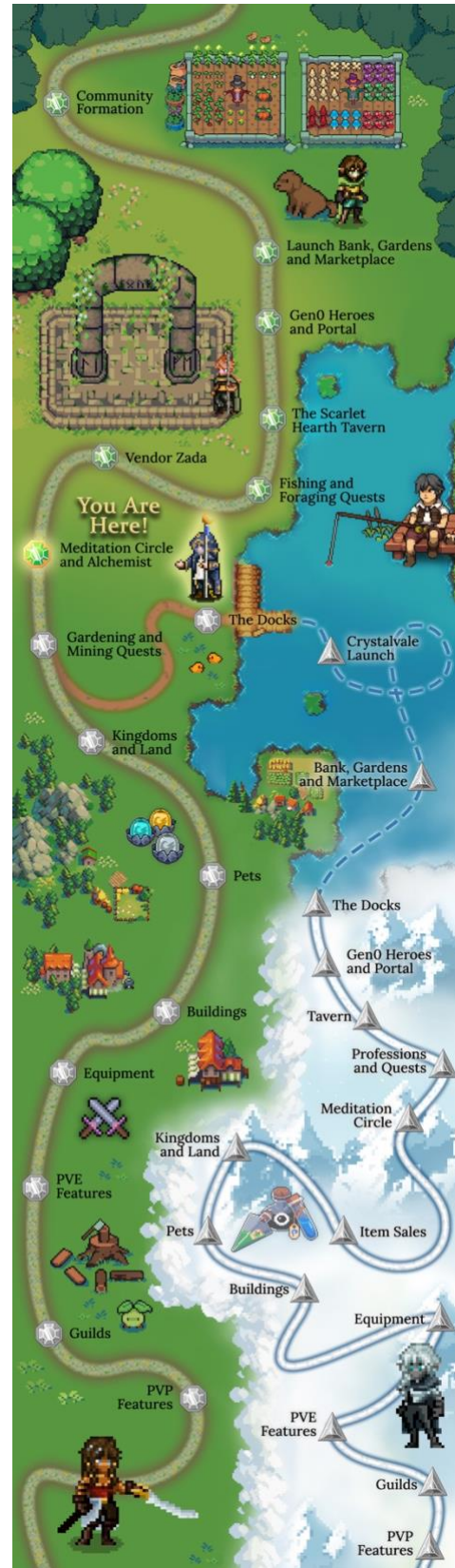


Figure 5: DFK Roadmap⁵

40,000 members in the Discord. Additionally, prominent Twitter users like @satsdart and @blknoiz06 have taken a liking to the game, even going as far as to start a closed DAO/guild community that is focused on acquiring in-game assets over the long-term future.

Overall, the team has shown major competence. Major contributors/team members include Frisky Fox, Professor Tango, Tadakichi, SpicyMapleCat, Dreamer, and Xeno Sniper. Many have long-term experience in industries such as marketing, creative design, software development, finance, and operations. Most importantly, they've stuck to their laid-out roadmap, constantly shipped new, working features, and built a solid community.

Technical Analysis

We've already gone over the fundamentals of the game, so let's take a quick look at the technical of JEWEL's price (see **Figure 6**).⁷



Figure 6: JEWEL Price From October To Now⁷

The price of JEWEL has more than doubled in the past 10 days as DFK has attracted more users and attention, especially in anticipation of the Crystalvale expansion. It *could* be considered overbought. Further, as mentioned earlier, the fully diluted valuation is high; less than 1/5 of the total tokens are in circulation right now. By the time locked tokens earned from the Gardens begin unlocking in July 2022, the number of circulating tokens will have more than doubled.

However, remember that Crystalvale is launching in Q1 of 2022, and JEWEL will be required to earn initial CRYSTAL. Plus, JEWEL will still be playing a big role in DFK on Harmony. A lot of future price movements depend on macro crypto price movements, but there is certainly a case for demand to continue outpacing supply growth as more users purchase JEWEL to stake in preparation for the Crystalvale launch. From a pure price perspective, JEWEL can continue to rise quickly if adoption continues and the macro crypto environment remains at least neutral (no big pullbacks and not highly bearish).

Risks

There are several risks to be aware of when looking at DFK and the JEWEL token. First, there's always smart contract risk. When you're depositing JEWEL into the bank or putting LP tokens into the Gardens, you're assuming that these smart contracts are safe. On the bright side, DFK's contracts have been audited by Solidity Finance,⁸ and the Gardens are based on Uniswap's smart contract code, which is among the most well-known and secure code in all of DeFi.

Second, as mentioned in *Technical Analysis*, much of the demand for JEWEL depends on incentives: the ability to earn CRYSTAL soon as well as in-game use cases. This is tied closely to **execution risk**. The team must continue to deliver new features and successfully launch Crystalvale (and other future expansions) in order to drive demand. So far, they have executed well, but this expansion will be a large undertaking that will test the team and community. Blockchain gaming is a competitive space with a lot of money flowing into it, and DFK needs to continue innovating to stay relevant.

Third, and also mentioned in *Technical Analysis*, there is macro risk. Crypto, as a risk-on asset class, is currently in a relatively uncertain

environment. The Omicron Covid variant, planned monetary policy tightening, and an uncertain regulatory environment could provide catalysts to move crypto prices lower. JEWEL, despite being a gaming/metaverse play first and foremost, would likely not be immune to these moves.

Rating Summary

I've rated DFK and JEWEL and 8/10 for a variety of reasons. Keep in mind this rating is mostly focused on the near-term future (think 1-6 months), but the token could certainly stay relevant for much longer if execution goes well.

The expansion to Crystalvale should be a huge catalyst for JEWEL, and, despite the high fully diluted valuation of JEWEL, it is possible to keep up with this (at least partially) by participating in the Gardens to earn JEWEL rewards or by staking in the Bank. Again, blockchain gaming is a highly competitive and fast-moving industry, but DFK looks to be positioned well for now, especially with the unique ability to expand cross-chain while continuing to drive value to the JEWEL token. Perhaps more centralized exchange listings could be on the horizon as well, especially once it expands to other chains (cough, Avalanche, cough) and can be more easily integrated into current exchanges.

Of course, there are always risks with every investment, especially in newer tokens/games like JEWEL and DFK. In-game transaction volumes, progress on new features, and the smoothness of the Crystalvale expansion are all things that could affect/lower the price and our 8/10 rating in the future.

How to Buy

You can buy JEWEL in the DFK game by visiting the Marketplace. The best way to do this is to first obtain ONE from an exchange like Gate.io or crypto.com, and then withdraw it to your MetaMask wallet. You can also bridge tokens

over from Avalanche and use those to swap for ONE and then JEWEL. Both methods are described in more detail [here](#).

Citations

- 1 <https://dappradar.com/rankings/category/games>
- 2 <https://defillama.com/chains>
- 3 <https://docs.defikingdoms.com/how-defi-kingdoms-works/the-gardens>
- 4 <https://dfk-hv.b-cdn.net/files/Expansion-FAQ-AVAX.pdf>
- 5 <https://docs.defikingdoms.com/roadmap>
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- 8 <https://solidity.finance/audits/DefiKingdoms/>

Links

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