Dungeons & DERO Whitepaper

What is Dungeons & DERO?

Dungeons & DERO is a Multi-User Dungeon (MUD)/MMORPG being built for Dero as a plugin application to the Bullish'N'Bored p2p message system. It is being designed to be played both in the browser as a Javascript app (overworld) as well as from the command-line (dungeon). As such, the overworld will focus on accessibility and fun factor, while the dungeon will be more focused towards challenges and experience, ideally teaching participants skills along the way that will benefit the Dero ecosystem. The rollout will include a fungible governance token and non-fungible reward tokens (NFTs), which can be used to advance one's position in the game, or traded externally on the open market. Thematically it will adopt a classical fantasy style with cypherpunk trappings, an archaic revival model with expansive possibilities.

What tools are being used?

The main page is under development. As mentioned, the browser-compatible overworld will be a javascript application, a likely development platform is RPGJSv3 (rpgjs.dev), although other options will be considered. The aim is a fun-to-play and efficient-to-program story-led game encouraging community-building and interactivity, with an old-school 16-bit visual aesthetic.

The Dero RPC bridge will be implemented to the front-page, allowing users to connect their wallets directly to an RPC endpoint and access the chain. Session data can be stored in the browser and written to the chain on a user's approval. The (https://github.com/dero-sweet/dero-rpc-ts) package is being considered for this purpose.

The dungeon components will be basic, the clandestine command-line interface is chosen for its simplicity and tactile interaction, as well as challenging users to think more than just mash buttons. Several terminal UIs are being considered, the (https://github.com/rivo/tview) library is a good first option, being written in Golang like the BBS is.

Fungible tokens will be issued according to the G45FAT standard, and non-fungible tokens to the G45NFT (unless new standards are offered/created. It is under consideration whether the aims of the project would merit re-configuring existing standards).

Governance is intended to be an evolving and engaging part of the experience, and will be given thorough analysis before implementation. DAO tooling could be an extensive project on its own, but interesting models already exist, for instance (https://aragon.org/) or something like it. Ideally, a fun game with a well-considered economic model that teaches useful skills, would encourage people to engage more deeply with governance and support user retention.

Gameplay

Dungeons & Dero is intended to be a classic-style MMORPG with all the features users expect from the genre. Base character classes will include warrior, wizard, rogue, and cleric, with plenty of room for expanding or mixing roles, and joining together into clans or nations. Characters will have levels that grow from 1-99, health points, magic points, strength, vigor, agility, stamina, speed, etc., and will be able to carry various items and equipment, which of course can be NFT-ized. Random encounters with monsters can provide xp and/or items or tokens, the drop rate of which can be controlled by the DAO, as well as coliseum battles against other players where wagers can be made, or boss battles for rare or exclusive drops as the storyline progresses. The complete narrative will be somewhat guarded, but basically a young hero-to-be has an unexpected encounter/experience and gets pulled from their mundane life into a world of adventure and danger, where they uncover clues to a

world far greater than they had imagined. Yes, there will be dragons! Part of the excitement of the narrative is that at the end of the dungeon(s) is rumored to be a relic with the power to change the course of history (something related to the governance of the DAO, possibly? or even the keys to change the source code, hmm?). The one who finds it can liberate their people and restore peace to the land (and be a full-blown legend of DERO!). How to get from here to there is up to the user, choose your own adventure...

Tokenomics

The tokenomics will be considered with extreme diligence. Ideally, token-issuance will be immutably written into the contract and open-source for all to see. This is a high priority, as the difference between a code being immutable without admin keys, or not, as far as user trust, can make the difference between a successful or unsuccessful coin. Thus, the initial contract aims to be succinct and impeccable. Further contracts can be added to augment its use, but the base token must be as close to perfect as possible. To this end, the rate of inflation and total supply must carefully be considered. In general, a capped-supply is easy for the lay-person to understand, and not feel overwhelmed or skeptical of, and one with inflation that is measured and sane. Most protocols heavily front-load tokenissuance, which is fine, but must be measured against user-access, so individuals who discover the coin later in its life-cycle will still be incentivized to join in. Mechanics will be considered to increased token rarity ie decrease supply, for instance burning tokens for the right to mint new tokens of a higherrarity (think bronze, silver, gold versions of a main coin). Existing NFT collections will be integrated for player avatars, with the possibility of augmenting character stats and buffs, as well as the possibility to fuse item-NFTs into more rare versions. Trustless-yield through staking mechanisms will likely be emphasized, as well as modeling a giving economy where more experienced players can be incentivized to gift items to newer entrants in return for in-game perks.

Governance

As mentioned, while token-issuance will be immutably coded and open-source, game mechanics and scenarios will be negotiable to some degree based on the consensus of the DAO. As users gain more tokens, they will gain more influence within their clan and then within the game as a whole, and ideally, within the Dero community. Ideally, integration with the BBS will make Dungeons & Dero a cool place to hang out and foster discussion, which can then be put to vote.

The governance can be arranged in a number of ways, which should be negotiable by consensus. The following are a list of foundational principles:

- 1. DAO influence should be proportional to stake. Those participants who put more economic energy into the game should enjoy more relative power. Basically, the "put your money where your mouth is" principle.
- 2. DAO influence should consider participation. Some kind of balance between stake and participation should be measured. A user with relatively few tokens, but who participates consistently, should eventually be able to overtake the influence of a whale who never logs in.
- 3. DAO influence should value reputation. There should be a mechanism by which DAO members can recognize the intrinsic value brought by the unique contributions of individuals. This mechanism should be designed to promote a meritocratic environment rather than a popularity contest.
- 4. Intrinsic equality. Members should have the same fundamental right to access, and right to privacy and non-censorship as any other participant. No cheaters and no rulers.

Vision

This project is in its formative stages. This paper represents only a glimpse of what could be, given the talent and depth of the Dero community and the participation thereof. I will love for other

developers to join in and help bring the vision to life. I have already spoken to the creator of the Dero&Dragons fantasy card game under development, there is surely room for crossover and/or collaboration. At some point, an in-game DEX could be integrated, both for the terminal and browser. Ideally, the dungeon portion of the game will teach users practical web3 coding skills that will encourage them to modify or augment the game/deploy contracts in useful ways.

At the end of the day, this project, as part of the overall Dero project in particular, and the project of cryptocurrency in general, has a practical focus. It is about encouraging people to understand asset management, incentivize them to engage and learn, help them monetize their passions, and motivate them to expand upon their fundamental freedoms and rights. The CLI portion of the game will be developed specifically to this practical purpose of learning. People should play this game because it's fun, when they want to, not because they have to, as a retreat from the "real-world" but not as an escape. The design of the game, and some of the unrevealed aspects of the storyline, are being crafted with a "meta"-RPG philosophy: that by playing games that model the fantasy lives we would like to live, we can actually develop the skills and mentality to put down the joystick and go outside and live that life!

Who better than the coders of today to mechanistically apply the laws of consciousness to manifest the leaders and champions of tomorrow?! Who more focused, skilled, and worthy? Who more aware of the true value of material sovereignty and private personal rights? The long-term view is to help the average entrant realize these truths within themselves, and make themselves, and thus the world atlarge, a better place; perhaps even the best it can be...

It is an honor to work beside and share ideas within the Dero community. I will be pleased to accept help in building out this vision, I am just one man. It's beyond my current skills, but who knows, maybe we get some Squaresoft or similar-type developers into Dero and make something truly sensational? Won't that be nice:)?

For the dreamers...

-Nico