Solana Speedrun: GameShift Track

GameShift by Solana Labs is a new product that reduces development time and complexity associated with Solana integration. It is designed to enable a Web2 friendly player experience, while still utilizing Solana to represent and transact game assets. We currently support user self-custodial wallets, cNFT minting, fiat payments, and asset lending. Our in-game marketplace functionality is coming soon.

We want participating teams to create games that showcase the simplicity of the GameShift integration and the ability to create Web2 player experiences that can still bridge into Web3 as desired. In a sense, we're asking you to focus on building a fun game rather than focusing on how it interacts with the chain. Of course, assets need to be a core part of the compelling gameplay experience, and their role in the game must go beyond speculative trading.

Game Requirements

- Assets must be a core part of the gameplay. This should include at least three of the following:
    - Issuing assets to players as the result of in-game actions or achievements
        - Create Asset: https://docs.gameshift.dev/reference/assetcontroller_mintnft
    - Players bartering assets among themselves to enhance their gameplay or to progress in the game (the game will allow users to negotiate barters and the game will facilitate the bi-directional transfer)
        - Transfer Asset: https://docs.gameshift.dev/reference/assetcontroller_transfer
    - Players loaning assets to one-another for fixed periods of time, perhaps as a way to sponsor new players or as part of a barter arrangement
        - Lend Asset: https://docs.gameshift.dev/reference/assetcontroller_createlease
    - Selling new-mint assets to players using fiat credit cards. These could be in-game assets or perhaps passes sold to give access to seasons or levels.
        - Create Asset Template: https://docs.gameshift.dev/reference/assettemplatecontroller_create
        - Create Payment for Asset: https://docs.gameshift.dev/reference/assettemplatecontroller_checkout
    - Evolving existing assets as the result of in-game activity
        - Update Asset: https://docs.gameshift.dev/reference/assetcontroller_put
    - User generated content in assets
        - Create Asset: https://docs.gameshift.dev/reference/assetcontroller_mintnft
- Simply expecting players to speculate on the value of assets is not acceptable
- The game must allow a user to sign up and play without bringing their own wallet by leveraging GameShift's wallet feature
    - Register User: https://docs.gameshift.dev/reference/projectusercontroller_create
- Users should be able to view their assets in the game
    - Fetch User Assets: https://docs.gameshift.dev/reference/projectusercontroller_getuserassets
- Users can be allowed to withdraw assets from their in-game wallet to another address on-chain
    - Transfer Asset: https://docs.gameshift.dev/reference/assetcontroller_transfer
- Game genre is not a strict requirement, but the central value of assets should make natural sense to the gameplay
- Participants are *not* required to write or deploy any on-chain programs
- The game must refrain from offensive content, and should be considered Teen friendly

Technical Requirements

- Games must be fully functional on devnet

- Games must be functional on mainnet with all features, with the exception of charging credit cards (which still must work on devnet)
- Must utilize these GameShift APIs:
    - Assets - Create, fetch, update, lend
    - Users - Register, fetch, fetch assets
    - Lending Grants - Fetch, accept, return
    - Payments - Create, fetch
- Users should be authenticated in the game by some method

Post-Event Requirements

- The winning team must work with GameShift to produce a case study and video interview on their build process, including code excerpts and “behind the scenes” views into the game implementation.
- GameShift will be allowed to reference any participating game in its marketing materials, on social media, etc.
- If the winning team wishes to distribute their game, they must continue to use GameShift, and will receive GameShift service credits