**SUPPORT WHO YOU LOVE – SWYL – DRAFT v2.0**

**PLATFORM TECHNOLOGY CHOICE**

1. **Backend**
2. **WEB\_SERVER:** Go (a.k.a Golang)
3. **DATABASE:** MongoDB ~~|| PostreSQL || MoralisDB || Sanity.io~~
4. **Engine**
5. **FRAMEWORK**: hardhat - a development environment for Ethereum software (editing, compiling, debugging and deploying smart contracts and dApps)
6. **BLOCKCHAIN**:

* **MAIN\_NET**: Polygon – a layer 2 (i.e., sidechain) scaling solution that runs alongside the Ethereum blockchain - allowing for speedy transactions and low gas fees
* **TEST\_NET**: Mumbai – a test network mimic the Polygon mainnet. Served for testing and development purposes

1. **SMART\_CONTRACT**: Solidity
2. **OTHER DEPENDENCIES**:

* **IPFS** (Interplanatory File System) – p2p network for storing and sharing data in a distributed file system using “content addressing” to identify objects rather than “location addressing”
* **Openzeppelin** library – library supports build advanced smart contract (proxy, ownable, upgradable, fungible and non-fungible tokens, etc.).
* **ERC-721** (Ethereum Request for Comments-721) – A standard/class to build single unique NFT smart contracts
* **ERC-1155** (Ethereum Request for Comments-1155) – A standard/class to build multiple unique NFTs smart contracts
* **NFT.storage** – Decentralized storage and bandwidth mainly for NFTs (store music audio files) built on top of IPFS and Filecoin

1. **QA**

* **Mocha chai** - smart contract unit testing
* **Testing.go** && **httptest package** – Go restful server unit testing package
* System testing - TBD

1. **Front-end**

* **NextJS** – a flexible React framework that create fast web applications – support server side rendering hence better SEO, better performance and ship code faster to clients
* **TailwindCSS** – low-level CSS framework
* **Moralis Provider** – web3.0 provider
* **Redux** – state management
* **~~Web3.js~~** ~~||~~ **Ethers.js** – tools help interacting with Ethereum blockchain
* Other dependencies: **IPFS-client**, **Axios**, **SWR**, **JWT**, etc.

1. **User Interaction | User Experience**

* **Figma** – interface design tool
* **Rainbowkit** – web3.0 UI kit
* **Rive** && **PottieFile** – modern animated components
* **Metamask** – crypto wallet

1. **Deployment**

* ~~Docker~~
* Vercel