Contract Explanation

This project implemented IDO mechanism used by DEXs built on the Cosmwasm framework.

IDO stands for "Initial DEX Offering".The IDO process typically involves creating a liquidity pool on the DEX, where users can contribute funds in exchange for the project's tokens. The tokens are then distributed proportionally to the contributors based on their investment. This allows projects to bootstrap liquidity and gain exposure within the decentralized finance (DeFi) ecosystem. In an IDO, participants can purchase newly issued tokens directly from the DEX's liquidity pool.

This smart contract defines the rules and logic of the IDO, including token distribution, pricing, and other parameters.

I will provide you with a detailed explanation in an intuitive manner.

1. Our team minted a new token.
2. Creating a liquid pool is quite challenging due to insufficient funds; therefore, we are seeking investors. Subsequently, we should proceed with the creation of a whitepaper for our minted token, outlining its application and benefits, in order to generate investor interest in our token.
3. Investors will purchase our token before launching public.
4. Our team will conduct an IDO period, allowing investors to purchase our token at an initial value during this period.
5. Our team decides several parameters for IDO
    start_time - The time to start IDO
    end_time - The time to end IDO
    price - initial token value
    soft_cap - minium amount of funds that our team aims to raise during the IDO period.
    total_amount - The amount of tokens that our team wants to sell.
    Tier - a specific phase or level within the token sale process. Tiers are often used to structure the IDO and provide different benefits or conditions for participants based on their level of involvement or contribution.
    Whitelist - a list of pre-approved participants who are granted priority access or certain benefits during the token sale.
    Lock_period - a predetermined duration during which certain tokens or assets are restricted from being transferred, sold, or otherwise moved.
6. By defining these parameters, our team establishes a strategy for the successful implementation of our service using our minted token.
7. Participants have the opportunity to purchase our new tokens for potential future profits.
8. Through the IDO, our team create a liquidity pool using the funds contributed by investors.

This contract implements the general IDO logic on the Secret Network. Secret Network is also based on the general Cosmwasm framework, but with slight differences in blockchain storage. The smart contract you provided is implemented on an older version of Cosmwasm (0.9), so it needs to be updated to version 1.2 and converted into a general Cosmwasm contract that can be used on the Sei Network. I am currently working on this update.