



**FIRDAOS**

POWERED BY  **ZPAYae**

# What is Firdaos?

Firdaos removes the need for third parties such as real estate agents while turning properties into smart contracts stored on a decentralized ledger.

**ZelaaPayAE** is one of the leading blockchain solution providers in the United Arab Emirates, and the entire Gulf Area. Today, ZelaaPayAE is expanding its position by entering the DeFi ecosystem with Firdaos: a revolutionary platform that bridges the worlds of decentralised finance and real estate investing.

Firdaos is a DeFi platform aiming to empower anyone, anywhere in the world, to benefit from investing in the real estate sector of the United Arab Emirates. Firdaos disrupts the traditional real estate ecosystem through blockchain technology and DeFi, which allows converting real estate assets into flash liquidity pools crowdfunded by a decentralised community of cryptocurrency investors from around the world.

The core idea of DeFi is removing the human element from traditional investment mechanisms, and replacing it with advanced blockchain technology. Firdaos does exactly this by removing the need for third parties such as real estate agents, while turning properties into smart contracts stored on a decentralized ledger, assuring the privacy and security of the entire process.

Firdaos adds a powerful DeFi aspect to ZPAE, and enables all the token holders to become real estate investors. By holding and staking a certain amount of ZPAE, investors are able to participate in the decentralised, crowdfunded liquidity pools. Every backer who contributes towards successfully funding the asset pool receives an assured fixed percent of yield in a specified tenure linked to property.

The combination of crypto and real estate is every investor's dream: high liquidity of blockchain assets together with the ever-appreciating value of the real estate industry. With Firdaos, the gates to investing in one of the world's most promising economies are open to everyone.

## Why Firdaos?

The real estate sector in the United Arab Emirates is expanding at a rate that is extremely attractive to investors. The UAE property market is expected to continue growing at an annual rate of 7.4% and reach USD 132.5 billion by the end of 2024. Thanks to successful government policies, the real estate sector of the United Arab Emirates has effectively dealt with the aftermath of the COVID-19 pandemic and still keeps expanding – fueled largely by the growing tourism and rising foreign investments.

## How does Firdaos work?

In simple terms, Firdaos acts as an intermediary between the real property asset class and the investors/backers of that asset on our platform.

We source and list a project on Firdaos after a successful diligence on it with key parameters that majorly include the asset which can appreciate in value fastest and in the shortest tenure possible as this becomes the cash flow for Firdaos and backs our promised APY calculation to the investors which again vary from project to project.

Once a project pool has been funded 100%, Firdaos purchases the asset from the developer/owner and registers it under ZPAE, UAE legally and then it waits for it to appreciate and at the right time, Firdaos liquidates the asset in the real-estate market for a profit that correlates to the APY in order to ensure the yield to backers. While we wait for the property to appreciate in value, Firdaos acquires tenants for the property and continues to earn from it from the very first day of acquiring the asset - in both cases, the property is exclusive to

# How does the Firdaos Smart Contract work?

The Firdaos smart contract has individual modules that handle the entire process and business plan in the most decentralised way possible, as below:

## Campaign

The campaign smart contract creates and lists the project's smart contracts, it is capable of generating projects that work either with ETH or USDT.

The campaign contract file has two other smart contracts, due to its size (3 contracts in a single file), the "Enable Optimisation" mode must be activated during the contract compilation.

Only the owner of the smart contract (the one who deployed the smart contract) can create projects.

## Functions

```
/**
```

- \* Creates a new project.
- \* @param title - Project title.
- \* @param description - Project description.
- \* @param deadline - Project deadline.
- \* @param amountToRaise - Amount to be collected in the project.
- \* @param hold - ZPAY value that the investor must have in his wallet to be able to invest
- \* @param projectType - Project type, 0 - ETH or 1 - USDT.\* /

```
function startProject(string calldata title, string calldata description, uint deadline, uint amountToRaise, uint hold, ProjectType projectType) external onlyOwner
```

```
/** Returns all projects that use ETH */
```

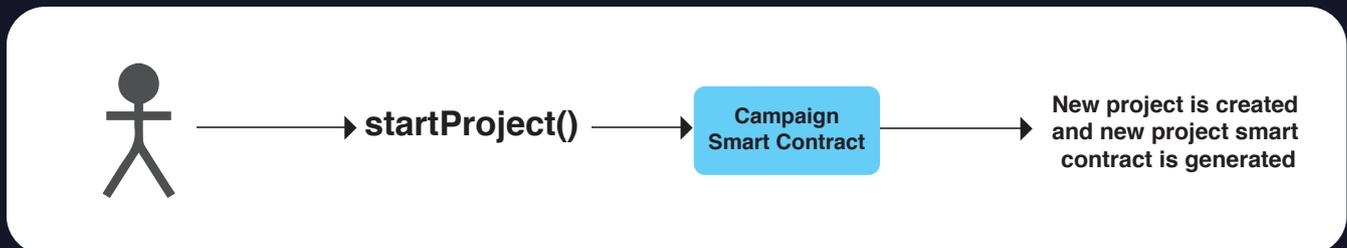
```
function returnAllProjects() external view returns(Project[] memory) { return projects; }
```

```
/** Returns all projects that use USDT */
```

```
function returnAllProjectsUSDT() external view returns(ProjectUSDT[] memory) { return projects_usdt; }
```

## Flow

The contract owner can create new projects, when creating a new project, the campaign's smart contract generates a new smart contract for the project. For each project created there will be a contract for it that is generated by the campaigns contract



## Project

The project smart contract manages the investments and earnings of a specific project. There are two versions of this contract, one that works with ETH and another that works with USDT. Both versions have the same functions, these functions are adapted to your ZPAE.

When creating a new project, the contract owner passes the following values:

- **Project title**
- **Project description**
- **Amount to be collected in the project**
- **ZPAE amount that the investor must have in his wallet to be able to invest - Project type, ETH or USDT**

With this contract investors can invest, give up the investment or receive gains from their investments.

Investors can only invest if they have ZPAE.

The contract has a refund fee that defaults to 0, this fee is charged by the investor if he gives up on an investment.

The contract owner can change the total amount to be collected, change the investment deadline, change the refund fee, change the amount of ZPAE that the investor must have to invest.

The contract owner can cancel the project.

The contract owner can receive the amount collected. The contract owner can deposit earnings to investors

## Functions

```
/**
 * Changes project values, amount value, deadline, refund fee, hold ZPAY. *
 * @param newAssetAmount - New amount value.
 *
 * @param newDeadline - New deadline.
 * @param _FEE - New fee.
 * @param newZ - New hold ZPAY value.
 */

function setNewValues(uint newAssetAmount, uint newDeadline, uint _FEE, uint newZ) external
onlyCreator {
/**
 * Investors buys project bonds.
 * @param payment - investment value. */

function buy()
/**
 * Investors give up the investment and request a refund. */

function refund()
/**
 * Project owner requests the amount collected if the project has been successful. */

function payout()
/**
 * Project owner cancels the project. */

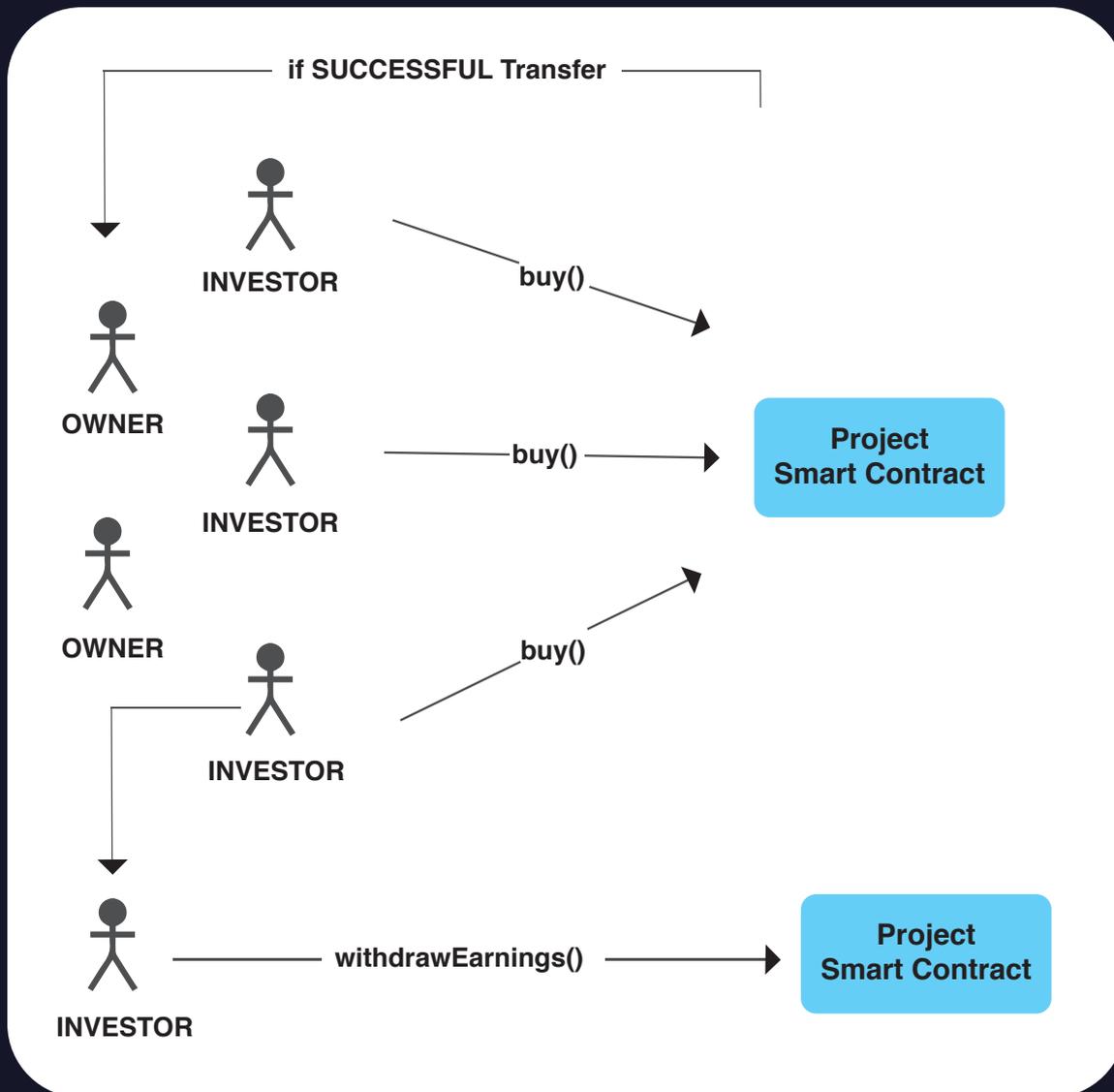
function cancel()
/**
 * The project owner deposits an amount to be distributed among investors. */

function depositEarnings()
/**
 * Investor withdraws his earnings. */

function withdrawEarnings()
/**
 * Get investor information.
 * @param inv - Investor address. */

function getInvestor(address inv) public view returns (
/**
 * Get project details. */
function getDetails() public view returns (
```

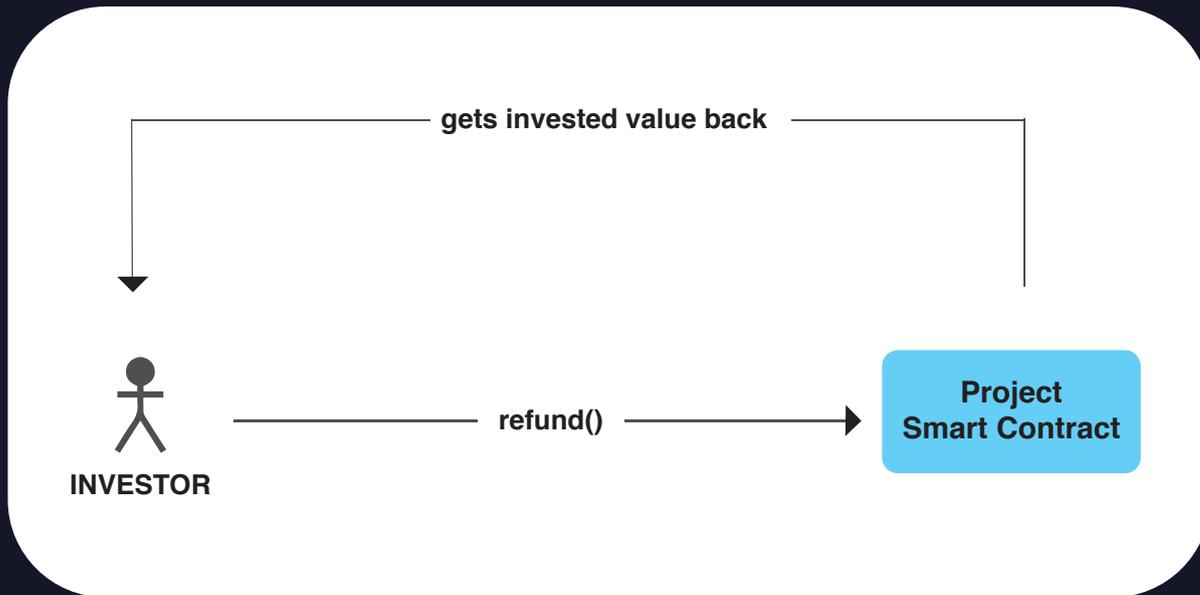
## Flow



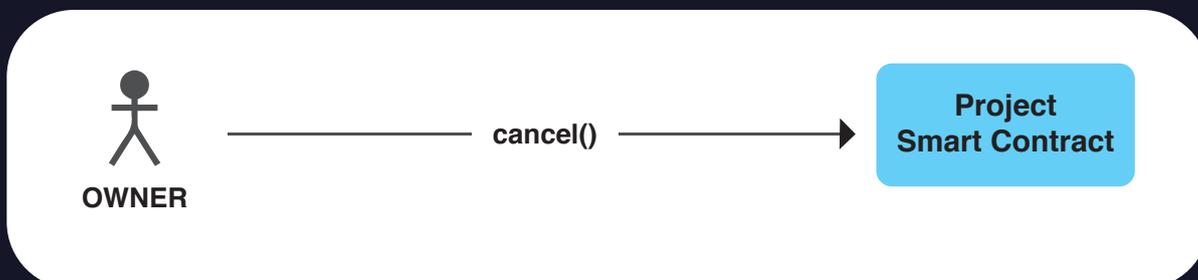
- 1) Investors secure ownership in Project.
- 2) The project owner requests the withdrawal of the invested amount, the amount will be transferred if the project has collected the total amount and has not exceeded the deadline.
- 3) The project owner deposits value to be distributed among investors.
- 4) Investor requests his share of the earnings that was deposited by the project owner.

# NOTE

N1) Investor can request the amount he invested back, if the project has not been completed



N2) The project owner can cancel the project, if the project is canceled each investor must request to recover their investments through the refund() function.





# FIRDAOS

POWERED BY  ZPAYae