Creating Accounts

You might want to create an account from a contract for many reasons. One example: You want to [progressively onboard](#) users, hiding the whole concept of NEAR from them at the beginning, and automatically create accounts for them (these could be sub-accounts of your main contract, such asuser123.some-cool-game.near).

Since an account with no balance is almost unusable, you probably want to combine this with the token transfer from[the last page](#) . You will also need to give the account an access key. Here's a way do it:

Promise :: new ("subaccount.example.near" . parse ( ) . unwrap ( )) . create_account ( ) . add_full_access_key (env :: signer_account_pk ( )) . transfer (250_000_000_000_000_000_000_000) ;

// 2.5e23yN, 0.25N In the context of a full contract:

use

near_sdk :: { env , near_bindgen ,

AccountId ,

Balance ,

Promise } ;

const

INITIAL_BALANCE :

Balance

=

250_000_000_000_000_000_000_000 ;

// 2.5e23yN, 0.25N

[near_bindgen]

pub

struct

Contract

{ }

[near_bindgen]

impl

Contract

{

[private]

pub

fn

create_subaccount (prefix :

AccountId)

->

Promise

```
{ let subaccount_id =

AccountId :: new_unchecked ( format! ( "{}.{}" , prefix ,

env :: current_account_id ( ) ) ) ; Promise :: new ( subaccount_id ) . create_account ( ) . add_full_access_key ( env ::
signer_account_pk ( ) ) . transfer ( INITIAL_BALANCE ) } }
```
Things to note:

- add_full_access_key
- – This example passes in the public key of the human or app that signed the original transaction that resulted in this function call (signer_account_pk
-). You could also use add_access_key
- to add a Function Call access key that only permits the account to make calls to a predefined set of contract functions.

[private]

- – if you have a function that spends your contract's funds, you probably want to protect it in some way. This example does so with a perhaps-too-simple [#[private]](#[private])
- macro.
- INITIAL_BALANCE
- uses the Balance
- type from near-sdk-rs. Today this is a simple alias for u128
- , but in the future may be expanded to have additional functionality, similar to recent [changes to the Gas type](changes-to-the-Gas-type)
- . [Edit this page](Edit-this-page) Last updated on Aug 24, 2022 by Damián Parrino Was this page helpful? Yes No