

## For Test

Party	Account number	address
Owner	2	0xf0b136505eEB6153DAbEC79F34649ce77805e7cF
Donor 1	3	0xF4D846Ed3c195DD8cE4f1ac39653E3949a05d64f
Donor 2	4	0x698019c23d09c1a89FEE8a6C5C5E0b3fdeDd8613
Beneficiary	5	0xf530E507a8f89a69259864C3820f885CD4b22b79
Validator	6	0xEee353CE8e139D303799F5E07272F73a7970651a
Validator	7	0x03fcc7B438483414aEF817d0D761dd80E2036AB7
Validator	8	0xAE355B827eaF295b5E5A629E36CeFacf8d8fadE8
Validator	9	0x1890DD250108CFb2AFdA9b2583A0281a5172ee68

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### Test 1:

- 1- Call register\_valid\_contract(master\_contract\_address) in token\_contract.
  - 2- Call assign\_token\_to\_donor (address reciever, uint amount) in token\_contract
  - 3- Call add\_validators (address \_validator\_addr) in master contract (note that you first need to gen. some addr. for validators)
  - 4- Call set\_project() in master\_contract --- set cancelation period to zero
  - 5- Call assign\_token\_to\_contract() in token\_contract
  - 6- Call validate\_project() – with accounts 6-10 --- check if the recipient received the tokens and donors token is decremented.
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### Test 2:

- 1- Call register\_valid\_contract(master\_contract\_address) in token\_contract.
  - 2- Call assign\_token\_to\_donor (address reciever, uint amount) in token\_contract
  - 3- Call add\_validators (address \_validator\_addr) in master contract (note that you first need to gen. some addr. for validators)
  - 4- Call set\_project() in master\_contract --- set cancelation period to zero
  - 5- Call set\_project() in master\_contract --- set cancelation period to zero
  - 6- Call set\_project() in master\_contract --- set cancelation period to zero
  - 7- Call set\_project() in master\_contract --- set cancelation period to zero
  - 8- Call assign\_token\_to\_contract() in token\_contract
  - 9- Call validate\_project() – with accounts 6-10 --- check if the recipient received the tokens and donors token is decremented.
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### Test 3:

- 1- Call register\_valid\_contract(master\_contract\_address) in token\_contract.
- 2- Call assign\_token\_to\_donor (address reciever, uint amount) in token\_contract
- 3- Call set\_project() in master\_contract --- allocate some tokens to it. set cancelation period to 1000000
- 4- Call set\_project() in master\_contract ---Don't allocate any token to it. Set cancelation period to 1000000
- 5- Call assign\_token\_to\_contract() in token\_contract

- 6- Call `cancel_project()`. – check if his token has been unlocked and the project got deleted.
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#### Test 4:

- 1- Call `register_valid_contract(master_contract_address)` in `token_contract`.
  - 2- Call `assign_token_to_donor` (address reciever, uint amount) in `token_contract`
  - 3- Call `set_project()` in `master_contract` as follows:
    - 3.1 Set `set_project ("Project 1",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1)`
    - 3.1 Assign token to project 1.
    - 3.2 Set `set ("Pro_2",8,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1000000,1)`
    - 3.3 Delete Project 1: Call `remove_an_expired_project()`
    - 3.4 Set `set ("Pro_3",8,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1000000,1)`
    - 3.5 Set `set ("Project 4",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1)`
    - 3.6 Delete Project 4: Call `remove_an_expired_project()`
    - 3.7 Set `set ("Project 5",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1)`
    - 3.8 Assign tokens to project 5.
    - 3.9 Set `set ("Project 6",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1000000,1)`
    - 3.10 Delete project 5: Call `remove_an_expired_project()`
    - 3.11 Set `set ("Project 7",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1)`
    - 3.12 Set `set ("Project 8",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",100000,1)`
    - 3.13 Set `set ("Project 9",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1)`
    - 3.14 Set `set ("Project 10",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1)`
    - 3.15 Set `set ("Project 11",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",100000,1)`
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#### Test 5: Test multiple donors creating/deleting different projects. A simple scenario

- 1- Call `register_valid_contract(master_contract_address)` in `token_contract`.
  - 2- Call `assign_token_to_donor` (address donor\_1, uint amount) in `token_contract`
  - 3- Call `assign_token_to_donor` (address donor\_2, uint amount) in `token_contract`
  - 4- Call `set_project()` in `master_contract` as follows:
    - 4.1 Donor 1: Set `set_project ("Project 1",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1)`
    - 4.2 Assign token to project 1.
    - 4.3 Donor 2: Set `set_project ("Project 2",9,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1)`
    - 4.4 Assign token to project 2.
    - 4.5 Donor 1: Set `set_project ("Projec 3",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1000000,1 )`
    - 4.6 Assign token to project 3.
    - 4.7 Donor 2: Set `set_project ("Project 4",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1 )`
    - 4.8 Donor 1 calls: `remove_an_expired_project (bytes6 _pro_id_1)`
    - 4.9 Donor 1: Set `set_project ("Projec 5",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1)`
    - 4.10 Call `remove_all_expired_projects`
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#### Test 6: Test multiple donors creating/deleting different projects:

- 1- Call `register_valid_contract(master_contract_address)` in `token_contract`.
- 2- Call `add_validators` (address \_validator\_addr) in `master contract`.
- 3- Call `assign_token_to_donor` (address donor\_1, uint amount) in `token_contract`

- 4- Call `assign_token_to_donor` (address `donor_2`, uint amount) in `token_contract`
- 5- Call `set_project()` in `master_contract` as follows:

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5.1 Donor 1: Set_project ( "Project 1.1",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1 )
5.2 Assign token to project 1.
5.3 Donor 1: Set_project ( "Project 2.2.",9,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1 )
5.4 Assign token to project 2.
5.5 Donor 1: Set_project ( "Projec 1.3",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1000000,1 )
5.6 Assign token to project 1.3.
5.7 Donor 1: Set_project ( "Projec 1.4",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1 )
5.8 Assign token to project 1.4.
5.9 Donor 1: call: remove_an_expired_project (bytes6 _pro_id_2.2)
5.10 Donor 2: Set_project ( "Projec 2.5",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1 )
5.11 Donor 2: Set_project ( "Project 2.6",9,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1000000,1
5.12 Assign token to project 2.6.
5.13 Donor 2: Set_project ( "Project 2.7",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1 )
5.14 Assign token to project 2.7.
5.15 Donor 1 calls: remove_an_expired_project (bytes6 _pro_id_1.1)
5.16 Donor 1: Set_project ( "Projec 1.8",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1 )
5.17 Assign token to project 1.8.
5.18 Donor 1 calls: remove_an_expired_project (bytes6 _pro_id_2.8)
5.19 Donor 2: Set_project ( "Projec 2.9",7,"0xf530E507a8f89a69259864C3820f885CD4b22b79",1,1 )
5.20 Call remove_all_expired_projects
5.21 Call validate_project(project_id_6) – with accounts 6-10
5.22 Call validate_project(project_id_3) – with accounts 6-10
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