NEO Persistable Classes 2.1 Platform for Python Smart Contacts

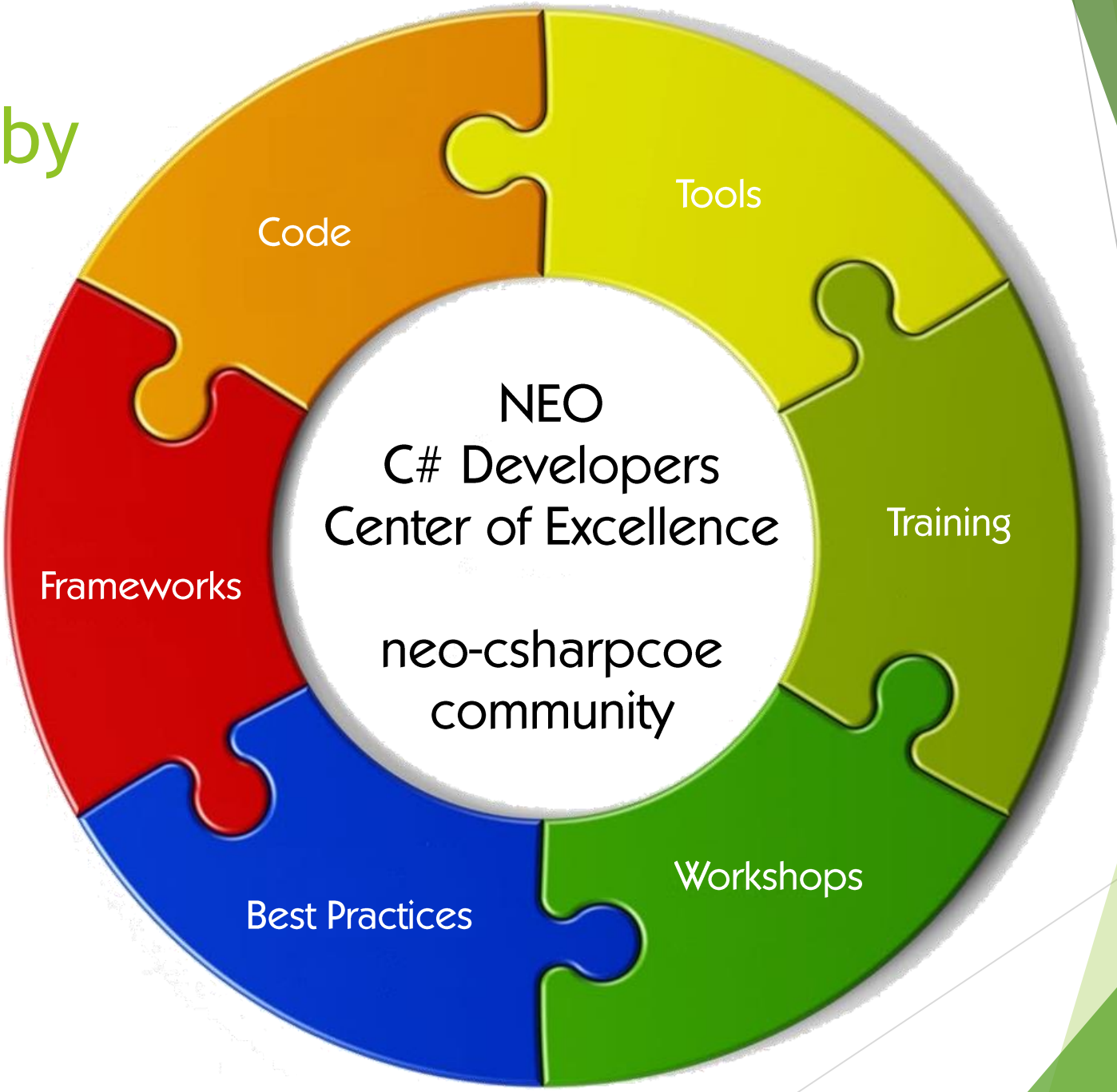
Michael Herman and Nate Bronstein

Independent Blockchain Developers

NEO C# Developers Center of Excellence

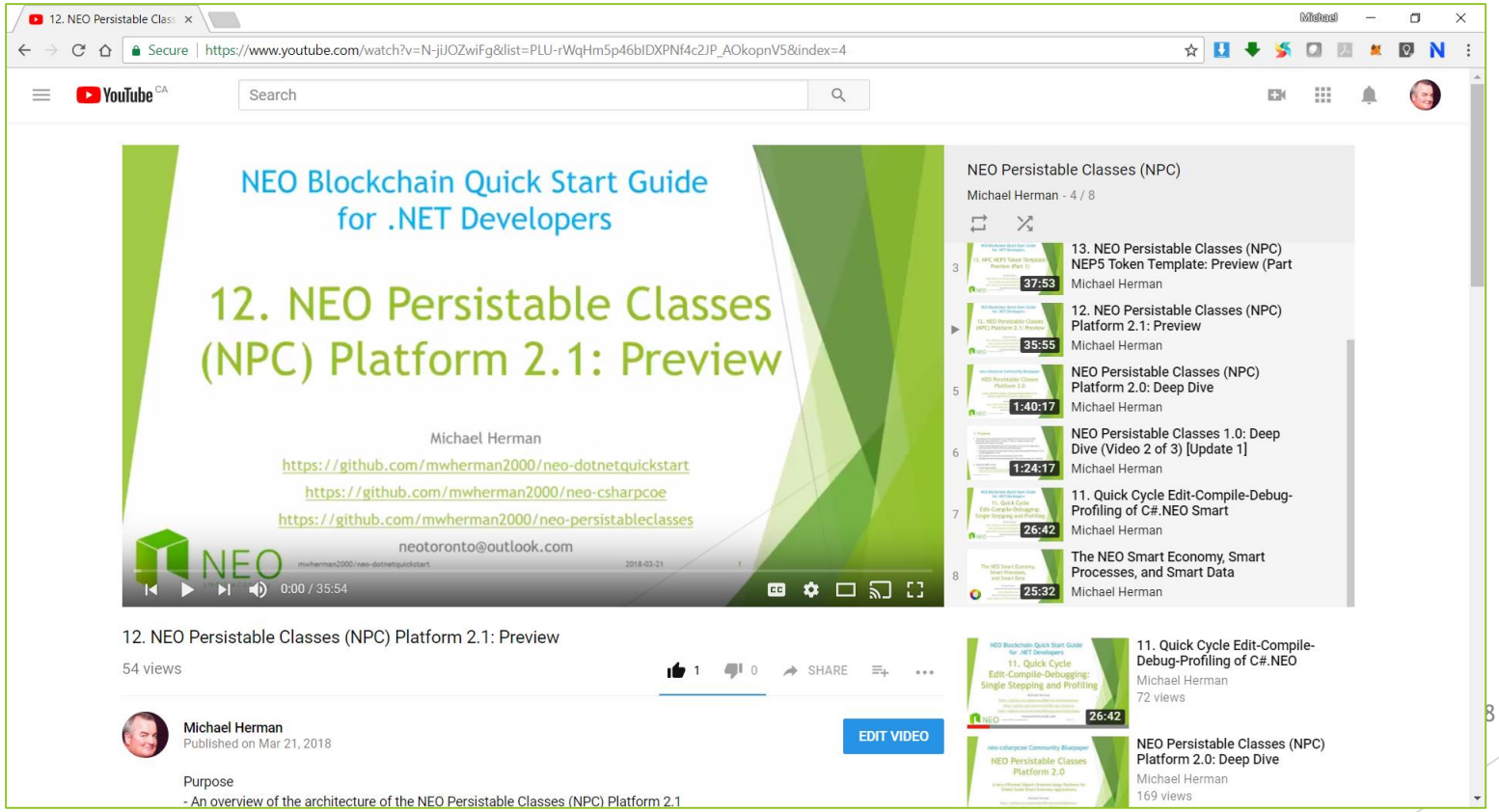
https://github.com/mwherman2000/neo-csharpcoe

Sponsored by



Homework

1. Watch the webcast “12. NEO Persistable Classes (NPC) Platform 2.1: Preview” https://www.youtube.com/watch?v=N-jiJOZwiFg

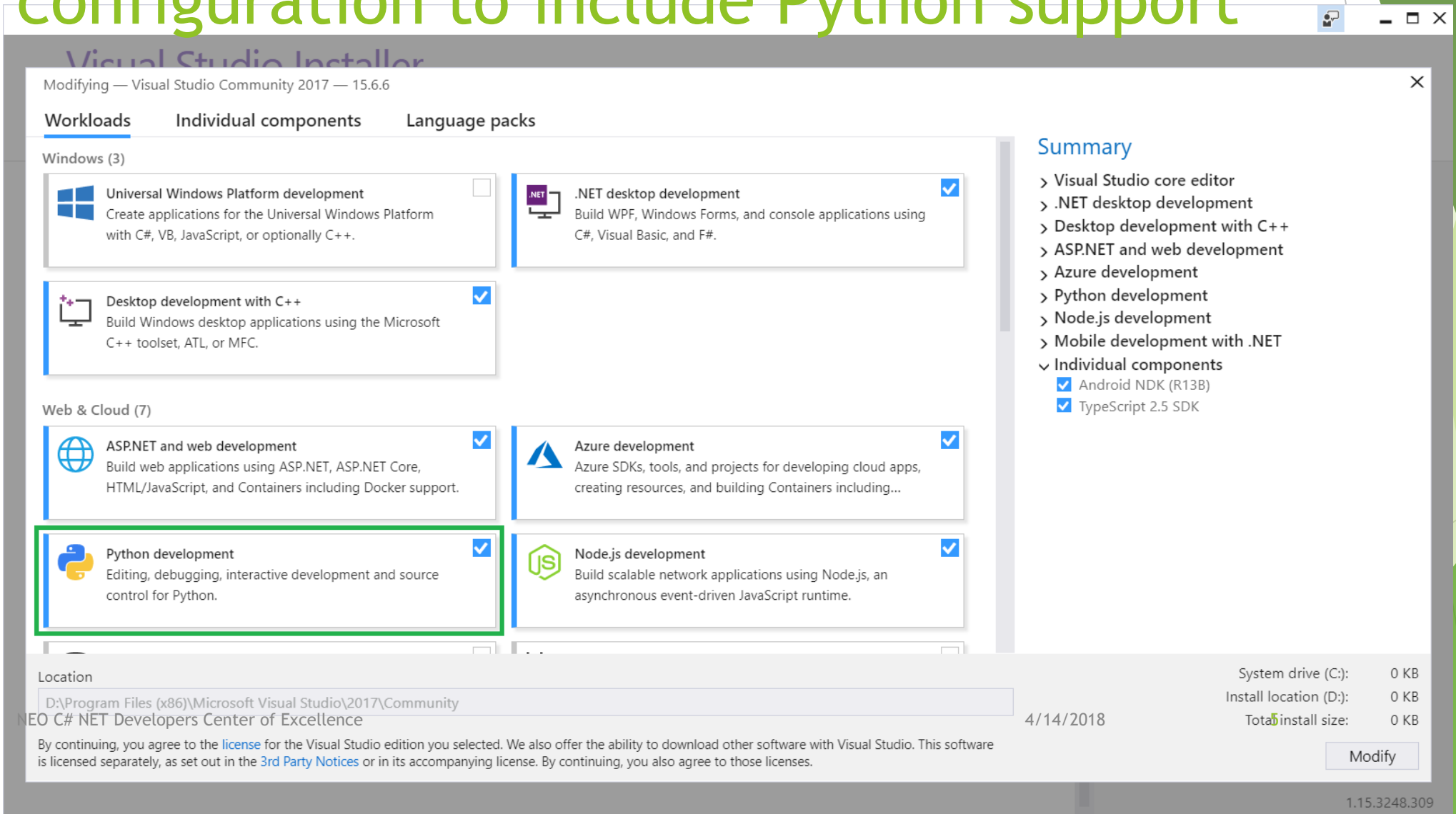


Preparation / Roadmap

NATE: First 9 step are complete

1. Install Visual Studio 2017 Community Edition (free)
   TODO
2. Modify the Visual Studio 2017 configuration to include Python support
   TODO
3. Follow the normal NPC process to create a Model Class project using C#
   TODO e.g. `NPC.mwherman2000.NEP5Token.Model`
4. Configure the NPC Compiler (npcc.exe) to be the “debugger” for the Model Class project
   TODO
5. Create a (C#) NEO Smart Contract project for the C# version of the smart contract
   TODO e.g. `NPC.mwherman2000.NEP5Token.Contract`
6. Click Start to run the NPC Compiler to generate the NPC C# support files in the C# smart contract project
7. Manually include the generated C# support files into the Visual Studio project
8. Create a Python Model project for the manually-created Python version of the C# smart contract (from Step 5-6-7)
   e.g. `NPC.mwherman2000.NEP5Token.ManualPContract`
9. Create a second Python Model project for the automatically generated Python version of smart contract
   e.g. `NPC.mwherman2000.NEP5Token.PContract`
10. Manually translate/port the C# from `NPC.mwherman2000.NEP5Token.Contract`
    to `NPC.mwherman2000.NEP5Token.ManualPContract`

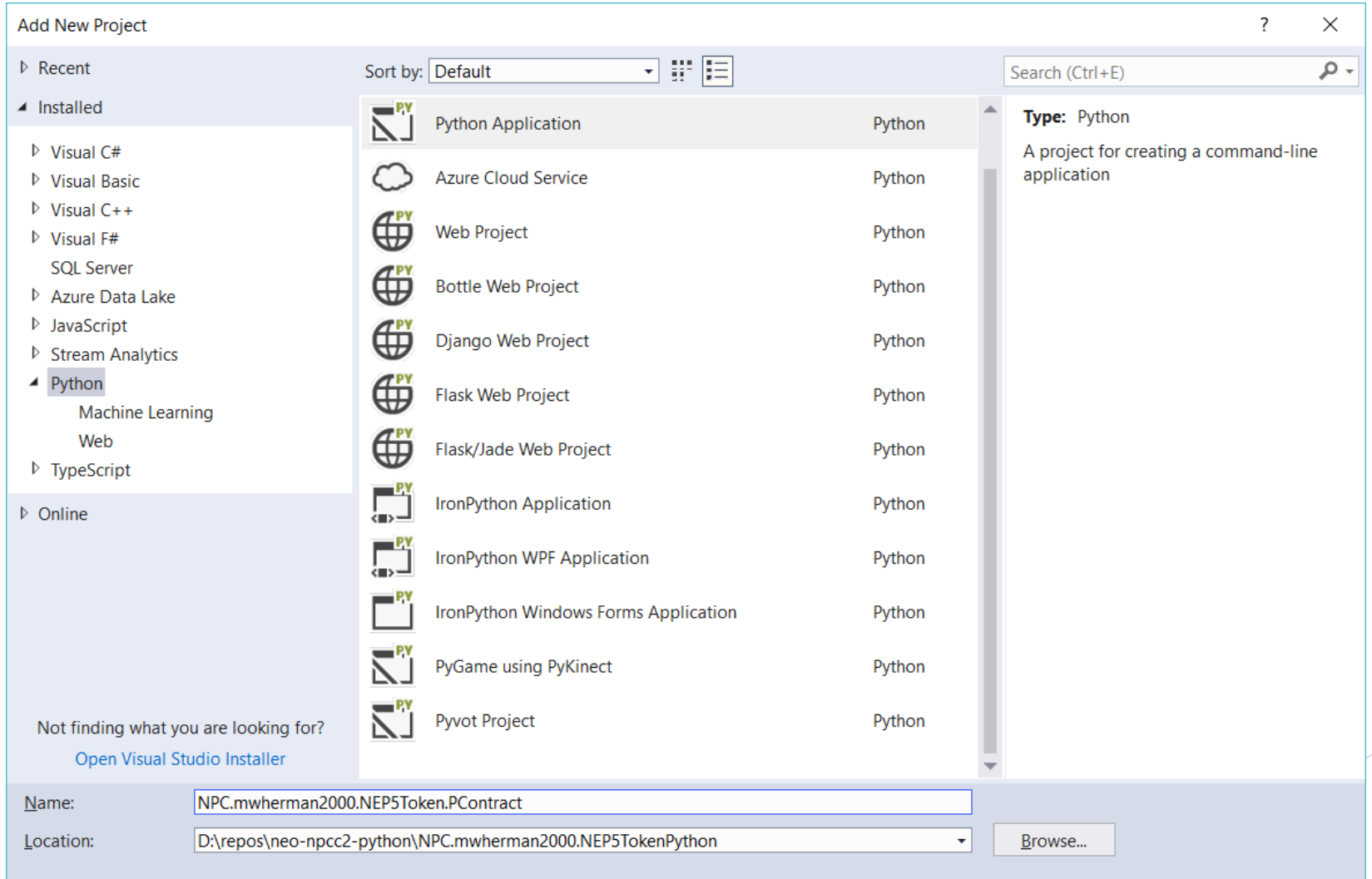
2. Modify the Visual Studio 2017 configuration to include Python support



8,9. Create a Python Model projects

NPC.mwherman2000.NEP5Token.**ManualPContract**

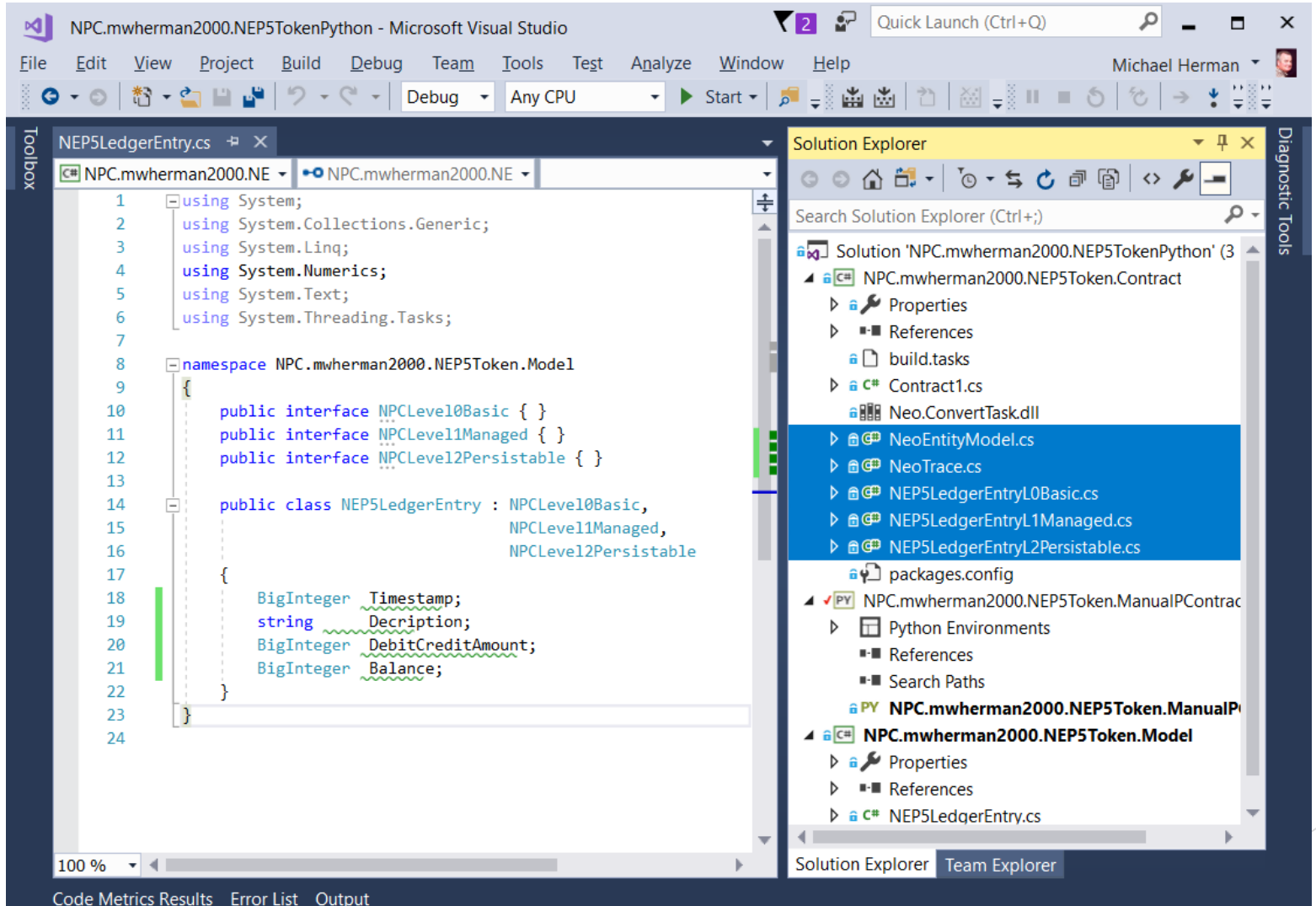
NPC.mwherman2000.NEP5Token.**PContract**



10. Manually translate/port the C#

from NPC.mwherman2000.NEP5Token.Contract

to NPC.mwherman2000.NEP5Token.ManualPContract

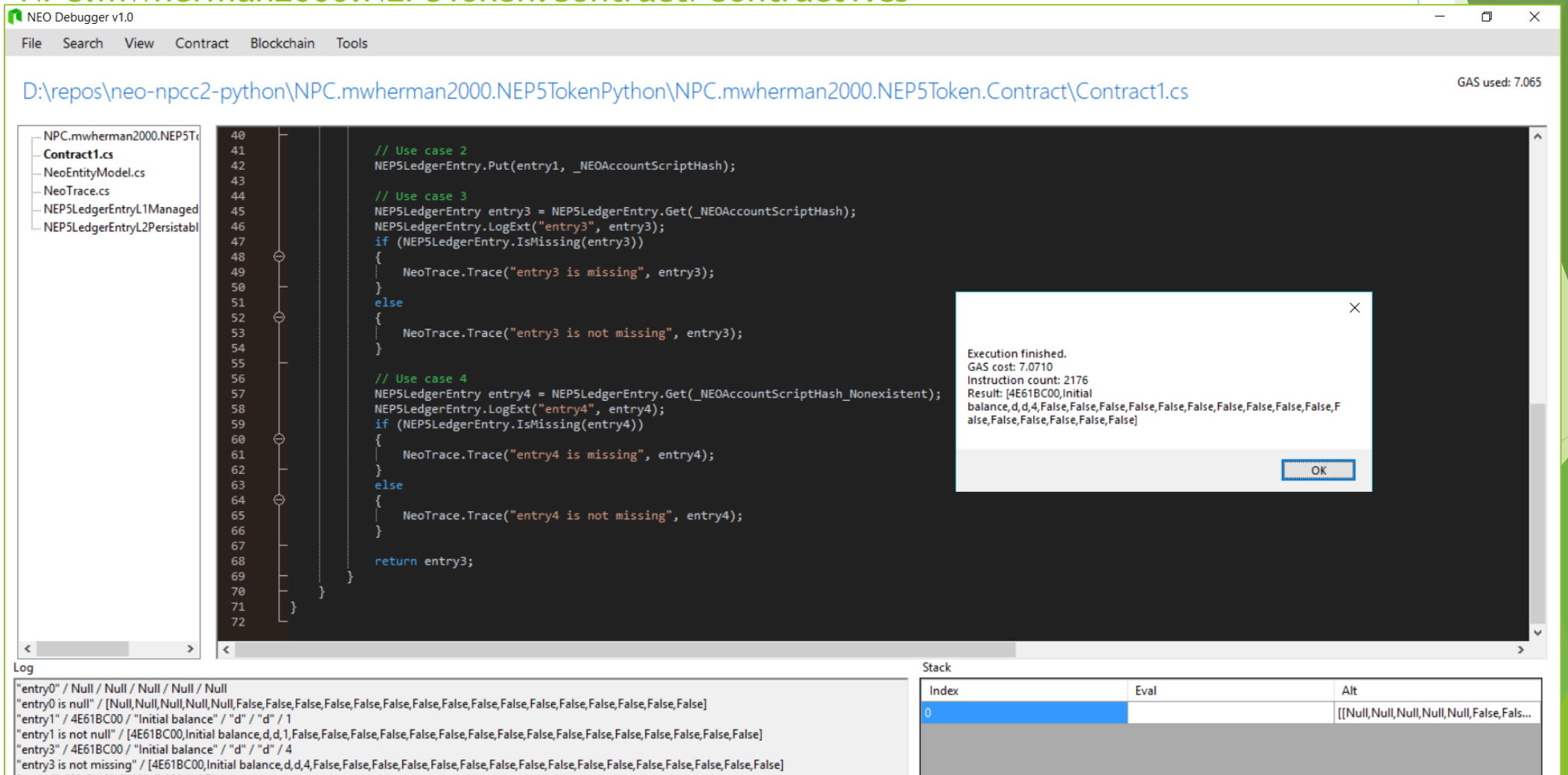


< Translate these 5 C# files

< into this Python project

5 Initial Test Cases for Testing (needs NEO Debugger)

https://github.com/mwherman2000/neo-npcc2-python/blob/master/NPC.mwherman2000.NEP5TokenPython/NPC.mwherman2000.NEP5Token.Contract/Contract1.cs



5 Initial Test Cases for Testing (F6 in New Debugger)

https://github.com/mwherman2000/neo-npcc2-python/blob/master/NPC.mwherman2000.NEP5TokenPython/NPC.mwherman2000.NEP5Token.Contract/Contract1.cs

Storage

Key	Content
849921A919A31F42543A8DC3643FCB9E025F20FF2F234E4550354C6564676572456E7472792E5F535441	3
849921A919A31F42543A8DC3643FCB9E025F20FF2F234E4550354C6564676572456E7472792E54696D657374616D70	12345678
849921A919A31F42543A8DC3643FCB9E025F20FF2F234E4550354C6564676572456E7472792E44656372697074696F6E	526438686511725495785644805507870281
849921A919A31F42543A8DC3643FCB9E025F20FF2F234E4550354C6564676572456E7472792E446562697443726564697441 6D6F756E74	100
849921A919A31F42543A8DC3643FCB9E025F20FF2F234E4550354C6564676572456E7472792E42616C616E6365	100

Questions?

Michael Herman (Toronto) – Independent Blockchain Developer

G: https://github.com/mwherman2000/neo-csharpcoe
E: mailto:neotoronto@outlook.com
L: https://www.linkedin.com/in/mwherman/
M: https://www.meetup.com/NEO-Blockchain-Toronto
F: https://www.facebook.com/neotoronto/
T: https://www.twitter.com/neotoronto