Python code Standard

1. PEP 8 is the base standard
2. We use ~~flake8 / black /~~ pylint for enforcing PEP 8
   1. Using yapf (<https://github.com/google/yapf/>) from Google code standard is a future <https://google.github.io/styleguide/pyguide.html> aspiration.
3. More-than-that
   1. Avoid introducing cool-new-libraries-state-of-the-art-genius Python packages and code, someone will need to read and re-code it after you!
   2. If you think its needed (the above) please consult the team.
4. Code is in Classes only, no scripts file, no external methods.
5. Classes structure
   1. Classes variables  
      **Avoid using class variables** as much as possible.   
      DS code hold many dataframes and other complex objects, when storing them as class variables the code become unreadable and often the object is change without awareness which leads to unwelcome consequences.
   2. Classes structure
      1. Each class starts with importing sys, io, paths, local imports.
      2. Next is constructor, which construct logger only.
      3. Next is RUN() method that is main entry point and hold a list of main methods.
6. Variables
   1. Naming -   
      To be kept across the code from method to method.
   2. By pointer-  
      When sending object to be processed on a method specify the return of it.  
      e.g.:  
      **dataset\_df** =self.aggragate\_data(**dataset\_df**)  
      This is done in order to keep explicitly and make code more readable.
7. Imports
8. Configuration
9. Directories
10. Logging
    1. Is a must
    2. At least one line of log in each method
11. Exception handling
    1. Each module should implement at list one Exception try-catch for its entry point so any exception is handled.
12. Constant strings  
    System has hundreds of DB columns names and data sources features names that are used in code
    1. Prefer enums  
       when possible use Enums files so coding is easier  
       Enum file:  
       so **‘lamas\_enum.py’** looks like: **class simul\_cols():  
        ID=”ID”  
        KodSeker=”KodSeker” # Keep source form** …..

…..  
 in code:  
 **data[simul\_cols.ID]** ….