CLEANWATCH.py

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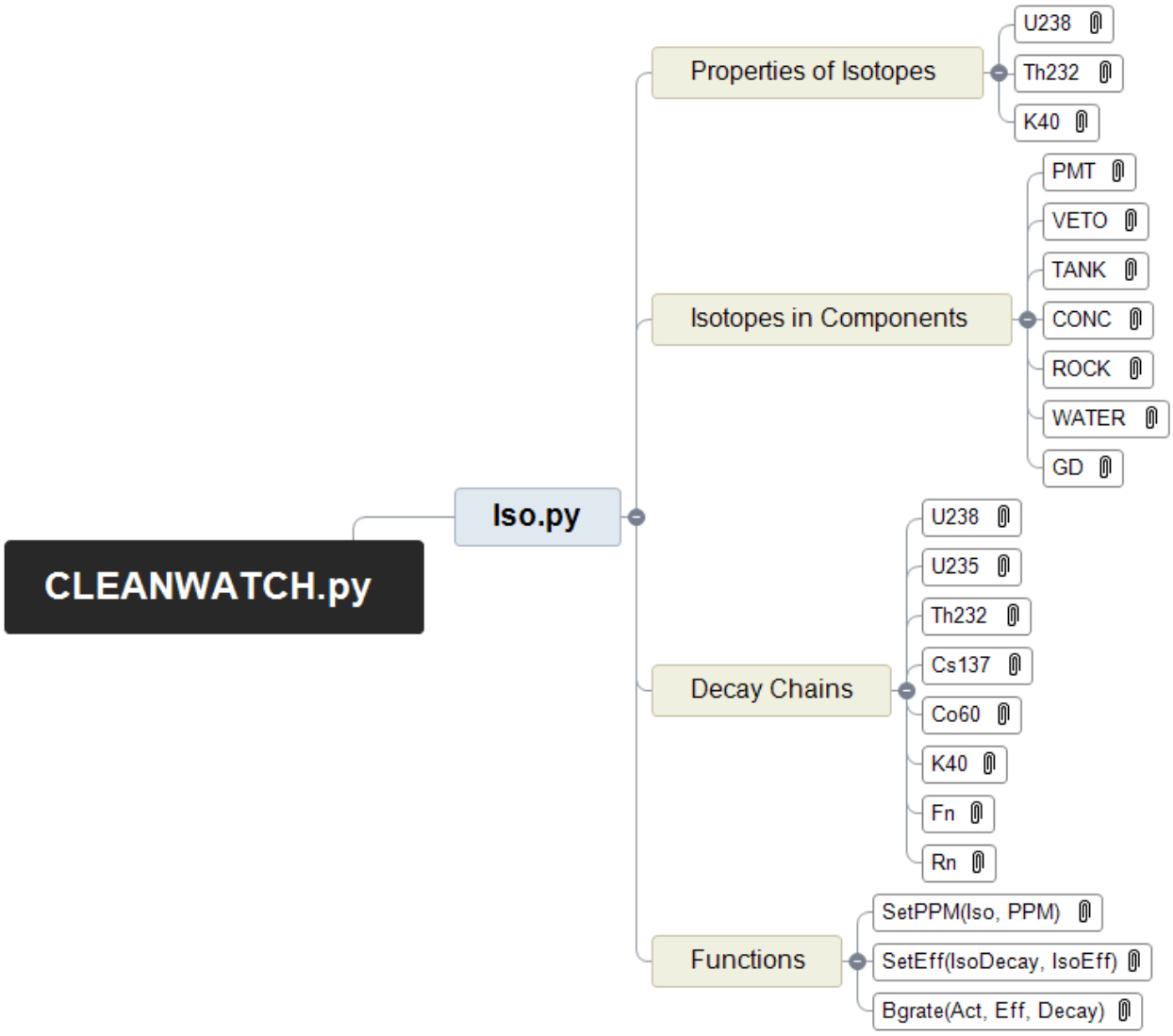

1. Iso.py

1.1. Properties of Isotopes

U238

Mass of single molecule [kg], Natural Abundance and decay constant [s^{-1}]

1.1.1. Th232

Mass of single molecule [kg], Natural Abundance and decay constant [s^{-1}]

1.1.2. K40

Mass of single molecule [kg], Natural Abundance and decay constant [s^{-1}]

1.2. Isotopes in Components

1.2.1. PMT

U238, Th232, K40

1.2.2. VETO

U238, Th232, K40

1.2.3. TANK

U238, Th232, K40, Co60, Cs137

1.2.4. CONC

U238, Th232, K40

1.2.5. ROCK

U238, Th232, K40, Fn

1.2.6. WATER

Rn222, Rn

1.2.7. GD

U238, Th232, U235, $U238_l$, $Th232_l$, $U235_l$

1.3. Decay Chains

1.3.1. U238

Pa234, Pb214, Bi214, Bi210, Tl210

1.3.2. U235

Th231, Fr223, Pb211, Bi211, Tl207

1.3.3. Th232

Ac228, Pb212, Bi211, Tl207

1.3.4. Cs137

Cs137

1.3.5. Co60

Co60

1.3.6. K40

K40

1.3.7. Fn

Fast Neutron

1.3.8. Rn

Radio Nuclide

1.4. Functions

1.4.1. SetPPM(Iso, PPM)

Allows User to change values of PPM for a specific isotope in a specific componet

1.4.2. SetEff(IsoDecay, IsoEff)

Allows user to change values for efficiency for a specific decay chain for specific componet

1.4.3. Bgrate(Act, Eff, Decay)

Calculates BG rate for specific component

1.4.4.