```
                                ┌─ Complexity              (20,29,40)
                                ├─ Duplicated Code         (26,58)
                 Design Debt ───┤
                                ├─ Long File               (47)
                                └─ Spaghetti Code          (24,41,390,440)

                                ┌─ Coding Convention       (3,7,16,23,36,38,42,438)
                 Code Debt ─────┤  Long Line               (50)
                                ├─ Long Parameter List     (46)
                                └─ Redundant Code           (13,15,25,45)

   TD Types ──┬── Test Debt                                (56)
              │
              ├── Documentation Debt                       (14,54,57)
              │
              │                 ┌─ Python3                 (12,21,31,52,432,439)
              └── Defect Debt ──┤  Argument Parsing        (299,355,363,368,369,403,411,414,418)
                                ├─ Name Error              (276,360,389,393,394)
                                ├─ Syntax Error            (49,274,281,328,364)
                                ├─ System Error            (51)
                                ├─ Value Error             (273)
                                └─ NotImplemented Error    (424)
```

The top nodes (i.e., Design Debt, Code Debt, Test Debt, Documentation Debt and Defect Debt) correspond to the five core types of technical debt, as defined in the classifications by Alves et al.[2] and Li et al.[1].
The numbers within parentheses on the right correspond to the ID of the rules provided by SonarQube.
The rules are mapped to categories (e.g., Complexity, Long File etc.) according to their semantics.
The categories of Code Debt have been adapted from Alves et al. [2].
The categories of Design Debt regard issues that have impact at the design level:
Complexity, Long Files and Spaghetti Code and Duplicated Code.
The categories of Defect Debt are derived from the definition of Defect Deb, i.e.,
uncorrected known defects or issues that might increase the chance of bugs.
Test Debt and Documentation Debt have no categories as they only comprise 1 and 3 rules respectively.