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| **S.No** | **Bug (SonarQube ref)** | **Code reference (file name, line no.)** | **Remarks** |
| 1 | Collection elements should not be replaced unconditionally | ResectionAlgorithm{}  Line no. 1444  Line no. 2315  UpcomingCasesViewController{}  Line no. 315 |  |
| 2 | Collection sizes comparisons should make sense | UpcomingCasesViewController{}  Line no. 836 |  |
| 3 | All branches in a conditional structure should not have exactly the same implementation | SolutionEditorViewController {}  Line no. 224  SolutionResectionViewController {}  Line no. 263  SolutionGapsViewController {}  Line no. 394  AuthViewController{}  Line no. 40  ResectionAlgorithm{}  Line no. 1075 |  |
| 4 | Infix operators that end with "=" should update their left operands | InteractiveLabel{}  Line no. 326  SolutionResectionViewController{}  Line no. 833  ResectionEditorViewController{}  Line no. 788 |  |
| 5 | Precedence and associativity of standard operators should not be changed | ResectionAlgorithm{}  Line no. 1117  Line no. 2453  Solution{}  Line no. 282 |  |
| 6 | Return values from functions without side effects should not be ignored | AuthViewController{}  Line no. 113  LimitsDate{}  Line no. 61 |  |
| 7 | Related "if/else if" statements and "cases" in a "switch" should not have the same condition | InitialPositionViewController{}  Line no. 352  Line no. 428  GapsEditorViewController{}  Line no. 439 |  |
| 8 | Identical expressions should not be used on both sides of a binary operator | ResectionAlgorithm{}  Line no. 1125  KBPageViewController{}  Line no. 368 |  |
| 9 | All code should be reachable | SolutionEditorViewController{}  Line no. 351  LimitsData{}  Line no. 854 |  |
| 10 | Loops with at most one iteration should be refactored | ResectionAlgorithm{}  Line no. 1687  SolutionResectionViewController{}  Line no. 309 |  |
| 11 | Implicitly unwrapped optionals should not be used | UpcomingCasesViewController{}  Line no. 94, 306  PreferenceScale{}  Line no. 15, 18 |  |
| 12 | The ternary operator should not return the same value regardless of the condition | PreferenceViewController{}  Line no. 1640  GapsEditorViewController{}  Line no. 440 |  |
| 13 | Floating point numbers should not be tested for equality | SolutionGapsViewController{}  Line no. 511  ResectionEditorViewController{}  Line no. 419 |  |
| 14 | Useless "if true {...}" and "if false {...}" blocks should be removed | InitialPositionViewController{}  Line no. 344  UpcomingCasesViewController{}  Line no. 213 |  |