

| File Name   | Organic | JDeodorant | DeepSeek-R1 | gpt-5-mini | Llama-3.3 | Qwen2.5-Coder | ORACLE | PREDICTION | RATERS VS HUMAN ORACLE (RQ1 & RQ2) |    |    |               |           |        | RATERS VS PREDICTIONS |    |    |               |    |           | HUMAN ORACLE VS PREDICTIONS (RQ3) |      |    |               |    |    |
|---|---------|------------|-------------|------------|-----------|---------------|--------|------------|------------------------------------|----|----|---------------|-----------|--------|-----------------------|----|----|---------------|----|-----------|-----------------------------------|------|----|---------------|----|----|
| AbstractSentinelAspectSupport.java                    | 0       | 1          | 0           | 0          | 0         | 1             | 1      | 0          | JDeodorant                         |    |    | JDeodorant    |           |        | JDeodorant            |    |    | JDeodorant    |    |           | JDeodorant                        |      |    | JDeodorant    |    |    |
| AndroidMusic.java                                     | 0       | 1          | 0           | 0          | 0         | 0             | 1      | 0          | TP                                 | TN | FP | FN            | Precision | Recall | F1                    | TP | TN | FP            | FN | Precision | Recall                            | F1   | TP | TN            | FP | FN |
| ArgumentTokenizer.java                                | 1       | 1          | 1           | 1          | 1         | 1             | 1      | 1          | 19                                 | 1  | 6  | 4             | 0.76      | 0.83   | 0.79                  | 16 | 1  | 6             | 7  | 0.73      | 0.70                              | 0.71 | 21 | 4             | 1  | 4  |
| ClassLoaderCommand.java                               | 1       | 0          | 0           | 1          | 1         | 0             | 1      | 1          | Organic                            |    |    | Organic       |           |        | Organic               |    |    | Organic       |    |           | Organic                           |      |    | Organic       |    |    |
| ClassReader.java                                      | 1       | 1          | 1           | 1          | 1         | 1             | 1      | 1          | TP                                 | TN | FP | FN            | Precision | Recall | F1                    | TP | TN | FP            | FN | Precision | Recall                            | F1   | TP | TN            | FP | FN |
| CN_QuantifierSegmenter.java                           | 0       | 1          | 1           | 1          | 1         | 0             | 1      | 1          | 18                                 | 5  | 7  | 0             | 0.72      | 1.00   | 0.84                  | 17 | 7  | 5             | 1  | 0.77      | 0.94                              | 0.85 |    |               |    |    |
| CodeCacheStage.java                                   | 1       | 1          | 0           | 1          | 1         | 1             | 1      | 1          | DeepSeek-R1                        |    |    | DeepSeek-R1   |           |        | DeepSeek-R1           |    |    | DeepSeek-R1   |    |           | DeepSeek-R1                       |      |    | DeepSeek-R1   |    |    |
| com.alibaba.excel.ExcelWriter.java                    | 0       | 1          | 0           | 0          | 1         | 0             | 0      | 0          | TP                                 | TN | FP | FN            | Precision | Recall | F1                    | TP | TN | FP            | FN | Precision | Recall                            | F1   | TP | TN            | FP | FN |
| com.google.zxing.client.result.VCardResultParser.java | 1       | 1          | 1           | 1          | 1         | 1             | 1      | 1          | 13                                 | 4  | 12 | 1             | 0.52      | 0.93   | 0.67                  | 14 | 8  | 8             | 0  | 0.64      | 1.00                              | 0.78 |    |               |    |    |
| CompareToBuilder.java                                 | 1       | 1          | 1           | 1          | 1         | 0             | 1      | 1          | gpt-5-mini                         |    |    | gpt-5-mini    |           |        | gpt-5-mini            |    |    | gpt-5-mini    |    |           | gpt-5-mini                        |      |    | gpt-5-mini    |    |    |
| ComparisonCriteria.java                               | 1       | 0          | 1           | 1          | 1         | 1             | 1      | 1          | TP                                 | TN | FP | FN            | Precision | Recall | F1                    | TP | TN | FP            | FN | Precision | Recall                            | F1   | TP | TN            | FP | FN |
| DefaultMQAdminExtImpl.java                            | 1       | 1          | 0           | 1          | 1         | 1             | 1      | 1          | 20                                 | 4  | 5  | 1             | 0.80      | 0.95   | 0.87                  | 21 | 8  | 1             | 0  | 0.95      | 1.00                              | 0.98 |    |               |    |    |
| DirectedGraphConnections.java                         | 1       | 1          | 0           | 1          | 1         | 0             | 1      | 1          | Llama-3.3                          |    |    | Llama-3.3     |           |        | Llama-3.3             |    |    | Llama-3.3     |    |           | Llama-3.3                         |      |    | Llama-3.3     |    |    |
| Faker.java  | 1       | 1          | 0           | 1          | 1         | 0             | 1      | 0          | TP                                 | TN | FP | FN            | Precision | Recall | F1                    | TP | TN | FP            | FN | Precision | Recall                            | F1   | TP | TN            | FP | FN |
| GeonBuilder.java                                      | 0       | 1          | 0           | 0          | 1         | 0             | 0      | 0          | 20                                 | 0  | 5  | 5             | 0.80      | 0.80   | 0.80                  | 19 | 2  | 3             | 6  | 0.86      | 0.76                              | 0.81 |    |               |    |    |
| InPacketHandler.java                                  | 1       | 0          | 1           | 1          | 1         | 1             | 1      | 1          | Qwen2.5-Coder                      |    |    | Qwen2.5-Coder |           |        | Qwen2.5-Coder         |    |    | Qwen2.5-Coder |    |           | Qwen2.5-Coder                     |      |    | Qwen2.5-Coder |    |    |
| JedisSentinelPool.java                                | 1       | 1          | 1           | 0          | 0         | 0             | 1      | 0          | TP                                 | TN | FP | FN            | Precision | Recall | F1                    | TP | TN | FP            | FN | Precision | Recall                            | F1   | TP | TN            | FP | FN |
| MarkDownWebServerPlugin.java                          | 0       | 1          | 0           | 0          | 1         | 0             | 0      | 0          | 13                                 | 4  | 12 | 1             | 0.52      | 0.93   | 0.67                  | 13 | 7  | 9             | 1  | 0.59      | 0.93                              | 0.72 |    |               |    |    |
| NodeTraversor.java                                    | 1       | 0          | 1           | 1          | 1         | 1             | 1      | 1          | JDeodorant                         |    |    | JDeodorant    |           |        | JDeodorant            |    |    | JDeodorant    |    |           | JDeodorant                        |      |    | JDeodorant    |    |    |
| OrderController.java                                  | 0       | 0          | 1           | 1          | 1         | 1             | 1      | 0          | TP                                 | TN | FP | FN            | Precision | Recall | F1                    | TP | TN | FP            | FN | Precision | Recall                            | F1   | TP | TN            | FP | FN |
| PassphraseEntryController.java                        | 1       | 0          | 0           | 0          | 1         | 0             | 1      | 0          | 19                                 | 1  | 6  | 4             | 0.76      | 0.83   | 0.79                  | 16 | 1  | 6             | 7  | 0.73      | 0.70                              | 0.71 | 21 | 4             | 1  | 4  |
| QuotedStringTokenizer.java                            | 0       | 1          | 1           | 1          | 1         | 1             | 1      | 1          | Organic                            |    |    | Organic       |           |        | Organic               |    |    | Organic       |    |           | Organic                           |      |    | Organic       |    |    |
| RedissonBloomFilter.java                              | 0       | 1          | 1           | 1          | 1         | 1             | 0      | 1          | TP                                 | TN | FP | FN            | Precision | Recall | F1                    | TP | TN | FP            | FN | Precision | Recall                            | F1   | TP | TN            | FP | FN |
| RestMethodInfoTest.java                               | 0       | 1          | 0           | 0          | 1         | 0             | 1      | 0          | 17                                 | 7  | 5  | 1             | 0.77      | 0.94   | 0.85                  | 17 | 7  | 5             | 1  | 0.77      | 0.94                              | 0.85 |    |               |    |    |
| SaJwtUtil.java  | 0       | 1          | 0           | 0          | 1         | 0             | 0      | 0          | DeepSeek-R1                        |    |    | DeepSeek-R1   |           |        | DeepSeek-R1           |    |    | DeepSeek-R1   |    |           | DeepSeek-R1                       |      |    | DeepSeek-R1   |    |    |
| Spider.java   | 1       | 1          | 1           | 1          | 0         | 1             | 1      | 1          | TP                                 | TN | FP | FN            | Precision | Recall | F1                    | TP | TN | FP            | FN | Precision | Recall                            | F1   | TP | TN            | FP | FN |
| TestProxies.java                                      | 1       | 0          | 0           | 1          | 1         | 0             | 1      | 0          | 14                                 | 8  | 8  | 0             | 0.64      | 1.00   | 0.78                  | 14 | 8  | 8             | 0  | 0.64      | 1.00                              | 0.78 |    |               |    |    |
| WebLogAspect.java                                     | 1       | 1          | 1           | 1          | 1         | 1             | 1      | 1          | gpt-5-mini                         |    |    | gpt-5-mini    |           |        | gpt-5-mini            |    |    | gpt-5-mini    |    |           | gpt-5-mini                        |      |    | gpt-5-mini    |    |    |
| XMLConfigBuilder.java                                 | 1       | 1          | 0           | 1          | 1         | 1             | 1      | 1          | TP                                 | TN | FP | FN            | Precision | Recall | F1                    | TP | TN | FP            | FN | Precision | Recall                            | F1   | TP | TN            | FP | FN |
| XxlJobExecutor.java                                   | 0       | 1          | 0           | 1          | 1         | 0             | 1      | 1          | 20                                 | 0  | 5  | 5             | 0.86      | 0.76   | 0.81                  | 19 | 2  | 3             | 6  | 0.86      | 0.76                              | 0.81 |    |               |    |    |