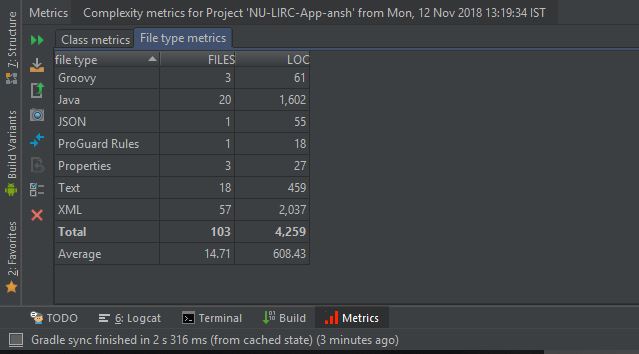
**8.0 Coding Metrics**

|  |  |  |
| --- | --- | --- |
| **FileType** | **FILES** | **LOC** |
| Groovy | 3 | 61 |
| JSON | 1 | 55 |
| Java | 20 | 1,602 |
| ProGuard Rules | 1 | 18 |
| Properties | 3 | 27 |
| Text | 18 | 459 |
| XML | 57 | 2,037 |



|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | **WMC** | **CBO** | **Cyclic** | **Dcy** | **DIT** | **Inner** | **LCOM** | **LOC** |
| AboutActivity | 34 | 13 | 9 | 12 | 8 | 16 | 2 | 209 |
| AdminLogin | 8 | 5 | 9 | 5 | 8 | 15 | 2 | 62 |
| AntiPlagiarism | 2 | 3 | 0 | 2 | 2 | 4 | 1 | 11 |
| EBooks | 2 | 3 | 0 | 2 | 2 | 4 | 1 | 11 |
| EJournals | 5 | 4 | 0 | 3 | 2 | 4 | 3 | 36 |
| EResourcesActivity | 32 | 13 | 9 | 12 | 8 | 16 | 2 | 196 |
| ExampleInstrumentedTest | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 9 |
| ExampleUnitTest | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 6 |
| LoginPage | 8 | 13 | 9 | 6 | 8 | 15 | 1 | 64 |
| MainActivity | 2 | 5 | 0 | 5 | 8 | 15 | 1 | 23 |
| NULIRCApp | 2 | 0 | 0 | 0 | 4 | 2 | 1 | 9 |
| NetworkActivity | 19 | 13 | 9 | 12 | 8 | 16 | 2 | 104 |
| OnlineLearning | 25 | 13 | 9 | 12 | 8 | 16 | 2 | 164 |
| OpenAccess | 19 | 14 | 9 | 13 | 8 | 16 | 2 | 109 |
| QuickLinks | 20 | 15 | 9 | 13 | 8 | 16 | 2 | 121 |
| ServicesActivity | 19 | 13 | 9 | 12 | 8 | 16 | 2 | 104 |
| SettingsActivity | 1 | 9 | 0 | 2 | 8 | 15 | 1 | 7 |
| SignUpPage | 9 | 5 | 9 | 5 | 8 | 15 | 1 | 76 |
| TabPagerAdapter | 8 | 5 | 0 | 4 | 3 | 0 | 3 | 29 |
| Theses | 2 | 3 | 0 | 2 | 2 | 4 | 1 | 11 |
| **Sum** | **219** | **149** | **90** | **122** | **113** | **205** | **32** | **1361** |
| **Average** | **10.95** | **7.45** | **4.5** | **6.1** | **5.65** | **10.25** | **1.6** | **68.05** |

* CBO - Coupling between objects
* DIT – Depth of inheritance tree
* WMC – Weighted Method Complexity
* Cyclic – No. of cyclic dependencies
* Dcy – No. of dependencies
* Inner – No. of inner classes
* LCOM – Lack of cohesion metrics: A value of 1 indicates a highly cohesive class, which can not easily be split into smaller classes. Higher values may indicate that the class may be "doing too much", and should be split.
* LOC – Lines of code

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Class** | **NOAC** | **NOC** | **NOIC** | **NOOC** | **RFC** | **SUB** |
| AboutActivity | 2 | 0 | 488 | 5 | 42 | 0 |
| AdminLogin | 1 | 0 | 493 | 2 | 19 | 0 |
| AntiPlagiarism | 0 | 0 | 172 | 1 | 3 | 0 |
| EBooks | 0 | 0 | 172 | 1 | 3 | 0 |
| EJournals | 0 | 0 | 170 | 3 | 9 | 0 |
| EResourcesActivity | 2 | 0 | 488 | 5 | 42 | 0 |
| ExampleInstrumentedTest | 1 | 0 | 11 | 0 | 4 | 0 |
| ExampleUnitTest | 1 | 0 | 11 | 0 | 2 | 0 |
| LoginPage | 1 | 0 | 495 | 1 | 16 | 0 |
| MainActivity | 0 | 0 | 495 | 1 | 7 | 0 |
| NULIRCApp | 0 | 0 | 143 | 1 | 6 | 0 |
| NetworkActivity | 1 | 0 | 488 | 5 | 31 | 0 |
| OnlineLearning | 1 | 0 | 488 | 5 | 32 | 0 |
| OpenAccess | 1 | 0 | 488 | 5 | 35 | 0 |
| QuickLinks | 2 | 0 | 488 | 5 | 36 | 0 |
| ServicesActivity | 1 | 0 | 488 | 5 | 31 | 0 |
| SettingsActivity | 0 | 0 | 495 | 1 | 3 | 0 |
| SignUpPage | 2 | 0 | 495 | 1 | 26 | 0 |
| TabPagerAdapter | 2 | 0 | 38 | 1 | 9 | 0 |
| Theses | 0 | 0 | 172 | 1 | 3 | 0 |
| **Sum** | **18** | **0** | **6778** | **49** | **359** | **0** |
| **Average** | **0.9** | **0** | **338.9** | **2.45** | **17.95** | **0** |

* NOAC – No. of operations added
* NOC – No. of children
* NOIC – No. of operations inherited
* NOOC – No. of operations overridden
* RFC – Response for Class
* SUB – No. of subclasses

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | **CSA** | **CSO** | **n** | **N** | **D** | **V** | **E** |
| AboutActivity | 25 | 666 | 139 | 398 | 50 | 2,833 | 141,919 |
| AdminLogin | 20 | 661 | 61 | 113 | 31 | 670 | 20,790 |
| AntiPlagiarism | 48 | 183 | 9 | 11 | 2 | 34 | 87 |
| EBooks | 48 | 183 | 9 | 11 | 2 | 34 | 87 |
| EJournals | 48 | 185 | 27 | 39 | 9 | 185 | 1,738 |
| EResourcesActivity | 24 | 666 | 134 | 374 | 49 | 2,642 | 131,550 |
| ExampleInstrumentedTest | 0 | 13 | 8 | 10 | 3 | 30 | 90 |
| ExampleUnitTest | 0 | 13 | 7 | 8 | 2 | 22 | 56 |
| LoginPage | 20 | 660 | 59 | 115 | 26 | 676 | 18,000 |
| MainActivity | 16 | 659 | 29 | 41 | 9 | 199 | 1,838 |
| NULIRCApp | 0 | 255 | 14 | 15 | 6 | 57 | 371 |
| NetworkActivity | 18 | 665 | 79 | 199 | 35 | 1,254 | 45,031 |
| OnlineLearning | 18 | 665 | 97 | 295 | 41 | 1,946 | 79,825 |
| OpenAccess | 18 | 665 | 87 | 211 | 37 | 1,359 | 50,485 |
| QuickLinks | 21 | 666 | 111 | 249 | 32 | 1,691 | 54,996 |
| ServicesActivity | 18 | 665 | 79 | 199 | 35 | 1,254 | 45,031 |
| SettingsActivity | 16 | 659 | 10 | 10 | 4 | 33 | 132 |
| SignUpPage | 23 | 661 | 79 | 176 | 35 | 1,109 | 39,093 |
| TabPagerAdapter | 6 | 49 | 24 | 43 | 5 | 197 | 1,167 |
| Theses | 48 | 183 | 9 | 11 | 2 | 34 | 87 |
| **Sum** | **435** | **9022** | **1071** | **2528** | **415** | **16259** | **632373** |
| **Average** | **21.75** | **451.1** | **53.55** | **126.4** | **20.75** | **812.95** | **31618.65** |

* CSA – Class size (attributes)
* CSO – Class size (operands)
* n – Halstead’s Vocabulary
* N – Halstead’s Length
* D – Halstead’s Difficulty
* V – Halstead’s Volume
* E - Halstead’s Effort

