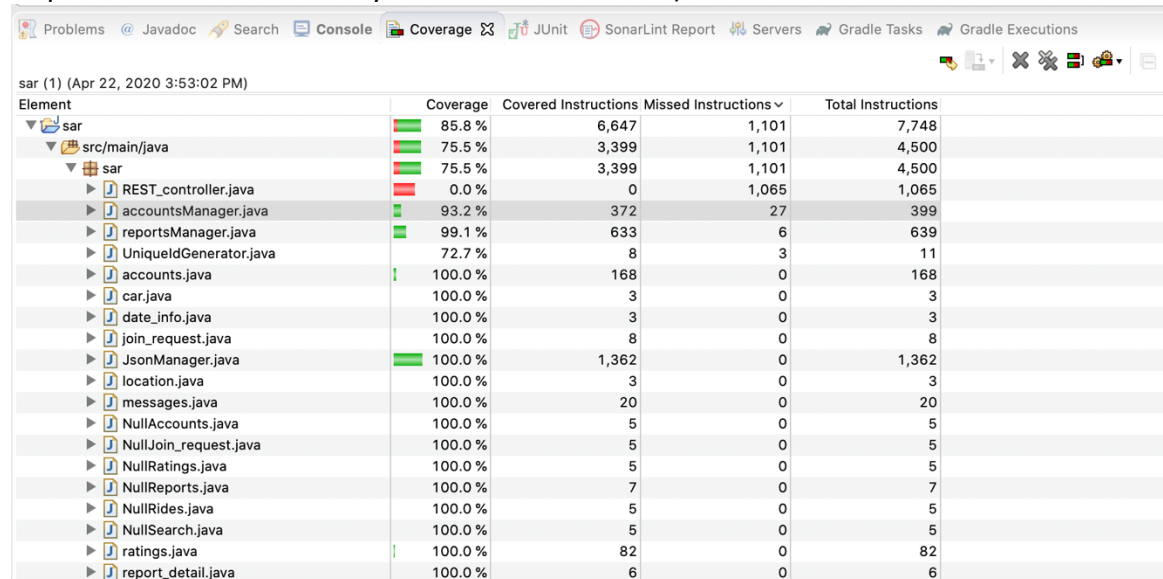


Memo for Project in CS445

1. The most difficult part for this project is to learn how to write the rest api in java and how to test this by postman with scripts.
2. All the parts in this project is completed.
3. Statistics about my code
 - 1) Lines of Code: 2176
 - 2) Lines of Code in unit test: 1819
 - 3) Unit Test Coverage: 85.8% (did not test Rest_controller.java which is light and do not need to test it as professor said in Q&A about this project. Some setters and getters were not tested which don't need to be tested as professor said. That's why it doesn't cover 100%)



The screenshot shows an IDE window with a coverage report for a project named 'sar'. The report is titled 'sar (1) (Apr 22, 2020 3:53:02 PM)'. It displays a tree view of the project structure with columns for 'Element', 'Coverage', 'Covered Instructions', 'Missed Instructions', and 'Total Instructions'. The coverage is 85.8% for the entire project. The 'src/main/java' directory has a coverage of 75.5%. The 'sar' directory has a coverage of 75.5%. The 'REST_controller.java' file has a coverage of 0.0%. The 'accountsManager.java' file has a coverage of 93.2%. The 'reportsManager.java' file has a coverage of 99.1%. The 'UniquelGenerator.java' file has a coverage of 72.7%. The 'accounts.java' file has a coverage of 100.0%. The 'car.java' file has a coverage of 100.0%. The 'date_info.java' file has a coverage of 100.0%. The 'join_request.java' file has a coverage of 100.0%. The 'JsonManager.java' file has a coverage of 100.0%. The 'location.java' file has a coverage of 100.0%. The 'messages.java' file has a coverage of 100.0%. The 'NullAccounts.java' file has a coverage of 100.0%. The 'NullJoin_request.java' file has a coverage of 100.0%. The 'NullRatings.java' file has a coverage of 100.0%. The 'NullReports.java' file has a coverage of 100.0%. The 'NullRides.java' file has a coverage of 100.0%. The 'NullSearch.java' file has a coverage of 100.0%. The 'ratings.java' file has a coverage of 100.0%. The 'report_detail.java' file has a coverage of 100.0%.

Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
sar	85.8 %	6,647	1,101	7,748
src/main/java	75.5 %	3,399	1,101	4,500
sar	75.5 %	3,399	1,101	4,500
REST_controller.java	0.0 %	0	1,065	1,065
accountsManager.java	93.2 %	372	27	399
reportsManager.java	99.1 %	633	6	639
UniquelGenerator.java	72.7 %	8	3	11
accounts.java	100.0 %	168	0	168
car.java	100.0 %	3	0	3
date_info.java	100.0 %	3	0	3
join_request.java	100.0 %	8	0	8
JsonManager.java	100.0 %	1,362	0	1,362
location.java	100.0 %	3	0	3
messages.java	100.0 %	20	0	20
NullAccounts.java	100.0 %	5	0	5
NullJoin_request.java	100.0 %	5	0	5
NullRatings.java	100.0 %	5	0	5
NullReports.java	100.0 %	7	0	7
NullRides.java	100.0 %	5	0	5
NullSearch.java	100.0 %	5	0	5
ratings.java	100.0 %	82	0	82
report_detail.java	100.0 %	6	0	6

4. Cyclomatic Complexity for my code: reportsManager::search4 CC (Cyclomatic Complexity)=14, ridesManager::search1 CC= 12, other functions CC<11;