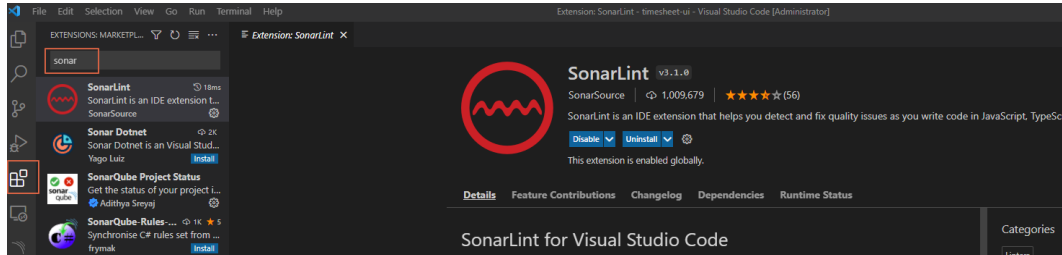


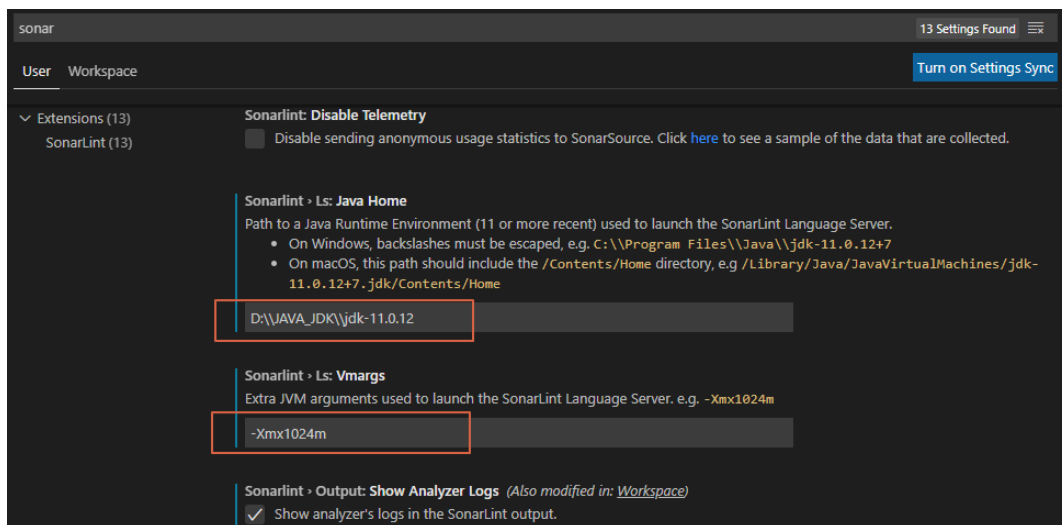
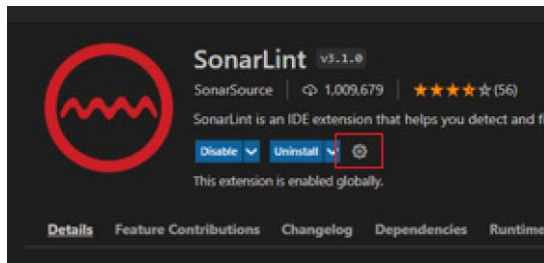
# SonarLint Scan

## VS Code

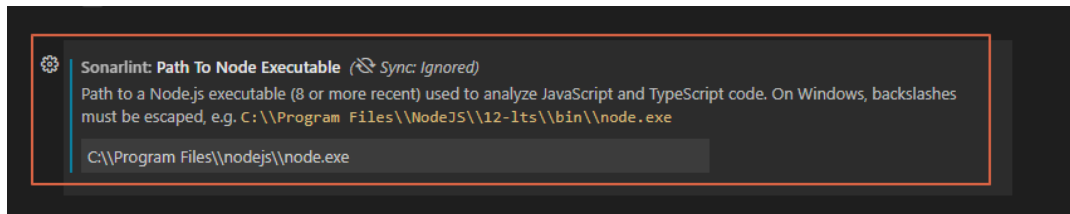
### Install SonarLint Extension



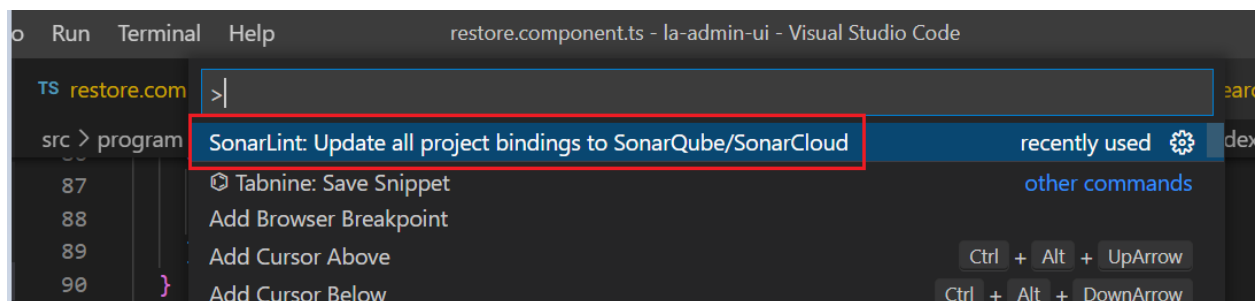
### Setting Java Home (JDK 11+)



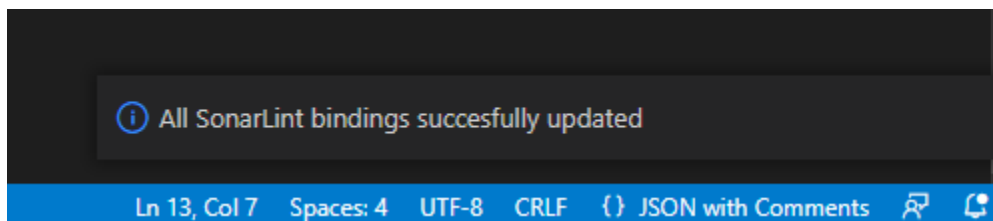
## Setting Nodejs



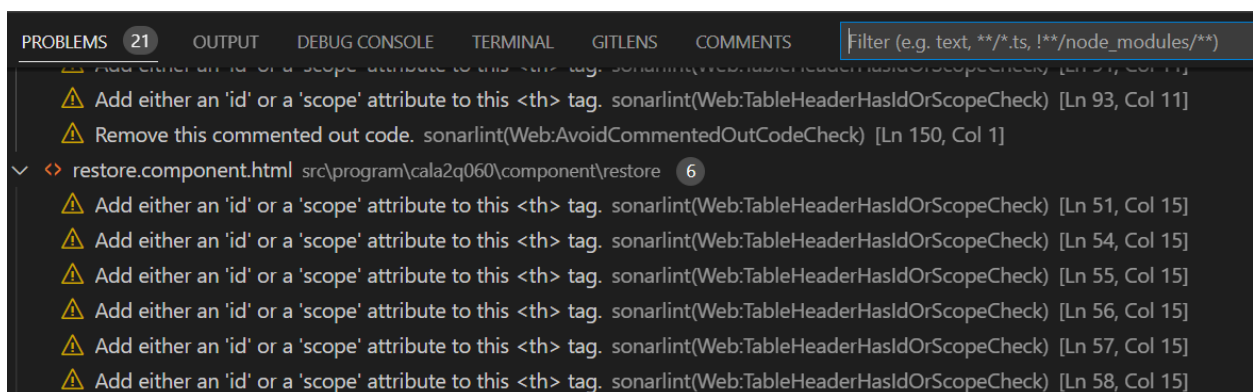
Ctrl+Shift+P (Windows/Linux) or Shift+Command+P(Mac) เลือกรัน command



Plugin จะดึง lib ที่จำเป็นจาก server จะเสร็จ จะแสดงข้อความ

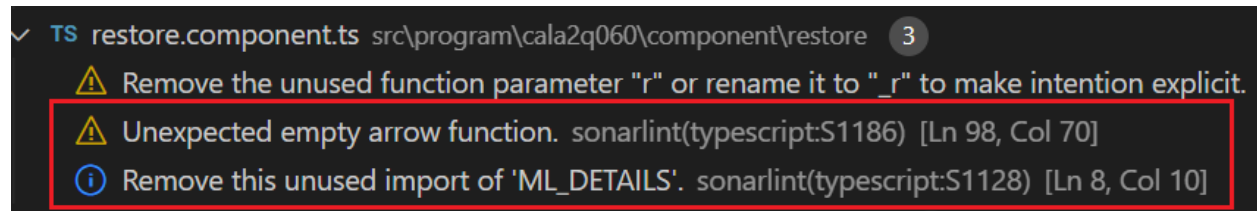


Tab Problems จะแสดงปัญหาที่ SonarLint scan พบ

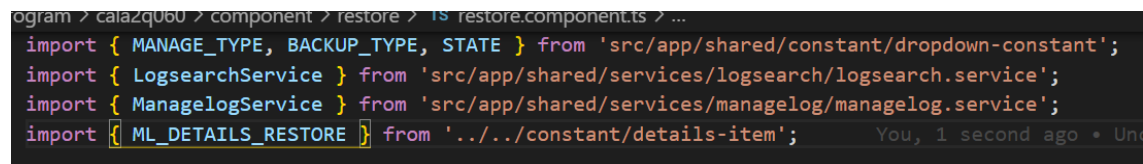
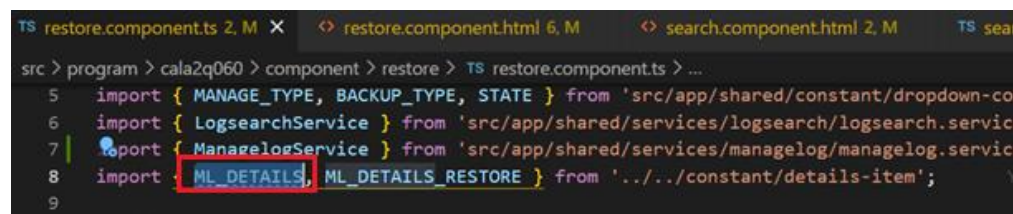


ตัวอย่างการแก้ไข Problem:

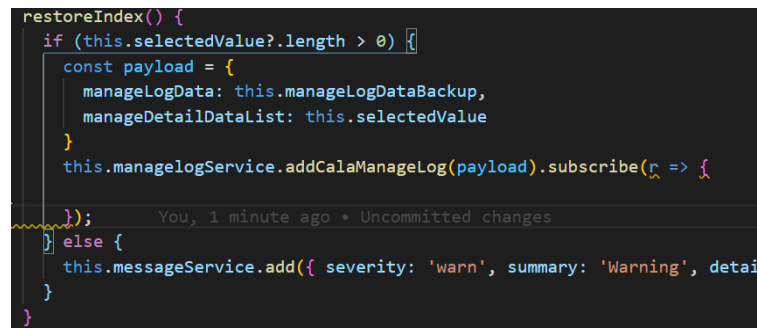
Double click ไปที่ problem นั้นจะนำไปหน้าไฟล์ที่มีปัญหา



ปัญหา import ไม่ได้ใช้งาน



ปัญหา arrow function ไม่ได้ใช้ทำอะไรต่อ



ให้เพิ่มการทำงานใน arrow function



เมื่อแก้ปัญหาใน File หมดแล้ว จะไม่มี Problem แสดงใน File นั้น

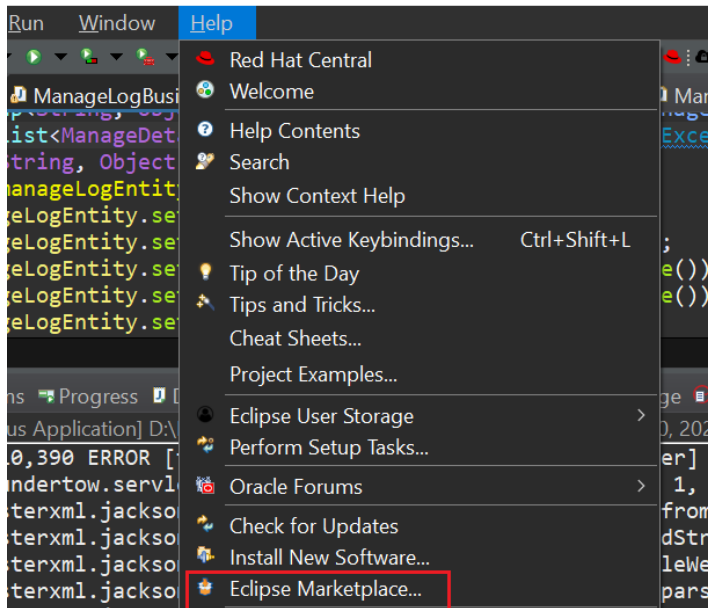
ตัวอย่างในรูปคือ File “restore.component.ts” ได้หายไปจากรายการ Problem แล้ว

```
✓ <> search-loguser.component.html src\program\cala2q040\component\search-loguser 9
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 79, Col 11]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 81, Col 11]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 83, Col 11]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 85, Col 11]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 87, Col 11]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 89, Col 11]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 91, Col 11]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 93, Col 11]
  ⚠ Remove this commented out code. sonarlint(Web:AvoidCommentedOutCodeCheck) [Ln 150, Col 1]
✓ <> restore.component.html src\program\cala2q060\component\restore 6
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 51, Col 15]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 54, Col 15]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 55, Col 15]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 56, Col 15]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 57, Col 15]
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 58, Col 15]
✓ <> search.component.html src\program\cala2q060\component\search 2
  ⚠ Add either an 'id' or a 'scope' attribute to this <th> tag. sonarlint(Web:TableHeaderHasIdOrScopeCheck) [Ln 95, Col 11]
  ⚠ Remove this commented out code. sonarlint(Web:AvoidCommentedOutCodeCheck) [Ln 98, Col 1]
✓ TS search.component.ts src\program\cala2q060\component\search 1
  ⚠ Constructor has too many parameters (8). Maximum allowed is 7. sonarlint(typescript:S107) [Ln 44, Col 3]
```

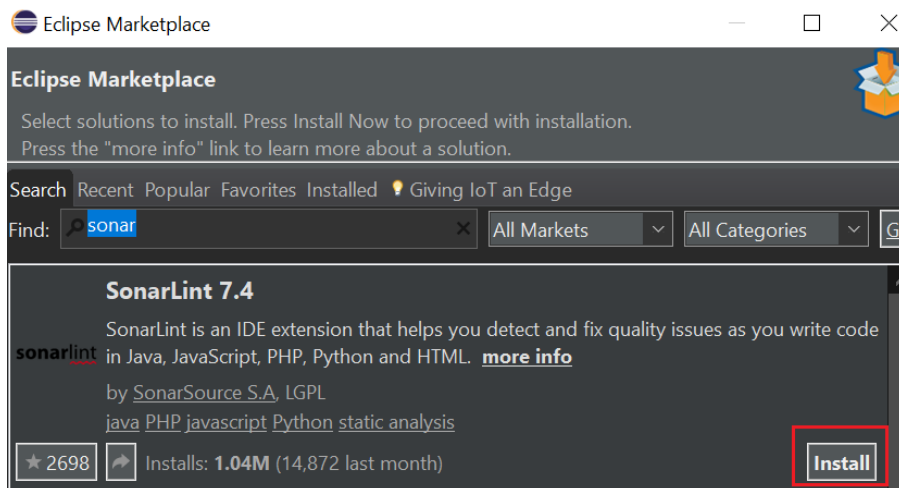
หมายเหตุ : บน VSCODE ไม่สามารถ scan ทั้ง project ได้ จะ scan เฉพาะ file ที่เปิด หรือแก้ไข

## Eclipse

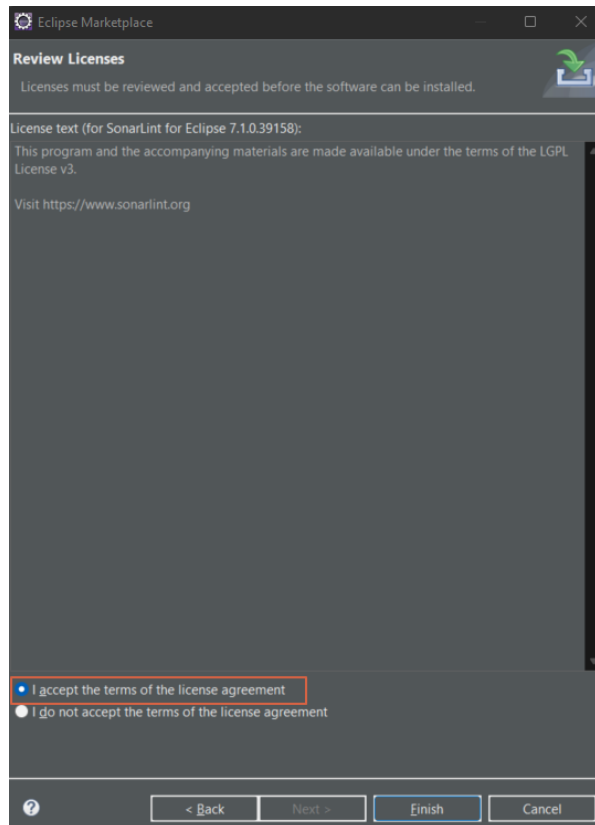
Install SonarLint ใน Eclipse Marketplace ที่ Tab Help



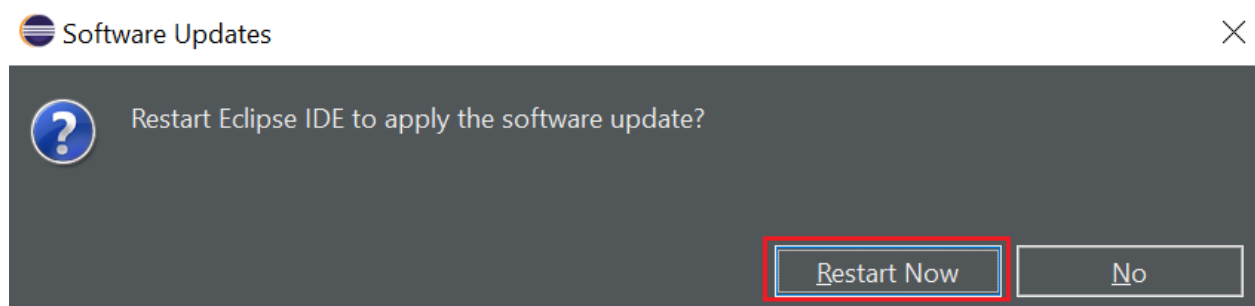
หา SonarLint ตามในรูปด้านล่างและกด Install



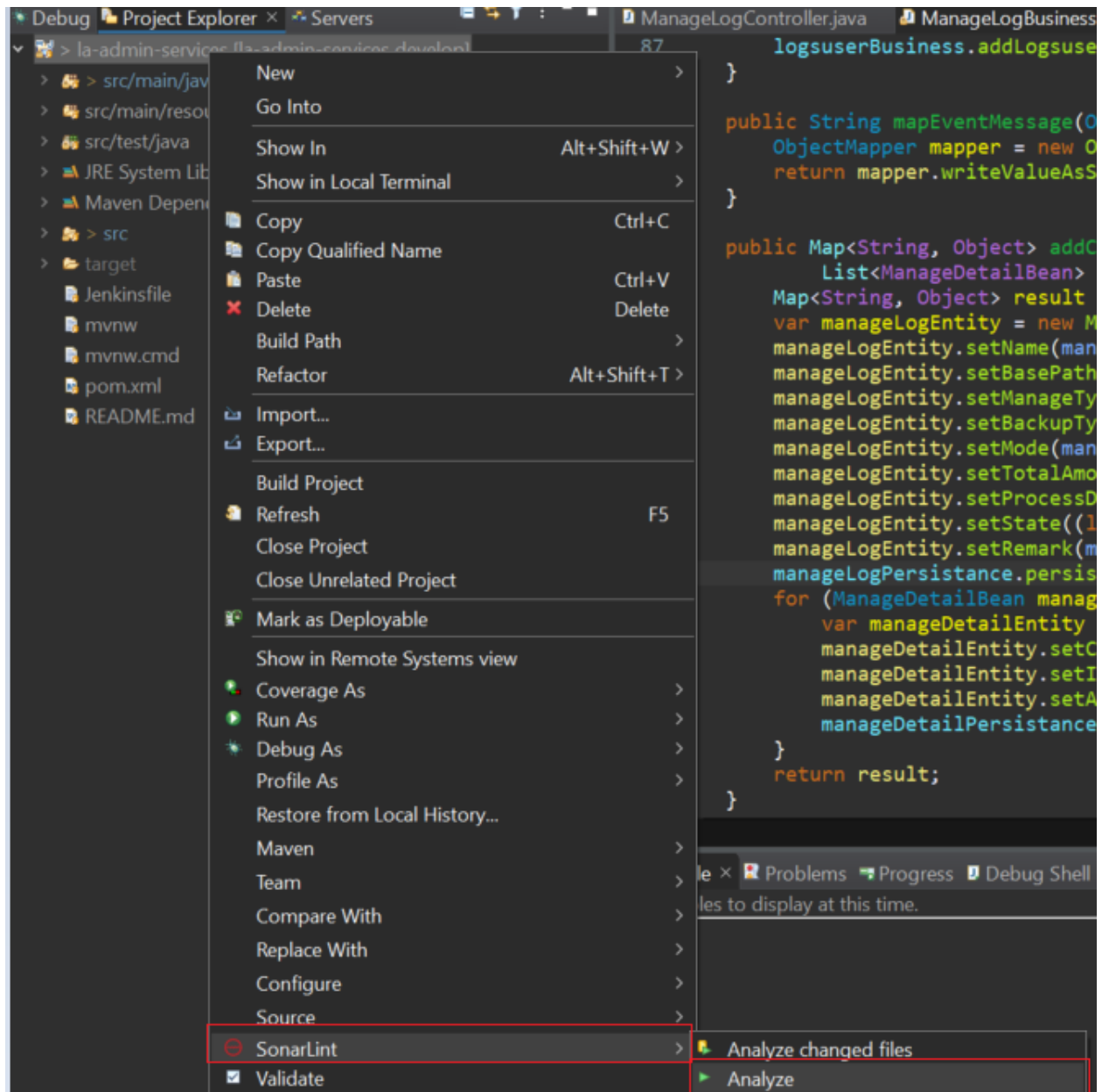
ยอมรับข้อตกลง



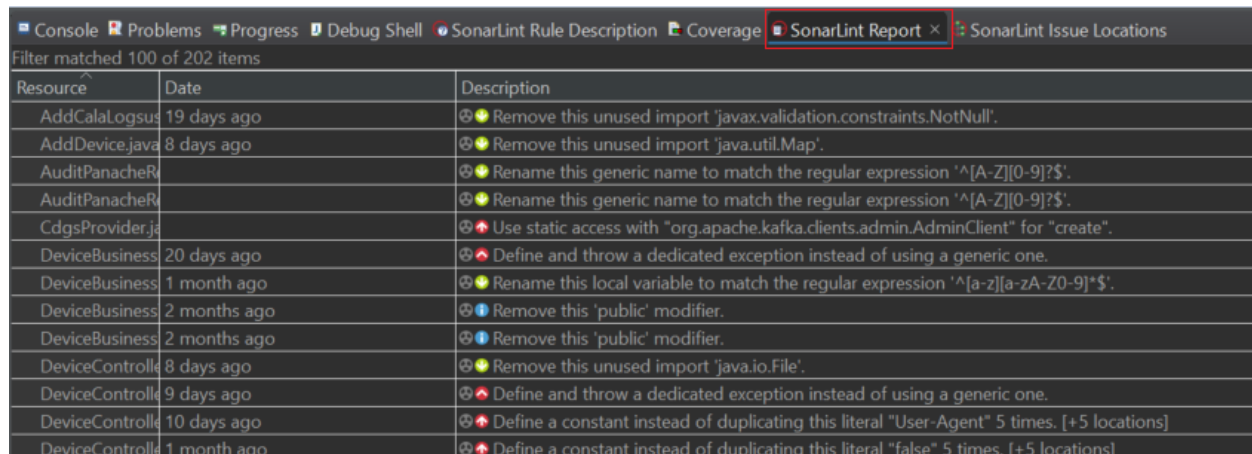
Restart Eclipse



คลิกขวาที่ Project เลือก SonarLint > Analze

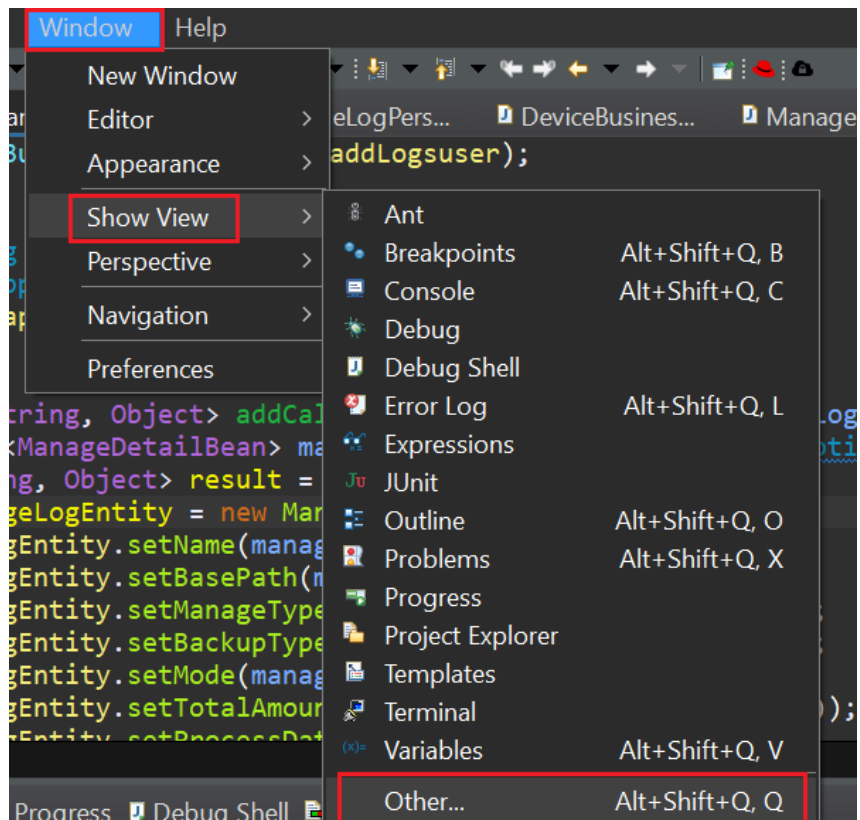


เมื่อการ Analyze เสร็จสิ้น จะแสดง Problem ต่างๆของ Project ที่ Tab SonarLint Report



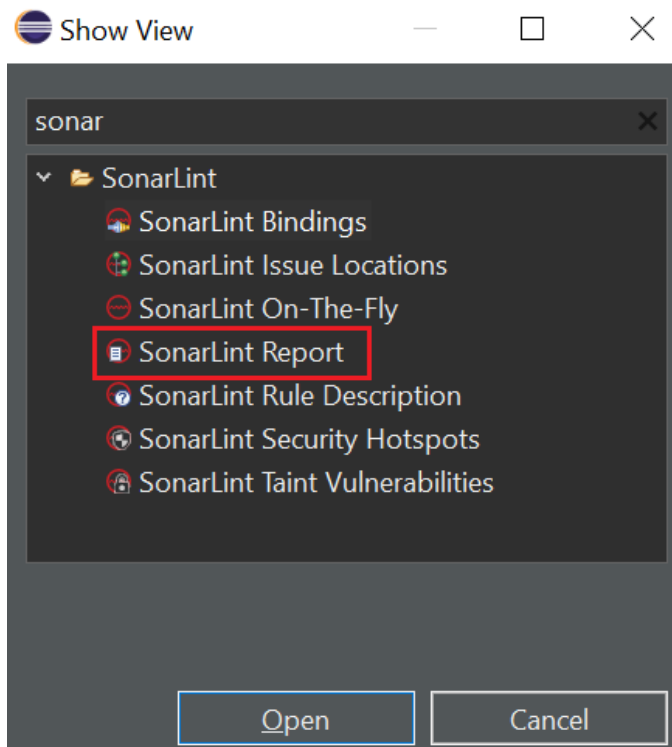
Resource	Date	Description
AddCalaLogsus	19 days ago	Remove this unused import 'javax.validation.constraints.NotNull'.
AddDevice.java	8 days ago	Remove this unused import 'java.util.Map'.
AuditPanacheR		Rename this generic name to match the regular expression '^[A-Z][0-9]?\$'.
AuditPanacheR		Rename this generic name to match the regular expression '^[A-Z][0-9]?\$'.
CdgsProvider.js		Use static access with "org.apache.kafka.clients.admin.AdminClient" for "create".
DeviceBusiness	20 days ago	Define and throw a dedicated exception instead of using a generic one.
DeviceBusiness	1 month ago	Rename this local variable to match the regular expression '^[a-z][a-zA-Z0-9]*\$'.
DeviceBusiness	2 months ago	Remove this 'public' modifier.
DeviceBusiness	2 months ago	Remove this 'public' modifier.
DeviceControl	8 days ago	Remove this unused import 'java.io.File'.
DeviceControl	9 days ago	Define and throw a dedicated exception instead of using a generic one.
DeviceControl	10 days ago	Define a constant instead of duplicating this literal "User-Agent" 5 times. [+5 locations]
DeviceControl	1 month ago	Define a constant instead of duplicating this literal "false" 5 times. [+5 locations]

หากไม่มี Tab SonarLint Report ให้ไปที่ Tab Window และทำตามรูปด้านล่าง

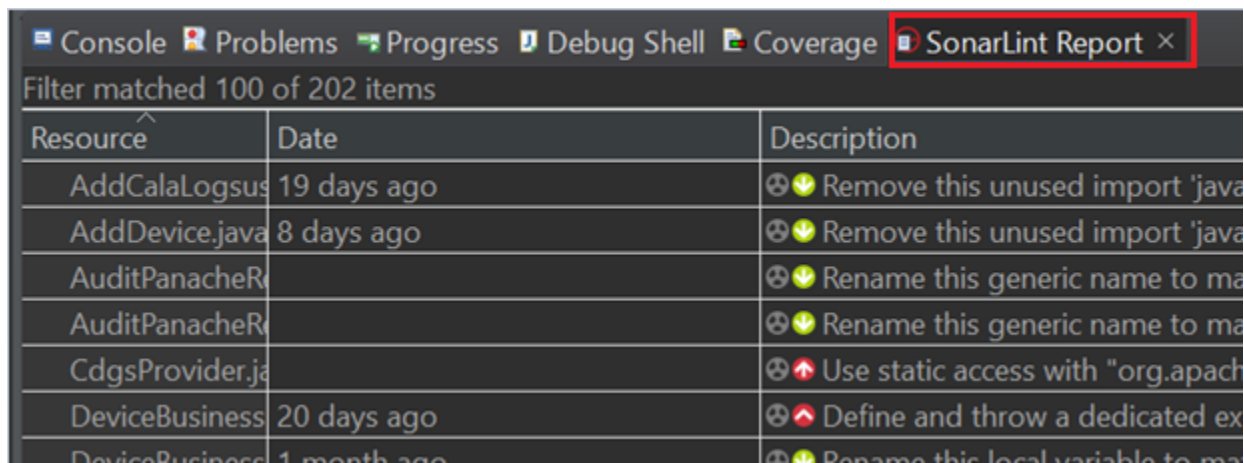




เลือก SonarLint Report และกด Open



จะขึ้น Tab SonarLint ดังรูป



ตัวอย่างการแก้ไข Problem:

Double click ไปที่ Problem จะเปิด File นั้นขึ้นมา

DeviceController.java	9 days ago	🔧 Define and throw a dedicated exception instead of using a generic one.
DeviceController.java	10 days ago	🔧 Define a constant instead of duplicating this literal "User-Agent" 5 times. [+5 locations]
DeviceController.java	1 month ago	🔧 Define a constant instead of duplicating this literal "false" 5 times. [+5 locations]
DevicePersistence.java	9 days ago	🗑 Remove this unused import 'th.co.cdgs.zone.ZoneBean'.
DevicePersistence.java	2 months ago	🔧 Define a constant instead of duplicating this literal "deviceId" 4 times. [+4 locations]
DevicePersistence.java	2 months ago	🔧 Remove this unused method parameter "paginator".
EditDevice.java	8 days ago	🗑 Remove this unused import 'java.util.Map'.
Email.java	14 days ago	🗑 Remove this unused "attachment" local variable.

ปัญหา import ไม่ได้ใช้งาน

```
DevicePersis... x DeviceBusin... ManageLogCo... ManageLogBus... ManageLogCo...
6 import java.util.List;
7
8 import javax.enterprise.context.ApplicationScoped;
9 import javax.inject.Inject;
10 import javax.persistence.EntityManager;
11 import javax.persistence.Query;
12
13 import th.co.cdgs.hibernate.orm.panache.AuditPanacheRepository;
14 import th.co.cdgs.request.paginator.Paginator;
15 import th.co.cdgs.zone.ZoneBean;
16 import th.co.cdgs.zone.ZoneBusiness;
```

ให้ลบ import ตัวนั้นออก

```
DevicePersis... x DeviceBusin... ManageLogCo... ManageLogBus... ManageLogCo...
5 import java.util.Date;
6 import java.util.List;
7
8 import javax.enterprise.context.ApplicationScoped;
9 import javax.inject.Inject;
10 import javax.persistence.EntityManager;
11 import javax.persistence.Query;
12
13 import th.co.cdgs.hibernate.orm.panache.AuditPanacheRepository;
14 import th.co.cdgs.request.paginator.Paginator;
15 import th.co.cdgs.zone.ZoneBusiness;
16
```

ปัญหาการใช้ชื่อซ้ำมากเกินไปใน File

```
DevicePersis... x DeviceBusin... ManageLogCo... ManageLogBus... Manage
31
32 public List<DeviceByConditionBean> getDeviceById(String deviceId) {
33     final var sql = "select device_id, dc.dcg_seqno, dc.dcg_name, d.device_ip, vendor, remark, d.status, d.create_by, d.dimg_name, d.dimg_path from device d "
34     + "inner join device_category dc on d.dcg_seqno = dc.dcg_seqno";
35     Query query = em.createNativeQuery(sql);
36     Duplication
37     query.setParameter(1 "deviceId", deviceId);
38     return mapResultsData(query.getResultList());
39 }
40
41
42 public BigInteger checkDupDeviceName(String deviceName, String deviceId) {
43     final var sql = new StringBuilder("select Count('X') cntDupDeviceName from device d ");
44     if (deviceId != null) {
45         sql.append(" and d.device_id <> :deviceId");
46     }
47     Query query = em.createNativeQuery(sql.toString());
48     query.setParameter("deviceName", deviceName);
49     if (deviceId != null) {
50         Duplication
51         query.setParameter(2 "deviceId", deviceId);
52     }
53 }
```

ให้ทำเป็น constant แทน

```
DevicePersis... x DeviceBusin... ManageLogCo... ManageLogBus... ManageLogPe...
10 import javax.persistence.EntityManager;
11 import javax.persistence.Query;
12
13 import th.co.cdgs.hibernate.orm.panache.AuditPanacheRepository;
14 import th.co.cdgs.request.paginator.Paginator;
15 import th.co.cdgs.zone.ZoneBusiness;
16
17 @ApplicationScoped
18 public class DevicePersistence extends AuditPanacheRepository<Device, String> {
19
20     static final String DEVICE_ID = "deviceId";
21
22     @Inject
23     EntityManager em;
24 }
```

```
public List<DeviceByConditionBean> getDeviceById(String deviceId) {
    final var sql = "select device_id, dc.dcg_seqno, dc.dcg_name, d.device_ip, vendor, remark, d.status, d.create_by, d.dimg_name, d.dimg_path from device d "
    + "inner join device_category dc on d.dcg_seqno = dc.dcg_seqno";
    Query query = em.createNativeQuery(sql);
    Duplication
    query.setParameter(1 DEVICE_ID, deviceId);
    return mapResultsData(query.getResultList());
}
```

ปัญหา Parameter ไม่ได้ใช้งาน

```
DevicePersis... x DeviceBusin... ManageLogCo... ManageLogBus... ManageLogPe... ManageLog.java DeviceContro... Device
22 @Inject
23 EntityManager em;
24
25 @Inject
26 ZoneBusiness zoneBusiness;
27
28 public List<DeviceByConditionBean> getDeviceByCondition(SearchDeviceBean searchBean, Paginator paginator) {
29     StringBuilder sql = createQueryCondition(searchBean);
30     List<Object[]> res = getQueryResults(searchBean, sql);
31     return mapResultsDataList(res);
32 }
```

ให้นำออก

```
public List<DeviceByConditionBean> getDeviceByCondition(SearchDeviceBean searchBean) {
    StringBuilder sql = createQueryCondition(searchBean);
    List<Object[]> res = getQueryResults(searchBean, sql);
    return mapResultsDataList(res);
}
```

เมื่อทำการแก้ไขปัญหาใน File ครบแล้ว ให้ทำการ Analyze ใหม่ตามขั้นตอนเดิมเพื่อ Update การ Scan

ในรูปด้านล่างจะเห็นว่า File “DevicePersistance” ไม่มีอยู่ในรายการ Problem แล้ว

DeviceController.java	9 days ago	Define and throw a dedicated exception instead of using a generic one.
DeviceController.java	10 days ago	Define a constant instead of duplicating this literal "User-Agent" 5 times. [+5 locations]
DeviceController.java	1 month ago	Define a constant instead of duplicating this literal "false" 5 times. [+5 locations]
EditDevice.java	9 days ago	Remove this unused import 'java.util.Map'.
Email.java	14 days ago	Remove this unused "attachment" local variable.
Email.java	14 days ago	This block of commented-out lines of code should be removed. [+2 locations]