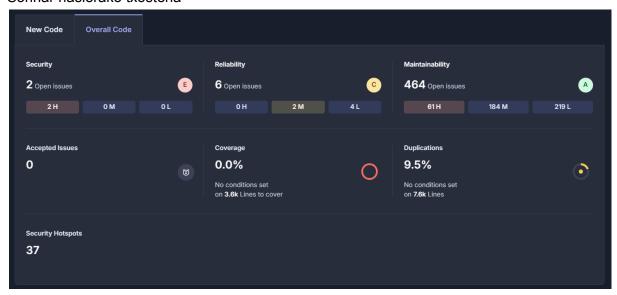
SONNAR ISSUE ZUZENKETAK

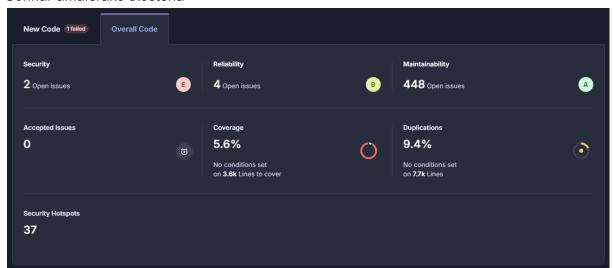
9.taldea, Ibai Oñatibia, Iker Galarraga eta Jon Olea

Proiektuaren sonnar link-a: https://sonarcloud.io/project/overview?id=9-taldea-rides24
Proiektuaren github link-a: https://github.com/lkerGl28/Rides24E9

Sonnar hasierako txostena



Sonnar amaierako txostena



Consistency

major

1. Arazoa

src/.../domain/Driver.java

Replace the synchronized class "Vector" by an unsynchronized one such as "ArrayList" or "LinkedList".

```
@XmlIDREF
@OneToMany(fetch = FetchType.EAGER, cascade = CascadeType.ALL)
private List<Car> cars = new Vector<Car>();;
@XmlIDREF
```

```
@XmLIDREF
@OneToMany(fetch = FetchType.EAGER, cascade = CascadeType.ALL)
private List<Car> cars = new ArrayList<>();
```

Arazoa konpontzeko, autoen bektorea erabili ordez, arrayList-a sortu dugu. Gainera, ArrayList-a "Car" motaz osatuta dagoela ez dugu jarri, "diamond operator" erabiliz.

2. Arazoa

src/main/java/domain/Traveler.java

Replace the synchronized class "Vector" by an unsynchronized one such as "ArrayList" or "LinkedList".

```
@XmlIDREF
@OneToMany(mappedBy = "traveler", fetch = FetchType.EAGER, cascade = CascadeType.PERSIST)
private List<Booking> bookedRides = new Vector<Booking>();

@XmlIDREF
@OneToMany(mappedBy = "traveler", fetch = FetchType.EAGER, cascade = CascadeType.PERSIST)
private List<Booking> bookedRides = new ArrayList<>();
```

Sinkronizazioa eraginkortasunari begira txarra denez, ohikoa da klase sinkronizatuen bertsio ez-sinkronizatuak erabiltzea. Horregatik hobe da erabiltzea LinkedList edo ArrayList klaseak Vector klasearen ordez.

3. Arazoa

src/main/java/domain/Traveler.java

Replace the synchronized class "Vector" by an unsynchronized one such as "ArrayList" or "LinkedList".

```
@XmlIDREF
@OneToMany(mappedBy = "traveler", fetch = FetchType.EAGER, cascade = CascadeType.PERSIST)
private List<Alert> alerts = new Vector<Alert>();
```

```
@XmlIDREF
@OneToMany(mappedBy = "traveler", fetch = FetchType.EAGER, cascade = CascadeType.PERSIST)
private List<Alert> alerts = new ArrayList<>();
```

Vector ordez ArrayList edo LinkedList erabiltzea gomendatzen du.

minor

1. Arazoa

src/.../java/gui/BezeroGUI.java

Rename this local variable to match the regular expression '^[a-z][a-zA-Z0-9]*\$'.

```
// Lista
taula = new JTable();
List<Booking> TravelList = appFacadeInterface.getBookingFromDriver(username);
```

```
// Lista
taula = new JTable();
List<Booking> travelList = appFacadeInterface.getBookingFromDriver(username);
```

TravelList izeneko lista "camelCase" formatura pasa dugu, travelList jarriz.

2. Arazoa

src/main/java/gui/AlertaAurkituakGUI.java

Rename this local variable to match the regular expression ^[a-z][a-zA-Z0-9]*\$'

```
private void closeButton actionPerformed(ActionEvent e) {
    this.setVisible(false);
}

private void closebutton() {
    this.setVisible(false);
}
```

"_" duten izenak letra larriz izatea gomendatzen duenez izena moztu egin dut, horrez gain erabiltzen ez den e atributua ezabatu dut.

3. Arazoa

src/main/java/gui/MovementsGUI.java

Rename this method name to match the regular expression '^[a-z][a-zA-Z0-9]*\$'.

```
private void iButtonClose actionPerformed(ActionEvent e) {
    this.setVisible(false);
}
```

```
private void botoiaitxi() {
    this.setVisible(false);
}
```

Gomendatzen da metodoaren izena letra larriz idaztea '_' karakterearekin, letra xehez idatzita eta '_' karaktererik gabe idatzi dut eta e parametroa kendu diot metodoari.

Intentionality

major

1. Arazoa

src/main/java/domain/Driver.java

Strings and Boxed types should be compared using "equals()".

```
if ((ride.getFrom()==from) && (ride.getTo()==to) && (ride.getDate().equals(date))) {
  if ((ride.getFrom().equals(from)) && (ride.getTo().equals(to)) && (ride.getDate().equals(date))) {
```

'=='-k ez ditu bi aldagaien balioak konparatzen baizik eta bien memoria posizioak konparatzen ditu, ondorioz gomendagarriagoa da .equals() metodoa erabiltzea.

2. Arazoa

src/main/java/businessLogic/BLFacade.java
This block of commented-out lines of code should be removed

```
6 import java.util.List;
7 |
8 //import domain.Booking;
9 import domain.Ride;
1 import domain.Traveler;
1 import domain.Joser;
2 //import domain.Admin;
3 import domain.Alert;

3 import java.util.Date;
4 import java.util.List;
5 import domain.Ride;
```

4 import java.util.list;
5 import domain.Ride;
6 import domain.Traveler;
7 import domain.User;
8 import domain.Alert;

Kodigo garbia mantentzeko komentario horiek ezabatzea lagungarria da.

3. Arazoa

src/.../domain/Driver.java

Add the "@Override" annotation above this method signature

```
public String toString() {
    return (super.toString());
}

@Override
public String toString() {
    return (super.toString());
}
```

@Override gehitu diogu Driver-en toString metodoari.

minor

1. Arazoa

src/main/java/configuration/ConfigXML.java Remove this unnecessary cast to "Node".

Node nValue = nlList.item(0);

return nValue.getNodeValue();

```
private static String getTagValue(String sTag, Element eElement)
{
    NodeList nlList= eElement.getElementsByTagName(sTag).item(0).getChildNodes();
    Node nValue = (Node) nlList.item(0);
    return nValue.getNodeValue();
}

private static String getTagValue(String sTag, Element eElement)
{
    NodeList nlList= eElement.getElementsByTagName(sTag).item(0).getChildNodes();
```

Ez da casting-a egin behar Node klaseko aldagaia erazagutzean esplizituki esaten ari garelako zein klasekoa izan behar den objektua.

2. Arazoa

src/main/java/businessLogic/BLFacadeImplementation.java Remove this empty statement.

Beharrezkoak ez diren ; ezabatu behar dira al den garbiena gelditzeko.

3. Arazoa

src/.../DataAccess.java
Complete the task associated to this TODO comment.

```
return ride;
} catch (NullPointerException e) {
    // TODO Auto-generated catch block
    return null;
}
```

```
return ride;
} catch (NullPointerException e) {
    e.printStackTrace();
    return null;
}
```

Arazoa, TODO komentarioa oraindik kendu gabe zegoelako da, beraz, komentarioa kendu, eta errore kasuan errorea kontsolan pantailaratzeko ere gehitu diogu.

critical

1. Arazoa

src/main/java/gui/BaloraGUI.java

Use static access with "javax.swing.SwingConstants" for "HORIZONTAL".

```
slider = new JSlider(JSlider.HORIZONTAL, 1, 5, 1);
slider = new JSlider(SwingConstants.HORIZONTAL, 1, 5, 1);
```

Aldagai estatikoak klasearekin daude lotuta ez instantzia zehatz baten bidez, horregatik metodo bati deitzerakoan hobe da oinarrizko klase estatikoaren bidez deia egitea eta ez instantziaren bidez.

2. Arazoa

src/main/java/businessLogic/BusinessLogicServer.java
Use static access with "javax.swing.WindowConstants" for "DISPOSE_ON_CLOSE".

```
public static void main(String[] args) {
    try {
        BusinessLogicServer dialog = new BusinessLogicServer();
        dialog.setDefaultCloseOperation(JDialog.DISPOSE ON CLOSE);
        dialog.setVisible(true);
    } catch (Exception e) {
        e.printStackTrace();
    }
}

public static void main(String[] args) {
    try {
        BusinessLogicServer dialog = new BusinessLogicServer();
    }
}
```

```
try {
    BusinessLogicServer dialog = new BusinessLogicServer();
    dialog.setDefaultCloseOperation(WindowConstants.DISPOSE_ON_CLOSE);
    dialog.setVisible(true);
} catch (Exception e) {
    e.printStackTrace();
}
```

Erroreak adierazten duen bezala JDialog ordez WindowConstants erabiltze gomendatzen da.

3. Arazoa

src/.../java/gui/KotxeaGehituGUI.java
Use static access with "javax.swing.WindowConstants" for "EXIT_ON_CLOSE".(jon)

```
public KotxeaGehituGUI(String username) {
    KotxeaGehituGUI.setBussinessLogic(MainGUI.getBusi
    this.getContentPane().setLayout(null);
    this.setSize(new Dimension(400, 250));
    this.setTitle(ResourceBundle.getBundle("Etiquetas this.setResizable(false);
    setDefaultCloseOperation(JFrame.EXIT ON CLOSE);
```

```
public KotxeaGehituGUI(String username) {
    KotxeaGehituGUI.setBussinessLogic(MainGUI.getBusinessLogic
    this.getContentPane().setLayout(null);
    this.setSize(new Dimension(400, 250));
    this.setTitle(ResourceBundle.getBundle("Etiquetas").getSt
    this.setResizable(false);
    setDefaultCloseOperation(WindowConstants.EXIT_ON_CLOSE);
```

JFrame barruko EXIT_ON_CLOSE konstantea erabili ordez, WindowsConstants barruan dagoen EXIT_ON_CLOSE konstantea erabili dugu, arazoak aipatzen zuen bezala.

Adaptability

major

Replace this use of System.out by a logger.

1. Arazoa

src/main/java/configuration/ConfigXML.java Replace this use of System.out by a logger.

```
} catch (Exception e) {
   System.out.println("Error in ConfigXML.java: problems with "+ configFile);
   e.printStackTrace();
}
```

```
transient Logger logger = Logger.getLogger(getClass().getName());
```

2. Arazoa

src/main/java/dataAccess/ObjectdbManagerServer.java Replace this use of System.out by a logger.

```
okButton.addActionListener(new ActionListener() {
   public void actionPerformed(ActionEvent e) {
     textArea.append("\n\n\nClosing the database... ");
     try {
        System.out.println("Server close");
```

```
okButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        textArea.append("\n\n\nClosing the database... ");
        try {
            Logger logger = Logger.getLogger(getClass().getName());
            logger.info("Server close");
```

3. Arazoa

src/.../domain/Driver.java
Replace this use of System.out by a logger.

Arazoa konpontzeko, System.out.println() erabili ordez kontsolan gauzak idazteko, logger bat erabili behar izan dugu. Lehenengo logger bat deklaratu dugu, transient erabiliz (logger-a ez serializatzeko).

Ondoren, logger-aren info erabili ahal bada, mezua kontsolan idatziko du, mezu formateoa erabiliz, posizioa adierazteko.

minor

1. Arazoa

src/test/java/CreateRideBDBlackTest.java Move this file to a named package.

```
    ✓ ♣ > (default package)
    > ♣ > CreateRideBDBlackTest.java
```

```
✓ ♣ > mocktest
> ♣ > CreateRideBDBlackTest.java
```

Izena ez daukan pakete bat egotea proiektu batean ideia ona ez denez, gomendagarria da klase eta fitxategi guztiak koherentziazko pakete izendunetan jasotzea.

2. Arazoa

src/.../java/gui/KotxeaGehituGUI.java

```
} catch (RideMustBeLaterThanTodayException e1) {
    jLabelMsg.setText(e1.getMessage());
} catch (RideAlreadyExistException e1) {
    jLabelMsg.setText(e1.getMessage());
}

} catch (RideMustBeLaterThanTodayException | RideAlreadyExistException e1) {
    jLabelMsg.setText(e1.getMessage());
}
```

Bi catch-ek berdina egiten zutenez, testu berdina aldatu, biak catch bakarrean elkartu ditugu.

3. Arazoa

src/main/java/domain/Complaint.java

Make egoera a static final constant or non-public and provide accessors if needed.

```
public Boolean aurkeztua;
public String egoera;

private Boolean aurkeztua;
private String egoera;
```

Egoera atributo publikoa zen eta estatikoan edo ez-publikoan ezartzea eskatzen du, ondorioz atributua pribatuan ezarri dugu, ez delako beharrezkoa publikoa izatea. aurkezpena atributuak ere arazo berdina zuenez biak aldatu ditugu.

critical

1.Arazoa

src/main/java/dataAccess/DataAccess.java
Define a constant instead of duplicating this literal "Madrid" 3 times

```
driver1.addRide("Donostia", "Madrid", date2, 5, 20); //ride1
driver1.addRide("Irun", "Donostia", date2, 5, 2); //ride2
driver1.addRide("Madrid", "Donostia", date3, 5, 5); //ride3
driver1.addRide("Barcelona", "Madrid", date4, 0, 10); //ride4
driver2.addRide("Donostia", "Hondarribi", date1, 5, 3); //ride5
```

Madrid ez errepikatzeko 3 aldiz "Madrid" string-a duen konstante bat erazagutu dugu.

```
final String MADRID = "Madrid";
driver1.addRide("Donostia", MADRID, date2, 5, 20); //ride1
driver1.addRide("Irun", "Donostia", date2, 5, 2); //ride2
driver1.addRide(MADRID, "Donostia", date3, 5, 5); //ride3
driver1.addRide("Barcelona", MADRID, date4, 0, 10); //ride4
driver2.addRide("Donostia", "Hondarribi", date1, 5, 3); //ride5
```

Define a constant instead of duplicating this literal "NotCompleted" 3 times.(Ibai)

2.Arazoa

src/main/java/dataAccess/DataAccess.java
Define a constant instead of duplicating this literal "Donostia" 4 times

```
driver1.addRide("Donostia", "Madrid", date2, 5, 20); //ride1
  driver1.addRide("Irun", "Donostia", date2, 5, 2); //ride2
  driver1.addRide("Madrid", "Donostia", date3, 5, 5); //ride3
  driver1.addRide("Barcelona", "Madrid", date4, 0, 10); //ride4
  driver2.addRide("Donostia", "Hondarribi", date1, 5, 3); //ride5
```

```
final String DONOSTIA = "Donostia";
```

```
driver1.addRide(DONOSTIA, "Madrid", date2, 5, 20); //ride1
driver1.addRide("Irun", DONOSTIA, date2, 5, 2); //ride2
driver1.addRide("Madrid", DONOSTIA, date3, 5, 5); //ride3
driver1.addRide("Barcelona", "Madrid", date4, 0, 10); //ride4
driver2.addRide(DONOSTIA, "Hondarribi", date1, 5, 3); //ride5
```

4 Aldiz String bera jarri ordez, "Donostia" duen konstante bat sortu dugu eta jarri dugu.

3.Arazoa

src/main/java/dataAccess/DataAccess.java

Define a constant instead of duplicating this literal "BookFreeze" 5 times.

```
Movement m1 = new Movement(traveler1, "BookFreeze", 20);
Movement m2 = new Movement(traveler1, "BookFreeze", 40);
Movement m3 = new Movement(traveler1, "BookFreeze", 5);
Movement m4 = new Movement(traveler2, "BookFreeze", 4);
Movement m5 = new Movement(traveler1, "BookFreeze", 3);
Movement m6 = new Movement(driver1, "Deposit", 15);
Movement m7 = new Movement(traveler1, "Deposit", 168);
```

```
final String BOOKFREEZE = "BookFreeze";

Movement m1 = new Movement(traveler1, BOOKFREEZE, 20);
Movement m2 = new Movement(traveler1, BOOKFREEZE, 40);
Movement m3 = new Movement(traveler1, BOOKFREEZE, 5);
Movement m4 = new Movement(traveler2, BOOKFREEZE, 4);
Movement m5 = new Movement(traveler1, BOOKFREEZE, 3);
Movement m6 = new Movement(driver1, "Deposit", 15);
Movement m7 = new Movement(traveler1, "Deposit", 168);
```

bookFreeze Atributua bost aldiz ezarri ordez atributu batean txertatzea eta hau erabiltzea gomendatzen da.

Responsibility

major

_

minor

_

critical

Make sure this SonarQube token gets revoked, changed, and removed from the code.

Arazo hau ez dugu zuzendu, ez genekien non jarri token-a