

These are the steps to install the HRM software system:

1. In case it is not already installed in your computer, install in your local computer MySQL Workbench and MySQL Community Server version 8.0.12.
2. Additionally, in case it is not already installed in your computer, install the Eclipse IDE for Java Developers Version: 2018-09 (4.9.0) and the JDK Java version: 13.0.1
3. Go to our Github repository Projects/HRM/Instrumented_Version/Database/ and download the database dump file: HRM_Database_Dump.sql
4. In MySQL Workbench, open the database dump file as a SQL Script and then execute the script.
5. In our Github repository, go to the branch: Projects/HRM/Instrumented_Version/HRMApplication/ and download all the files present there.
6. In your local computer, go to the Eclipse Workspace folder and create a folder called HRMApplication and copy all the files downloaded in the step 3.
7. In the Eclipse Workspace folder, copy the files that were generated from the Forensic-Ready Logger which are: FrIDatabaseMethods.aj and FrIStart.aj into the frI folder located into the path: eclipse-workspace/HRMApplication/src/frI
8. In Eclipse, open the HRMApplication project that is located in the Eclipse Workspace Folder.
9. Find the gui package and then the HRMAPP.java class which is the main class that starts the HRM software system.
10. Run the HRMAPP.java class using the "AspectJ/Java Application" option.

These are the steps to create a new Travel Request using Henry Smith's Credentials:

1. Connect to the HRM Software System using Henry Smith Credentials, who is the HRM System's Administrator: User: hsmith / Password: 12345.
2. In the HRM Software System Main Menu Screen, go to the Travel Requests Module by clicking a button labeled as "Travel Requests".
3. In the Travel Request Main Menu Screen, click on the button labeled as "Add New".

4. In the screen of a new travel request, fill out all the fields present there, and when finished click on the button labeled as "Save". Once is saved, all the fields will be cleaned.
5. Then, click on the button labeled as "Cancel" to return to the Travel Request Main Menu screen.

These are the steps to modify the Arthur Jones' credentials:

1. In the Travel Request Main Menu Screen, go to the "HRM System" option located in the left corner of the screen.
2. Then, select the option labeled as "HRM Main Menu".
3. In the HRM System Main Menu Screen, go to the Users Module by clicking on the button labeled as "Users".
4. In the Users Main Menu Screen, select the Arthur Jones User record.
5. Then, click on this record using the right side of the mouse to obtain a contextual menu.
6. In the contextual menu, select the option labeled as "Modify".
7. In the User screen, fill out the field: password and confirm.
8. Click on the button Save. Once is saved, all the fields will be cleaned.
9. Click on the button labeled as "Cancel" to return to the Users Main Menu screen.
10. In the Users Main Menu Screen, sign out from the HRM Software System by clicking on the "HRM System" option located in the left corner of the screen.
11. Then click on the "Sign out" option.
12. A message will appear on the screen asking: "Do you really want to sign out the HRM System?".
13. Click on the button labeled as "Ok".

These are the steps to approve a new travel request using Arthur Jones's Credentials:

1. Connect to the HRM Software System using Arthur Jones Credentials, which is Manager in the HRM Software System. Use these credentials that were set during the previous steps for the User: ajones.
2. In the HRM System Main Menu, go to the Travel Requests Module by clicking the button labeled as "Travel Requests".
3. In the Travel Request Main Menu select the record of the last travel request created.
4. Click on this record using the right side of the mouse to obtain a contextual menu.
5. In the contextual menu, select the option labeled as "Change Status".
6. In the Travel Request Screen, go to the Status field and change it to the "Approved" Value.
7. In the next field called "Status Change Notes field", add a message related to the approval of the Travel Request. For example: "This travel request was reviewed and approved".
8. Click on the button labeled as "Save".
9. To exit from this screen, click on the button labeled as "Cancel".
10. In the Travel Request Main Menu Screen, exit completely from the HRM Software System by clicking the "HRM System" option located on the left corner.
11. Then, click on the "Exit" option.
12. A message will appear on the screen with the text: "Do you really want to exit the HRM System". Click on the button labeled as "Ok".
13. Then, once we completely exit from the HRM software system, the Eclipse Console will have the following two text messages displayed that mention the location of the Incident Model files"
 - Message FRL: UML Sequence Diagram Text File created: /Users/fanny/Output/IncidentSequenceDiagram.txt
 - Message FRL: UML Sequence Diagram PNG File created: /Users/fanny/Output/IncidentSequenceDiagram.png

14. In your computer, find this path and open the files to see the UML Sequence Diagram related to the representation of the misuse scenario in the HRM software system.