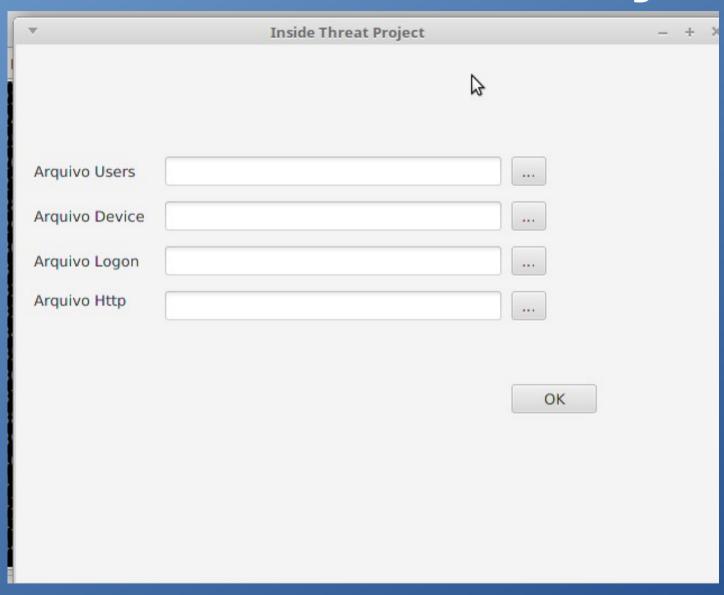
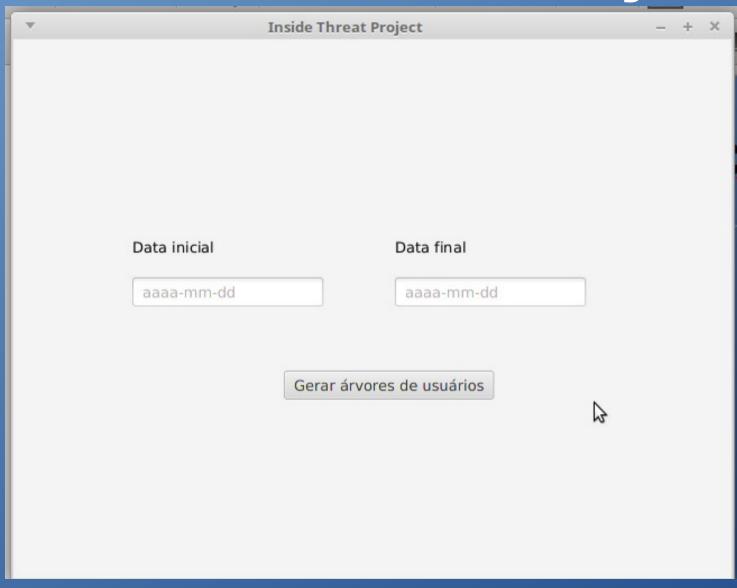
Andrécio Costa Bezerra

Dante Alighieri Miranda dos Santos





```
public class BuildForest {
    String startTime;
    String endTime;
    boolean userTree;
    ArrayList<Node> forest;
    ArrayList<Device> devices;
    ArrayList<Http> https;
    ArrayList<Logon> logons;
    public BuildForest(String start at, String end at, boolean ut) {
    startTime = start at;
    endTime = end at;
    userTree = ut;
    forest = new ArrayList<Node>();
```

```
public ArrayList<Node> run() {
    DeviceDAO dDAO = new DeviceDAO();
    HttpDAO hDAO = new HttpDAO();
    LogonDAO IDAO = new LogonDAO();
    try {
        devices = dDAO.betweenDates(startTime, endTime);
        https = hDAO.betweenDates(startTime, endTime);
        logons = IDAO.betweenDates(startTime, endTime);
    } catch (SQLException e) {
        System.out.println(e.getMessage());
    buildUserNodes();
    return forest;
```

```
private void buildUserNodes() {
    for (Device d : devices)
        setBuildNode("Device", d);
    for (Http h : https)
        setBuildNode("Http", h);
    for (Logon I : logons)
        setBuildNode("Logon", I);
}
```

```
private void setBuildNode(String kind, Activity a) {
    ArrayList<String> branch = new ArrayList<String>();
    branch.add(a.getDate());
    branch.add(a.getPcId());
    branch.add(kind);
    branch.add(a.getActivity());
    for (Node n : forest) {
        if (n.getKey() == a.getUserId()) {
             n.addNodeInChain(branch);
             return;
    Node node = new Node(a.getUserId());
    node.addNodeInChain(branch);
    forest.add(node);
```

```
void setBuildForest(ActionEvent event) {
        BuildForest b = new BuildForest(startDate.getText(), endDate.getText(), false);
        ArrayList<Node> forest = b.run();
        System.out.println(forest.size());
        try {
             FXMLLoader loader = new FXMLLoader();
loader.setLocation(MainScreenController.class.getResource("../views/ChooseUser.fxml"));
             AnchorPane chooseUserScreen = (AnchorPane) loader.load();
             ChooseUserController controle = new ChooseUserController();
             controle.carregarUsuarios(forest);
             mainScreen.setCenter(chooseUserScreen);
        } catch (IOException e) {
             e.printStackTrace();
```