PROJECT : JAVA

```java
package mine;

import javafx.application.Application;

import javafx.collections.FXCollections;

import javafx.collections.ObservableList;

import javafx.geometry.Insets;

import javafx.scene.Scene;

import javafx.scene.control.*;

import javafx.scene.layout.BorderPane;

import javafx.scene.layout.HBox;

import javafx.scene.layout.VBox;

import javafx.stage.Stage;


import java.util.HashMap;

import java.util.Map;


public class Main extends Application {

    private ObservableList<String> students;

    private Map<String, ObservableList<String>> attendanceRecords;


    @Override
    public void start(Stage primaryStage) {
        students = FXCollections.observableArrayList(
            "Student 1", "Student 2", "Student 3", "Student 4", "Student 5");


        attendanceRecords = new HashMap<>();


        ListView<String> studentListView = new ListView<>(students);

        studentListView.getSelectionModel().setSelectionMode(SelectionMode.SINGLE);
```

```java
DatePicker datePicker = new DatePicker();

Button markAttendanceButton = new Button("Mark Attendance");
markAttendanceButton.setOnAction(e -> {
    String selectedStudent = studentListView.getSelectionModel().getSelectedItem();
    if (selectedStudent == null) {
        showAlert("Please select a student.");
        return;
    }

    String date = datePicker.getValue().toString();

    System.out.println("Date: " + date + ", Student: " + selectedStudent + ", Status: Present");

    if (!attendanceRecords.containsKey(selectedStudent)) {
        attendanceRecords.put(selectedStudent, FXCollections.observableArrayList());
    }
    attendanceRecords.get(selectedStudent).add("Date: " + date + ", Status: Present");
});

Button viewAttendanceButton = new Button("View Attendance");
viewAttendanceButton.setOnAction(e -> {
    String selectedStudent = studentListView.getSelectionModel().getSelectedItem();
    if (selectedStudent == null) {
        showAlert("Please select a student.");
        return;
    }

    showAttendanceRecords(selectedStudent, "Attendance Records");
});
```

```java
        Button viewAllRecordsButton = new Button("View All Records");

        viewAllRecordsButton.setOnAction(e -> {

            showAllAttendanceRecords();

        });


        VBox vbox = new VBox(10);

        vbox.setPadding(new Insets(10));

        vbox.getChildren().addAll(datePicker, markAttendanceButton, viewAttendanceButton,
viewAllRecordsButton);


        HBox hbox = new HBox(10);

        hbox.setPadding(new Insets(10));

        hbox.getChildren().addAll(studentListView, vbox);


        BorderPane root = new BorderPane();

        root.setCenter(hbox);


        Scene scene = new Scene(root, 600, 400);

        primaryStage.setTitle("Attendance Register");

        primaryStage.setScene(scene);

        primaryStage.show();

    }

    private void showAlert(String message) {

        Alert alert = new Alert(Alert.AlertType.INFORMATION);

        alert.setTitle("Information");

        alert.setHeaderText(null);

        alert.setContentText(message);

        alert.showAndWait();

    }
```

```java
    private void showAttendanceRecords(String selectedStudent, String title) {

        Stage attendanceStage = new Stage();

        VBox vbox = new VBox(10);

        ListView<String> attendanceListView = new ListView<>();


        if (attendanceRecords.containsKey(selectedStudent)) {

            attendanceListView.setItems(attendanceRecords.get(selectedStudent));

        } else {

            attendanceListView.setItems(FXCollections.observableArrayList("No records found."));

        }


        vbox.getChildren().addAll(new Label("Attendance Records for " + selectedStudent),
attendanceListView);

        Scene attendanceScene = new Scene(vbox, 400, 300);

        attendanceStage.setScene(attendanceScene);

        attendanceStage.setTitle(title);

        attendanceStage.show();

    }


    private void showAllAttendanceRecords() {

        Stage allRecordsStage = new Stage();

        VBox vbox = new VBox(10);

        ListView<String> allRecordsListView = new ListView<>();


        for (Map.Entry<String, ObservableList<String>> entry : attendanceRecords.entrySet()) {

            allRecordsListView.getItems().addAll("Attendance Records for " + entry.getKey());

            allRecordsListView.getItems().addAll(entry.getValue());

        }


        vbox.getChildren().addAll(new Label("All Attendance Records"), allRecordsListView);
```

```
        Scene allRecordsScene = new Scene(vbox, 400, 300);

        allRecordsStage.setScene(allRecordsScene);

        allRecordsStage.setTitle("All Attendance Records");

        allRecordsStage.show();

    }


    public static void main(String[] args) {

        launch(args);

    }

}
```

OUTPUT: