**Flight Information Management System**

**Overview**

This project is a Flight Information Management System developed in Java. It allows users to input in console, then sort and display flight details through both console and graphical user interfaces (GUI).

**Prerequisites**

* **Java Development Kit (JDK)**: Ensure you have JDK 11 or later installed.
* **IntelliJ IDEA**: Download and install IntelliJ IDEA (Community or Ultimate Edition).

**Installation**

**1. Download IntelliJ IDEA**

1. Go to the [IntelliJ IDEA website](https://www.jetbrains.com/idea/download/).
2. Choose the appropriate version for your operating system and download it.
3. Follow the installation instructions specific to your OS.

**2. Set Up the Project in IntelliJ IDEA**

1. **Open IntelliJ IDEA**.
2. **Create a New Project**:
   * Click on **"New Project"**.
   * Select **"Java"** and ensure the project SDK is set to JDK 11 or later.
   * Click **"Next"**.
3. **Set Up Project Structure**:
   * Choose **"Create project from existing sources"**.
   * Select the directory where your project files are located.
   * Click **"Finish"**.
4. **Add Source Code**:
   * In the Project view on the left, navigate to src.
   * Right-click on src and select **"New"** > **"Java Class"** to create new Java files for Main, Flight, and Form1 classes.
   * Copy and paste the provided code into the corresponding Java files.
5. **Build and Run the Project**:
   * Click on **"Build"** in the menu bar and select **"Build Project"** to compile the code.
   * To run the project, right-click on the Main class and select **"Run 'Main.main()'"**.

**Usage**

**Console Interface**

1. Run the Main class.
2. Follow the prompts to enter flight details such as airline name, flight number, origin, destination, etc.
3. The program will display unsorted and sorted flight lists in the console.

**GUI Interface**

1. After running the Main class, a GUI window will appear.
2. Click the **"Display Sorted Flights"** button to view sorted flight information.

**Testing**

* Test cases are documented separately. Ensure all test cases pass to validate the functionality of the project.

**Dependencies**

* **No external libraries** are required. This project uses standard Java libraries.

**UML LINK**

* https://viewer.diagrams.net/?tags=%7B%7D&target=blank&highlight=00FF00&edit=\_blank&layers=1&nav=1&title=UML.drawio#R7Vxbc9o4FP41zLQPZLANSfoIoaTptp3OpLub7ktG2ALUypYrCwL76%2FfoZmxjwKTc2ZfEOpaPzk1HR%2FqU1Ly7cHrPUTz6zAJMa24jmNa8bs11Had1C78kZaYpN25TE4acBKbTnPBI%2FsWG2DDUMQlwkusoGKOCxHmiz6II%2ByJHQ5yzl3y3AaP5UWM0xAuERx%2FRRerfJBAjTb1tNeb0D5gMR3Zkp2He9JH%2Fc8jZODLjRSzC%2Bk2ILBvTNRmhgL1kSN77mnfHGRP6KZzeYSrNai2mv%2BsteZuKzHEkqnzQJH90B4N4GP%2F4%2BOWflv%2F08ssZ1Q2XCaJjY4qae02BXyeWIouZsdD1r7GUsxMiPiRRzWs34mnarAsWA6mpSAJPRR1RMpS9fJANc6DOOcDT0PxW4xBL6FFlYEMGPUixK9DiIm3EpZw2oOwgzvLxNtGL4oFIFVtkWZfRRzglEX6OUAgc20B5FJxEQ%2BiDQrBKJ%2Bon8RodtizSQBnyORqHfSytUxBrz2IwTuT3hxYD0osgERKEHYEsY64FUVKQSOxRBIjXAaSM1AYBG%2FeB9%2F4ECDCkLDHm%2BFmQEB%2FOF7BsEEh7B5bCRgRJBIr8A7olwUgkz2iCCEVq5Eal6Dxk%2Bq25HSmmYZzESM5sn6IkyfEe0R9JvT8mVDzLPFTksrDsaEb65Zurq6u39l2fV1mQjk7BIRbt7CK1RNO3ZTPgRFVOqqmsdTWKTxgUSqetNni6l1%2F7L8LVlXQ%2BX1%2FbAuuSfL1a5%2FP1da6KvSSHV1D8jL1u9wurXZ4p1U5U5aSyyqDrWXm6bbdlKz2c3xWcqLbJWm21mmfl325h13sRubua0meYt9u5s4WL8HUVlc%2FQ073i%2Bc1F5O%2BKWp9hHn8sHpOdf0VWUeWzqsgEWzgJ%2Fv3k7ea0dCeYC%2BIj2tZYWVeBaB2DnHW1mh0GvQZUwYYDQilQBiwSBkB1XNPuoZBQCb1%2BwHSCJVepogip7ASPCqDEEgdsSKNYIFI2fBYS3zyDfzHtpIjmHaOMwyuFacJngrOfKTxaAj9aLBH0wtMMycCR95iFWPAZdDFvm7cGGn2ZY66uRVZHGby11fAM1mtw3mHKaw54woPBPDfAP1sl%2BGfBTzgK2hJihhaLMfimA5SecoYyLrSy%2FlhqdrATnz1Bo964ajSuLeW7fH11fZMSutPsB91ZtvUVc1hfFaSqiEudIGCyYLEe%2BMVBDhhfdFXGNc61cQ3HFDZnkzx2XuYaw%2B4rU4nQut1tGj7msoBn25ZFwsbcx%2BarLKJdYNRs3q5mpK2wwEhFSqrj64PneiF4oOKFcMCRP6sWRtnACVAyUsHivDqKXMdZF0VTIp5s4MKz%2Fq5lWvOPZON1kaedt8Jq7u2WQ9REg7RHKxcPdae1kF%2B2FsStfBCnfDcOYmcNoyVBPGdkO7LBAJbrXQT6zfHcErn%2F8yGzula6IrL%2FmyyMh86mUlZAUku06DMeYF43L9oJo9KRK4TcaqmVK7JKhEtLibqvawldFBNBEC1lKZFoVYUkMq6jQKYJ8EKbYwjy8lrsYJWmusxAkpii2SODkifojIWwlzo%2Bmsb%2BRElAhi5nMZR2Vgao7fqsw6Y1exdJjVu4n7RvkyUYcX%2FUI1he0VNifgMP6%2Fb%2BpND3LhItgb0C0Ki11Oah1T3aiapy0gtHsZY8YvpZjpnaAp6lOfI%2F9zKJN99o6e1aMWGWze8tZpk3xuHg7VZ35aa1Xlt%2BjW9nQr5ql34PzONPaMbGy%2B6y7MKQeeOVWqo0L5fJVX3WH%2FckOKnIMXwgm92xMIaNfiTWLbQHjJ%2FOaRgV%2BRK6hB3TAPIaDvZoz7Ya%2Bf0EVz%2BM%2B38qHknUjOMACayXpodIho5CwL9VrH%2B3Oy03iY%2FtnGtmTjxeRkTgxxipY4Q0oH7%2FuDG%2F0U7b2dNHp%2BT0MSVu%2FfTRHoXsfGOtqAH2WXrxXJ4pqRuSK2dh3xI%2Bo9x1q%2F7qiDiCQnnlzuB2C%2BBBgin2BeN1gYaLnMK8vUpg0A1HQULwEoFVCbtkoH3CMcssWq9sz5Ww218Q0YG50vsQxUtr3P3c196TsjHs6D8xf%2BU9qLPRV697X1be4T0bZR8icRlR3FU3AM5eV53Rt6bmiRZUJfVUCmZk6ynH21U95S3%2BOWs7SZhPTA4tGFZWRXlDWaOmhVPR9iEJAvl5qUnzSN0WDOy5eQt7JSYus%2FDuDOwdEvI0QGWKd9aqYZ1zfPN7bY58lmOde4A1b44Z1nQKEZdex9gU1vTevSswKsiyU1gTmvM%2FrNfd5%2F%2B4wHv%2FHw%3D%3D