Flappy Bird Java Game

Introduction

This project is a simple implementation of the popular Flappy Bird game in Java. The game involves controlling a bird to navigate through obstacles by clicking the screen. Mimics the popular Flappy Bird game that was released in 2013 by .Gears.

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1. Installation

To run the game, ensure you have a Java IDE installed on your system and a JDK

2. Usage

1. Create a new project named **FlappyBird** in an IDE of your choice
2. Copy the files from the **src** directory on GitHub to the **src** directory created by the project
3. Copy the **Assets** directory from GitHub to the project root directory
4. Compile and run the **FlappyBird.java** file. A file named **Data.txt** will be created to save your data. *It is important that you do not change anything within this file*
5. Change the bird color or background using the respective buttons if you wish
6. Use the controls (see #6 Controls) to navigate the bird through the obstacles

3. Features

- Simple, intuitive controls
- Score tracking
- Collision detection
- Ability to change bird color and background
- Saves previously used color, background, and saves high score

4. Architecture

The game is implemented using Java's Swing library for the graphical user interface. The main components are:

- **FlappyBird.java** – Creates the frame and adds the GUI to the frame
- **Game.java** – Creates the GUI and implements the game
- **Bird.java** – Represents the bird and its behavior
- **Pipe.java** – Represents the obstacle pipes and their behaviors
- **Button.java** – Represents the buttons that are used throughout the game
- **Theme.java** – Represents the themes that are available

5. Dependencies

- Java SDK
- Java Swing

6. Controls

- Click on the screen with your mouse to make the bird jump

7. License

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