

Kcirde Santos

Kexin Zheng

Math is Fun! Description Page

Our Project

Our project is a very fun interactive math game that displays 15 questions of addition, subtraction, and counting problems. After one game is completed you will be able to see the records of the top 5 players scores to see where you stand among other players. We have also added a “Let’s Learn” tab for you to be able to learn how to count with images that are very appealing to the eye. The main title page allows the user to learn, play game, or check record. After the user choose to play the game, they will enter their name and do all the questions. At the end, their score as well as the refreshed record will be displayed.

Work Distribution

Kcirde Santos is responsible for creating the displayRecord class to handle the top 5 player record, the Audios class, and Frames class and getting all the required resources, such as audio and images, for this project. Kexin Zheng is responsible for creating the Panels class, the Imgs class, the validator class, Games class, and GameApp driver class.

GameApp.java

GameApp.java is our driver class for the whole game, this class creates the frame as well as displaying the frame/gameplay.

Games.java

Games.java is the class that is able to process our game. This class includes class variables such as: player names, your score, current question that you are on, the type of

question you are answering, and information about the problem. This class holds functions that are able to be the set and get variables listed from above, as well as functions that create a random number generator and a last function that is able to check your answer and add up your score.

Imgs.java

Imgs.java stores all of our images/icons we used such as apples, stars, balloons, bubbles, circles, flags, flowers, leaves, oranges, and squares.

Panels.java

Panels.java stores all the jpanels for each frame each function assembles the components to form the wanted page such as the main page panel, in game panel, learning panel, result panel, and more. This contains class variables that are panel components, such as buttons and labels.

Validator.java

Validator.java is the class that simply is able to validate your name input as well as your answer. Methods used such as try catch statements for those that will throw an exception like “NumberFormatException” for the answer validation.

Audios.java

The Audios.java class stores all the audios used in this game includes background music and sound effects when user finished answering a question if they get it right or wrong. The class also contains static class variables to store audio clips that were used in the program.

DisplayRecord.java

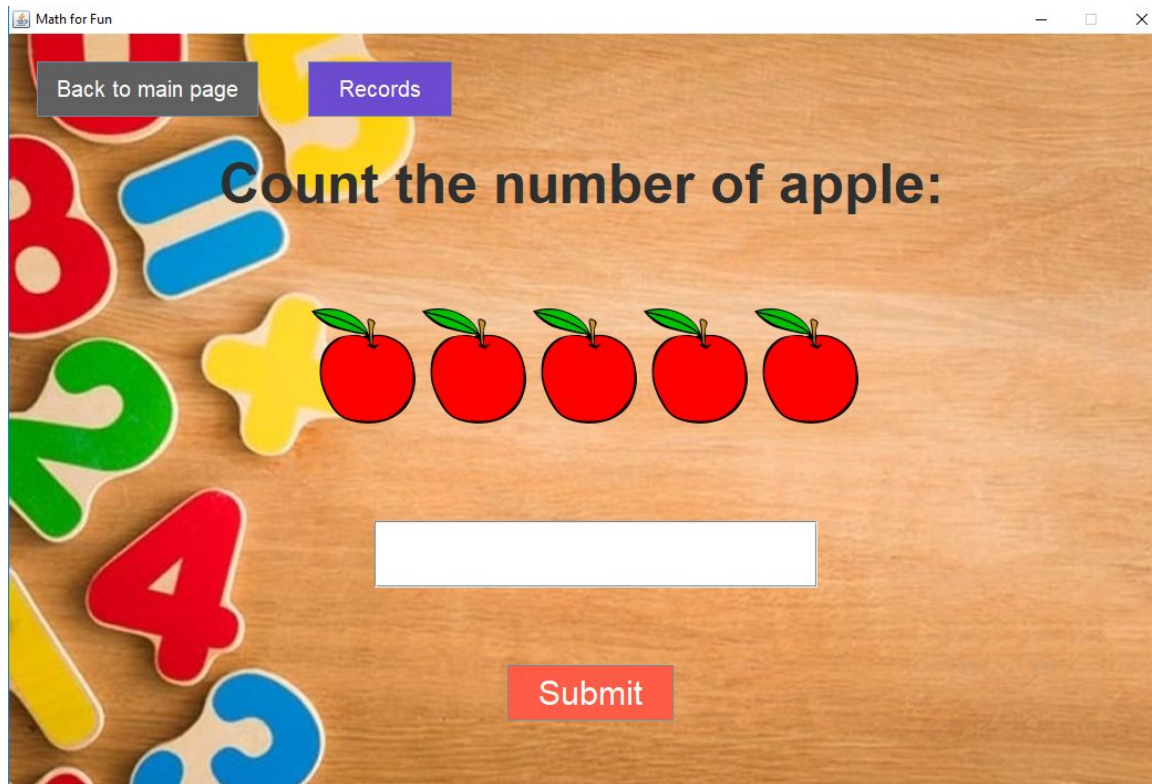
DisplayRecord.java is a class that will create the frame to display the records of the top 5 players of the game. It also handles and modifies the file that stores the record. This class has

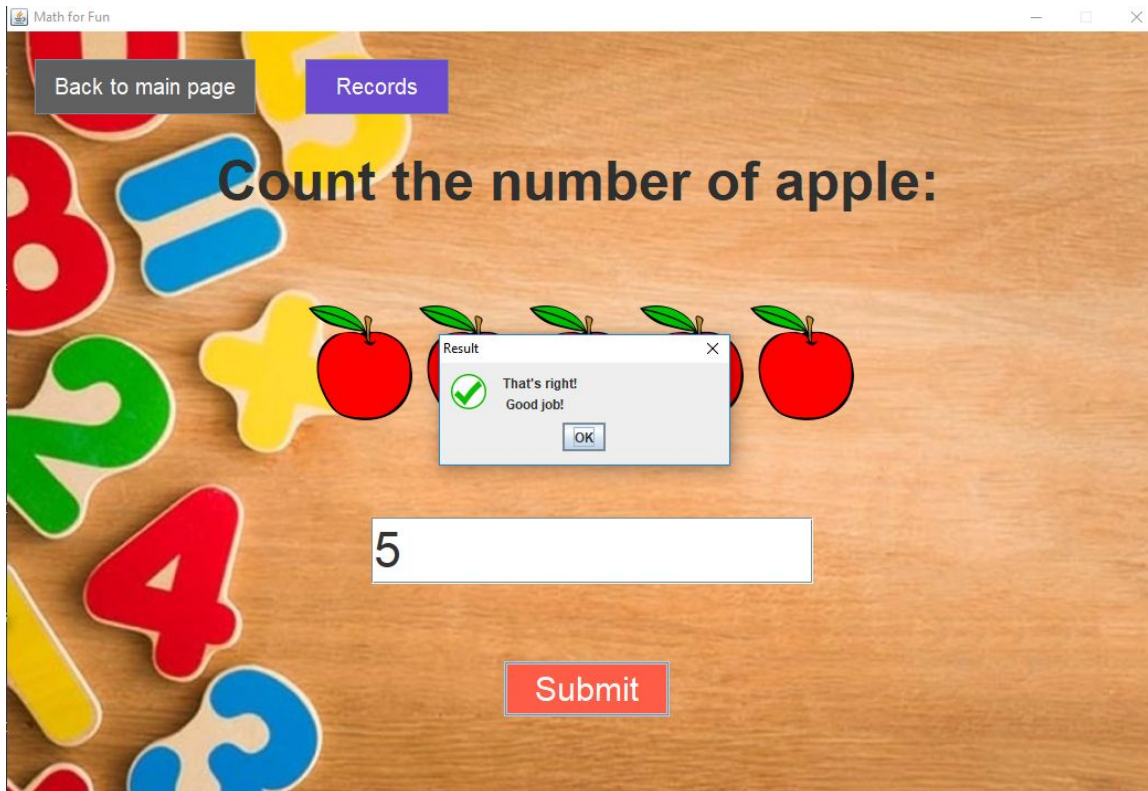
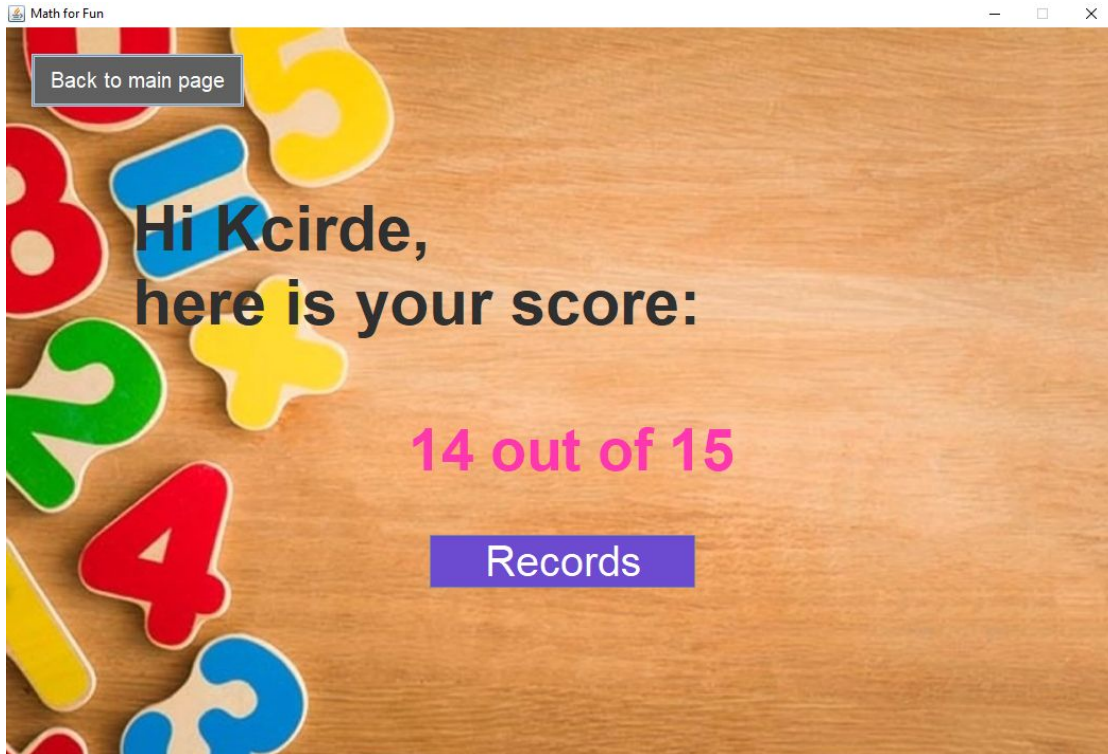
functions such as formatting the frame, creating new records, displaying records, as well as some exception handling.

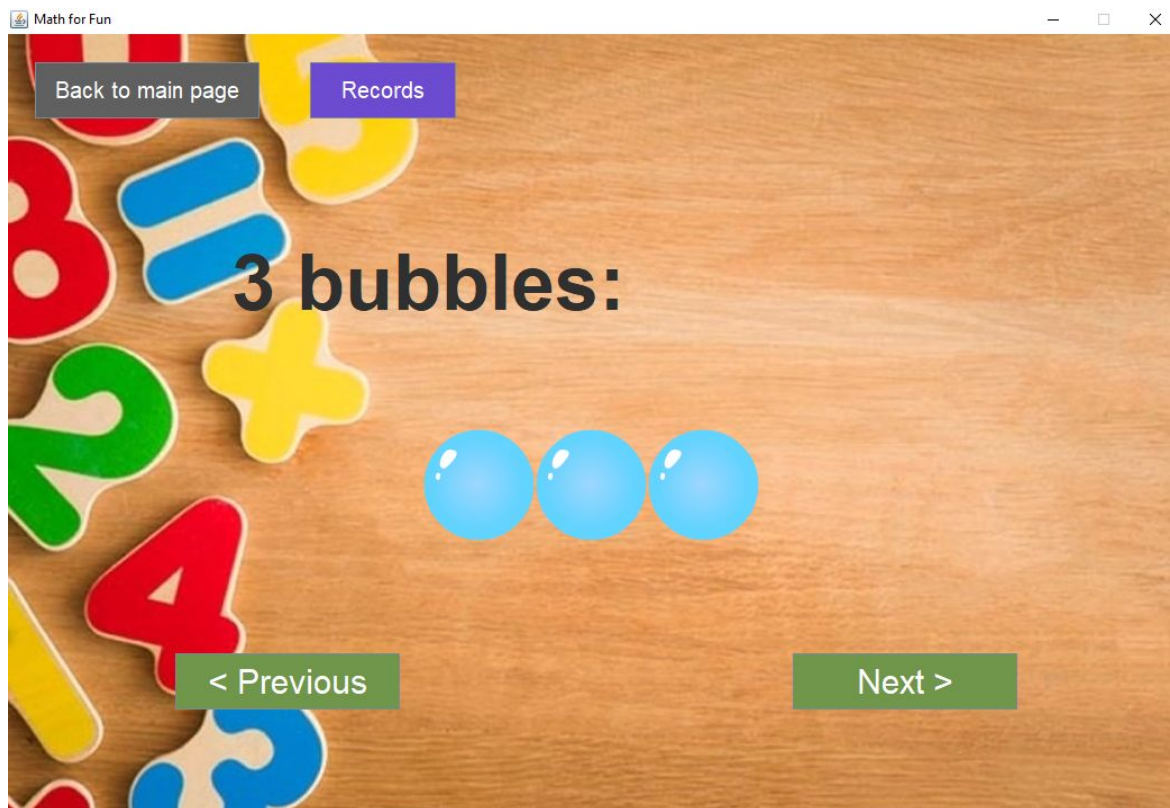
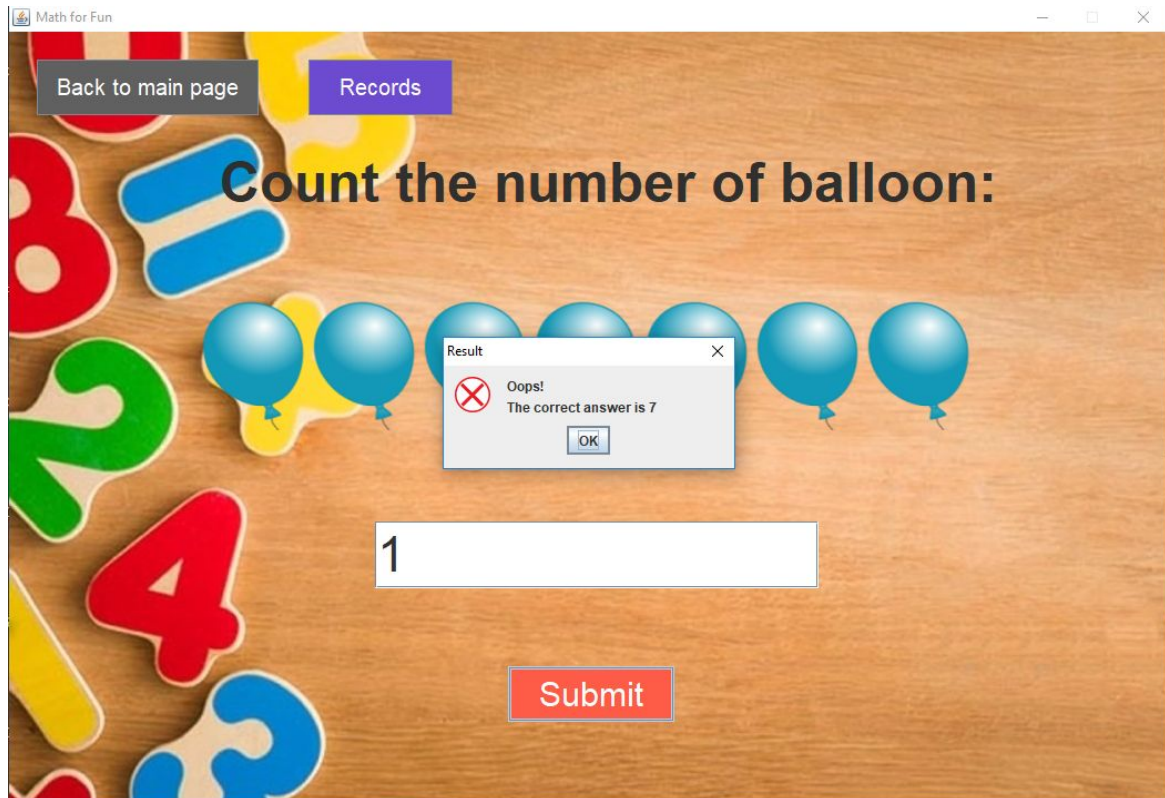
Frames.java

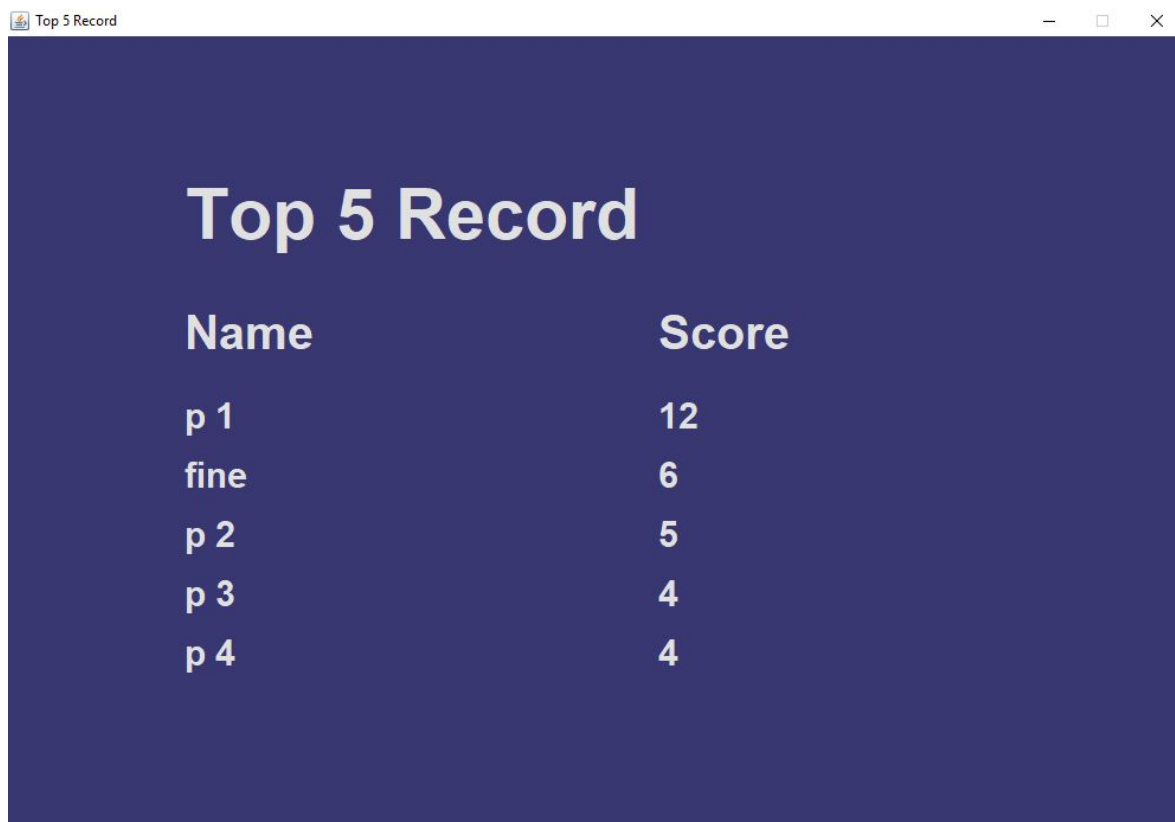
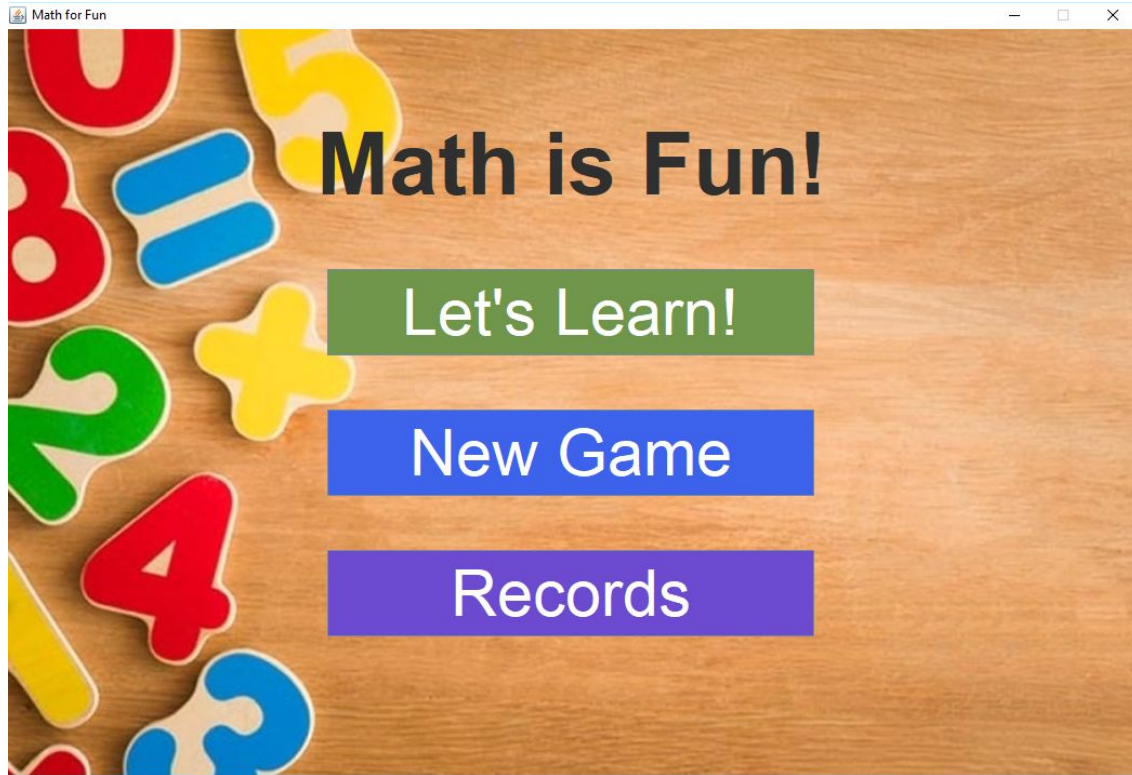
Frames.java stores all the required frames except for the record frame for the game. For example the class holds frames for the main page frame, in game frame, learning frame, result frame, and etc. It contains class variables that are frame components.

Screenshots of the Game







The image shows a screen titled "Top 5 Record" with a dark blue background. It displays a table with two columns: "Name" and "Score". The table lists the top 5 records with names "p 1", "fine", "p 2", "p 3", and "p 4" and their corresponding scores: 12, 6, 5, 4, and 4. The window title bar at the top says "Top 5 Record".

Name	Score
p 1	12
fine	6
p 2	5
p 3	4
p 4	4