

The Record class is used to create the json files. The Record class has two attributes, a String name and a JSONArrayBuilder states. Record has five methods, getName, setName, add, getBuilder, and write. getName and setName are simple getters and setters for the name attribute. add converts a GameState to a JsonObject and then adds it to states. getBuilder returns the states attribute. Finally, write builds the array and writes it to name.json in the records folder. If name.json already exists it is replaced. When the user chooses to record a game, every time the app's redraw function is called the current GameState is added to the Record. Once the user either loses, quits, or wins, the write method is called.

Replay is used to read the list of GameStates from a .json file. It has one attribute, an ArrayList of GameStates called states. Replay only has two methods. the first is read which takes a file as an input. The Record constructor calls this method immediately after creation. If the file exists, a JSONArray is read and split into JsonObjects which then are converted to GameStates and added to states. The second method is getStates, which simply returns the states attribute.

When the user chooses to replay a file, they will be shown a window which allows them to choose a file. When the file is chosen a new Replay object is created as long the file can be parsed. The window then displays one GameState per second until it all frames have been played. If the user presses space to pause the replay they can move frame by frame, forwards or backwards, using the left and right arrow keys. They can then hit either space or escape to unpaue the replay.