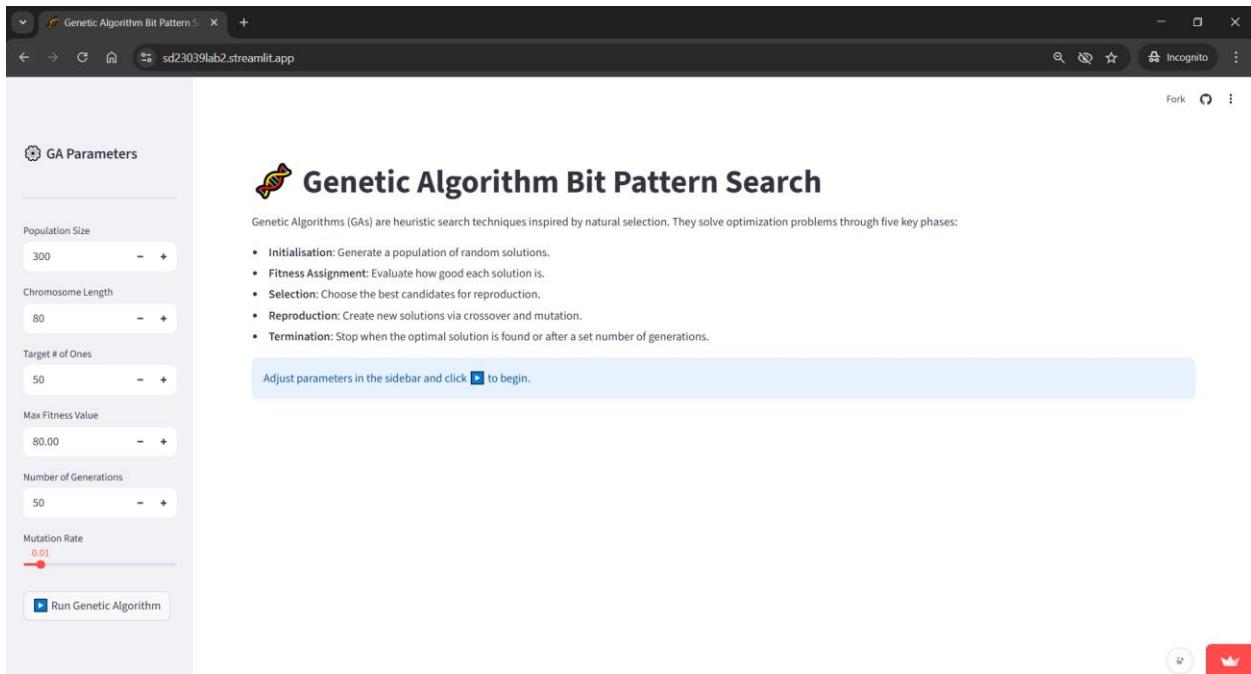


Instructions & Screenshots

1. Figure below shows a screenshot of the app immediately after it loads. The interface includes: A sidebar for configuring Genetic Algorithm parameters such as population size, chromosome length, target of ones, maximum fitness value, number of generations, and mutation rate. There is also a main panel that introduces Genetic Algorithms and outlines the five evolutionary phases: Initialisation, Fitness Assignment, Selection, Reproduction, Termination to allow users to understand the concept before running the simulation. This is followed by a message: Adjust parameters in the sidebar and click run to begin. So, users may explore by using different parameters and see the results.



2. Figures below show the successful execution of the Genetic Algorithm. It displays the animation of balloons if the target condition is met, alongside messages: Algorithm Complete! and Goal Achieved! Found an individual with 50 ones to indicate successful execution. Users can also see the target ones number, fitness score of the best individual, the number of ones in the best individual, the number of generations taken to converge, as well as the final bit pattern found by the algorithm. This confirms that the algorithm has correctly evolved a solution matching the predefined criteria.

