# **Genetic Algorithms**

# **Tutorial based application on the subject of Genetic Algorithms**

## **Motivation & Aims**

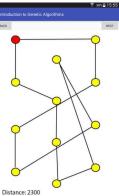
- This application's aim is to be a successful tutorial, teaching the user on all aspects of Genetic algorithm's in the field of Artificial Intelligence
- Incorporates various educational methodologies to ensure maximum learning potential is achieved
- Includes topics for each part of the genetic algorithm
- Follows structured design
- No current similar application on Android marketplace

### **Functions & Purpose**

- Includes text, animations, worked examples and questions and answers for each topic
- Uses an actual Genetic Algorithm to show worked example animations on the Travelling salesman problem
- Main purpose is to effectively teach the user of the application about Genetic Algorithms, from beginning to end, starting at a basic knowledge level, so is available for anybody to use
- A mobile tutorial



#### **Text On Each Topic**

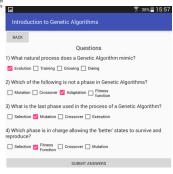


**Animated Examples** 



This shows the best route found, in the order of the cities that the salesman should visit. You can see that the initial distance that the salesman would have had to travwas 140, but now after applying the Genetic algorithm to the problem, the distance i only 105. This is 35 shorter for the salesman to travel.

#### **Worked Real Examples**



Questions & Detailed Answers on each topic

