JAVA PROJECT REPORT

TITLE: SIMULATION OF FRUITMARKET

PROBLEM DEFINITION: Write a simulation program for the fruit market. The farmer will be able to produce different types of fruits(e.g. apple, orange ,grape, and watermelon), and put them in the market to sell. The market has limited capacity and the farmers have to stand in a queue if the capacity is exceeded to sell their fruits. Consumers can come to the market any time and purchase their desired fruits; and if the fruits they want to buy runs out, they are willing to wait until the supply of that kind is ready.

GROUP MEMBERS:

NAME:	Roll No:
John Britto Edinburgh	40
Rohit Nahata	41
Sagar Prabhu	46
Rohan Sheth	53

MOTIVATION/OBJECTIVES:

 Our main objectives are:

- to successfully implement Java concepts and GUI features of java.
- to create a simulation of a basic fruitmarket using Swing and awt components in java.
- To design a simple, user-friendly interface for fruitmarket application where a user can either sell his product or buy or wait as per the stock availability.

INTRODUCTION:

Our aim is to create a simulation of a fruitmarket which will allow a user to either enter the market as a farmer or as a consumer. As a farmer, a user can only sell his product at a selling price fixed by the fruitmarket. Market has a upper limit for each fruit stock. If the limit is reached, the user is notified and is made to wait using the concept of Threading until some stock is bought by any consumer. As a consumer, a user can only buy from the market out of the given choices of the available fruits in the markets along with their price. If the desired fruit is not currently available , the user is notified and is made to wait until the stock becomes available again. While the user waits, the application lets another user to login to the market either as a farmer or a consumer. As per the prices and the amount of fruits being sold or purchased, the stock is always updated until the application ends its run. Finally, when a user is done buying or selling, he final price of the entire transaction is displayed.

SOFTWARE SPECIFICATION

1. <u>Java SE Development kit 8</u> : Includes a complete JRE(Java Runtime Environment) plus tools for developing , debugging, and monitoring java applications.
2. <u>NetBeans IDE</u>: NetBeans is a community for individuals and organisations who wish to collaborate on commercially-friendly open source software. Its projects are focused on building an open development platform comprised of extensible frameworks, tools and runtimes for building, deploying and managing software across the lifecycle.

FUTURE SCOPE:

This application is a basic approach to the real world FruitMarket. It can be improved in Java for a practical use and build upon to actually implement several complex situations which arise and find solutions to such problems.