

AHMEDABAD UNIVERSITY

Subject : DSA :- FINAL PROJECT SUBMISSION

REPORT : SHOPPING MANAGEMENT : THE EPIC MALL : DISCOVER THE DIFFERENCE

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PROBLEM STATEMENT/PROJECT DESCRIPTION:

- *Shopping for various things in the section of garments.
- *We have basically three categories : 1.) Mens (2.)Female (3.) Kids. Now, they again are categorised on the basis of various different categories.
- *For that searching for an item and display related items is necessary.

DATA STRUCTURES USED:

- 1.Queue(wishlist making)
- 2.Binary search tree(searching)
- 3.Array(storing)

ALGORITHM: Ask user for category (clothes).

- 2.) Go to appropriate subcategory (clothes).
- 3.) Ask for subcategory of clothes (men, women and kids).
- 4.) Ask for the choice on whose basis the user will buy the item.
- 5.)Now the search will be applied on sub tree in an alphabetical sequence.
- 6.) For example if the user enters mens and if he/she wants to search on the basis of brand then in the search of brands, all the brands will be the children of parent named brand and the search will occur in an alphabetical order.
- 7.)Same search method will occur for sub tree of clothes of other sections.
- 8.)Then after getting the needed item we will allow user to make his/her wish list using stack and queue in which he/she will keep his multiple items among which he is confused still and will buy one among them.
- 9.) Then when user has decided the items he/she wanted to buy, then user will be

asked for if he/she is an old user or not. If he/she is an old user then we will take the data from our records which we have asked earlier. If not then we will ask for the data like name, address, and contact number.

10.) Then for payment we will again give options like online payment or cash on delivery and finally the product will be bought.

LIST OF OPERATIONS:

In our project, basically two data structure is being used,

1. Binary search tree: for searching of data.

2. Queue: For making up of wish list.

Also, in the project we have made use of file management and handling which as a programmer we only can access.

LIST OF PROGRAMS:

1.) Conversion of data to WORD(CODE). (FOR CONVERTING STRING TO FLOAT)(FILE NAME: Conversion.java, Node.java, tree.java)

2.) Conversion of code to data again. (AGAIN CONVERTING FLOAT TO STRING)

3.) Men(categories). (FILE NAME : Men.java)

4.) Women(categories). (FILE NAME : Women.java)

5.) Kids(boys & girls categories). (FILE NAME : Kid_Boy.java && Kid_Girl.java)

6.) Operations in tree for searching.(FOR SEARCHING OF DATA IN THE RELEVANT DATA FILE STORED)(FILE NAME : Tree.java).

References:

<http://projectsgeek.com/2012/04/online-shopping-java-project.html>

<https://www.cs.cmu.edu/~adamchik/15-121/lectures/Trees/code/BST.java>