**Data Structures and Algorithm**

**CS - 102**

**Project Proposal**

**Grocery Provider**

**Submitted By:** **April 18, 2020**

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* 1. **Project Description:**

The project is mainly about how can we ease people by delivering normal easily available goods which can be obtained from any supermarket to their homes. It can be achieved by making an app. By downloading, the users will be added on the platform by signing in. There is a list of service providers. Whenever an order is placed, the user type in his/her location. Riders, who are nearest, can accept the request, buy the requested items from nearest mart. On delivering the things, the user and rider can give the approval and user can hand money to the rider.

* 1. **Project Outcome:**

The above proposed system is an application of graphs. It creates a whole network and keeps track of procedure. Data can be stored in different structures and mainly lists and dictionaries are used. Plus, this application is also useful according to present situation. It’s safer and the expense is approximately same as buying by themselves.

* 1. **Procedure:** The user will sign up by the name, phone number and the address. A safety code will be sent to the number provided by the user, as the user enters the safety code into the app the app lets in the user sign in. When the user places an order it is added into a queue. The rider who is nearest to the location accepts the order and a message is sent to the number provided to the user about the name of the rider, the things ordered, total bill and total time it will take for the biker to deliver the order. We can make policies for the unwanted happenings that can take place for example if the rider did not deliver into the given time frame or some of the items went missing from the list of items ordered. When the order is delivered the user enters the money given into his mobile and the rider entering the amount received by him in his mobile. A credit solution can be introduced by using a built-in wallet which will be used by the user and may be linked to easy paisa which tops up the amount or could be linked to various bank accounts, So that in the given situation there is less or no transfer of germs through the exchange of money. We can also direct the riders the safety of delivering the items such as he might sterilize the shopper in which he delivers by spraying solution of Dettol + water.
  2. **Libraries / Resources:**

Apache, asyncoro etc.

Queues, lists, graph.