## **Smart Shopping Cart App**

Hamdan, Azad (School: Shaimaa Girls Secondary School) Smeeq, Dania (School: Shaimaa Girls Secondary School)

Patients specially who suffer from diabetic or Celiac allergy suffer and consume much time when choosing the products suitable for their diet during shopping . A survey was made to know the percentage of people who suffer from these diseases and the collected data have shown that the celiac patients are equivalent to 1% and diabetics are 45% . After that a questionnaire, aimed to know opinions of customers about the time they spend reading about the contents of the product, was designed electronically and distributed online. Based on the results, the "The Smart Shopping Cart App" was designed using Mobile App "Appinventor" and Bluetooth piece has been used to connect the shopping cart with "Arduino MEGA" . The Application is used to alert the consumer of the content of the product through (RGB) led and sound from the App. After designing the application , it was tested several times and various modifications were made to suit the recommendations of the people who tried it. "The Smart Shopping" Cart App was implemented on a celiac patient who expressed her satisfaction and comfort for the app .