## Intelligent Promotion System (IPS).

Ad.ai, is starting a new offering to its Promotion Display Systems installed in Retail stores, Vending Machine, Metro, Airports and Restaurants. Many companies try to find their way in the market directly to the ideal consumer. They use computer programs to recommend specific products to specific people. If you ever buy books online, you've seen this happen. Even as you shop for one book, Amazon will suggest others you might like. Ad.ai. want to take this kind of tailored marketing to a new level, our system takes one look at you and offers what you supposedly want. Ad.ai, Inc wants to make its Promotion Display Systems intelligent by showing promotions customised for the buyer. A promotion selects a single product to feature by displaying its ad signage and presents it to the consumer with a discounted price, e.g. it is priced "Just-for-you".

A business user uses ad.ai web portal to create new promotions (images, videos) which are stored in a repository. These are pushed as a package down to the Display system. Each Promotion Display System maintains a local copy of the ads (images, videos). It should be like being able to give the Display System a new paint job with the click of a button.

The system will support three types of promotions.

## 1. Demography based Promotion

When a Display System identifies a visitor in proximity, it takes a photo that it will use to determine demographics such as age, gender, and possibly features like whether the consumer is smiling or wearing sunglasses. The demographics data are then used to decide what to promote on its display. The Display System then displays the recommended product at the recommended price. In addition to driving the recommendation, these demographics are stored durably for later analysis.

## 2. Loyalty based Promotion

Use customer interaction history to acquire a precise profile for each customer, allowing devices to deliver high levels of personalization in customer engagement. Regular customers can be identified with facial identification and the Display System can showcase customized offers for these loyal customers.

## 3. Location context based Promotion

Recommendations also factor location context, including purchase trends and current temperature and weather conditions.

The company realizes that their Display Systems and the cloud are a perfect match and are looking for ways to build their solution using a Cloud Platform. Design a solution and prepare to present the solution to the target customer audience in a 10-minute chalk-talk format.