1 You are required to design and implement a software service and a corresponding mobile
2 app that can be used to manage a user's personal shopping. Users typically sign up for the
3 service using their email address and can then download the app on their mobile phone.
4
5 The backend service monitors the prices of goods from multiple online sources. A user
6 can choose to see information from all the sources, or select a subset. Whenever the
7 service adds new sources, users should get a notification about it in their application, and
8 they (the users) have the option to see information from the new sources. Information is
9 not just about price, it can also be about whether a particular source has a particular good
10 in their inventory. This latter one is true particularly for sources who do not publish their
11 price, but instead pursue a strategy where users can negotiate a price.
12
13 A user can choose to monitor the price of particular goods. This can be done in one of
14 three ways: the first one being a basic notification about the price of the goods in the
15 different sources (for sources that publish price), the second one being a notification about
16 the availability of a good in different sources (for all types of sources) and the third one
27 allows the user to set a threshold price and the user is notified if the price of a good in a
18 particular source falls below that price. This last one is also applicable for sources that
19 publish their price.