

Draw a use case diagram that employs the “includes”, “generalization”, and “extends” relationships to model the described use cases (at least six brief use cases).

1. Bakery domain is adopting new technology: The “BAKER SHAKER CLOUD 007” is a production and vending machine, which is meant to connect to the cloud. It allows customers to order baked goods via their mobile phones. During the ordering process the customer has to authenticate himself. Once the order is complete, the system informs the credit card company to charge the customer’s credit card. Later on, the system autonomously starts the production of the baked goods, so that they are ready at the time specified in the order. For the production of “kiwi cheesecake” there is a special backing process that applies steam at a rather low temperature for a long time. The customer can retrieve the baked goods from the delivery interface of the machine, again accessing the machine via their mobile phone. Again, the customer needs to authenticate for this. The “BAKER SHAKER CLOUD 007” is placed in supervised locations. If it is out of ingredients a maintainer is called.
2. You are building a mobile application: “REAL SOLUTION ESTATE” to help homebuyers explore neighborhoods in which they are interested in purchasing a home. Through interviews and focus groups with real estate agents and recent homebuyers, you have identified a number of use cases. One is “explore school”, and another is “explore coffee shop” near potential buying property. In each case:
 - A. the transaction involves retrieving data from a custom real estate information system
 - B. the selection of the location of interest can happen by pointing at the building using the mobile device, or by touching the item on a map on the mobile device
 - C. there are a few different types of schools (primary school, secondary school, and university/college). Each has differences in the way information is presented and differences in how the user might interact with that data. By contrast, all coffee shops will contain similar information to each other.
 - D. an optional help screen should describe the kind of information that is retrieved for any item of interest.