

**ME470 - Systems Engineering**  
Customer Requirements Assignment  
Due (Monday, September 21)

**The objective of this assignment is to give students practice in the following skills:**

- 1. Developing an interview guide,**
- 2. Conducting an interview with customers,**
- 3. Translating customer statements into need statements.**

Form a team of 3-4 students and select a product. You may choose your own product if you wish. Your product must have at least 3 identifiable market segments. Some possible products to stimulate thought are listed below:

- a) Flashlight (home owner, mechanic, search and rescue, camping enthusiast)
- b) Backpack (college student, high school student, young professional)
- c) Lawn mower (home owner, yard maintenance professional, farmer, golf course manager)
- d) Cell phone (teenager, basic phones, business phone)
- e) Fishing pole (fly-fishing, bass fishing, deep sea)
- f) Golf club (pro club, intermediate clubs, beginner clubs)
- g) Binoculars (birding, spectator sports, military, astronomical)
- h) Mountain bikes (downhill, free ride, cross country, garage, police)
- i) Water softeners (individual homeowner, industrial drinking, industrial chemical)
- j) Skis (Alpine skis, cross-country skis, twin-tip skis)
- k) Calculators (scientists, home owners, financial, 4-function, graphing, FE exam, specialty)

Once you have identified a product that your team finds interesting, follow the steps listed below:

1. Identify the appropriate market segments and select the segment that your team intends to interview.
2. List 2-5 of the most important product criteria you expect to hear from the customer in your selected market segment and turn it in (hand written is fine) to your instructor before leaving class.
3. Prepare an interview guide for those customers.
4. Find at least 3 customers from your selected market segment.
5. Conduct an interview with each of the customers. When you interview the customer, use the roles discussed in class (Interviewer, Scribe, and Observer). Rotate the roles so that everyone gets a chance to assume each role.
6. Write up your interview notes. Be sure to indicate the name of the customer interviewed and the roles that each team member assumed.
7. Using your interview notes, complete a customer needs list.
8. Reflect on the process. What did you learn? How well did you predict what the customer wanted? Did anything happen that was unexpected? Do there seem to be needs that the customers did not address? Are there any gaps in data?
9. As a group, turn in your Interview Guide, Interview Notes, Customer Needs List, and your Reflections.