**Cellphone Inventory**

**Scenario:** A customer goes into a mobile phone store seeking information regarding the store’s cell phone inventory. This store has several brands and models of cellphones and uses an application for searching their cell phone offerings.

**Exercise:** Develop an application that a store clerk can use to search their cell phone offerings based on a handful of parameters. The application will need to do the following:

1. Initially populate the inventory, a data file of the inventory is provided
   1. Each line of cellphone data has the following attributes:
      1. String brand
      2. String model
      3. String storage
      4. String color
      5. Double price
2. To simulate the back and forth between the customer and store clerk
   1. The application needs to provide a means for inputting parameter values
   2. With that set of parameter values, the application will perform a search of the cellphone inventory
   3. It will output the results of the search by providing an **ordered list** of the cellphone inventory meeting the search criteria
3. Examples of the aforementioned
   1. Parameter list: Brand => Google Price => < $900
   2. Result: List the Google phones priced less than $900 in ascending price order.

Parameter list: Storage => 128 GB Color => Black, Gray

* 1. Result set: List of all cellphones in ascending order by Brand & Color

1. Using HTML and CSS, mockup an HTML page depicting the above functionality.
   1. The data for this page may be hard coded as we’re just interested in the UI design and functionality.
   2. Think about other pages and navigation that may be useful for this app.
2. The application needs to additionally perform:
   1. parameter input validation
   2. appropriate exception handling
3. Upload your project content to [GitHub](file:///C:\Users\ts805951\Documents\Assignment\github.com) and provide a link for accessing it.

**Evaluation:** We are interested in your thought process and how you go about problem solving.  Be prepared to discuss what you did, how you did it, and why it was done that way.  Below are a handful of the type of questions you may be asked regarding your work:

* Why were the data structure(s) used chosen?
* Can you think of other means for coding the search?
* How would you approach this type of task working with a team of software engineers?
* Bugs happen!  How might you code to facilitate debugging when bugs occur in production and testing?