Brainstorm Review

The first part of the brainstorm is designed to ***increase the number of ideas***, and the second part is to ***reduce the list of ideas to a workable size***.

<u>First Part of the Brainstorm</u>:

1. **Do not allow criticism or debate:**
   As ideas are generated, the recorder writes down every one of them, like an automaton. Why? This ensures that ideas are not lost, people do not censor themselves, and the meeting doesn't go off on tangents with participants arguing over just how good or foolish an idea really is. Most of the world's great ideas seemed "foolish" when they were first enunciated.

2. **Let your imagination soar:**
   The wilder the idea the better, but only within the context of the design statement and the project description.

3. **Shoot for quantity:**
   More ideas mean more rough diamonds, and consequently, the brainstorming must be designed to produce a magnitude of ideas. Set a time limit and challenge the group to produce some ridiculously large number of ideas within that limit. Facilitators may be tempted to provoke more ideas, but instead, they should be *patient with silence*. Usually, a long silence comes just before a breakthrough idea.

4. **Mutate and combine ideas:**
   In proper brainstorm design, participants are encouraged to suggest variations on ideas already listed or to combine ideas to create still more.

<u>Second Part of the Brainstorm:</u>

1. **Voting with a threshold:**
   In threshold voting, all participants receive a quota of, say, five votes each, which they individually tally by placing a number by the idea they are voting for.

2. **Applying the criteria – Pahl & Beitz:**
   If the group has a list of criteria prepared in advance of the brainstorming, the brainstormed list can be reduced by applying the criteria to each idea and eliminating those ideas that don't meet all criteria. Often in requirements exploration, the criteria list is set by a prior brainstorming and reduction session. And, of course, the final requirements document will become a criteria list against which various design ideas will be tested.

(From Chapter 10: *Exploring Requirements: Quality Before Design* by Donald C. Gause and Gerald M. Weinberg- The pdf of Chapter 10 is posted on Bb.)