1. 4 Technique for usability design:

* Usefulness: address the real needs of users.
* Consistency: within an application (or a suite of applications), make sure that actions, terminology, and commands are used consistently.
* Simplicity: eiminate any unnecessary or irrelevant elements.
* Communication: Provide appropriate, clear, and timely feedback to the user so that he sees the results of his actions and knows what is going on with the system.
* Error Prevention and Handling: prevent the user from making serious errors whenever possible, and ask for user confirmation before allowing a potentially destructive action.

1. Basic rules for Erononomy:
   * Consistency: Users should not have to wonder whether different words, situations, or actions mean the same thing (keep nature characteristic)
     + Ex: user find menu, it usually on top the page. The form have description above and filling space below
   * information feedback: give user the response from their action
     + inform to assure user: long process -> use clock (copy something in OS), button pushed -> change color
     + inform to avoid mistake: show error, warning
     + inform to helo memorize: type documents -> need a place to show it
   * concision: minimize the need to exchange
     + macro command, short-cut -> quick way to do the task
     + default values in form
   * error management:
     + avoid error: inform, ask user for deleteion
     + warning error: give the reason
     + correct error: undo function, indications
2. Licker scale: satisfaction measures
   * 1-> 5: unsatisfied -> very satisfied
3. A/B test: compare 2 version of the page and determine which one is better by showing the 2 variance of the web page randomly to user and use statistically analysis to see which is better. Tool: PLANOUT



1. T test: statistically test, we test whether the means of two groups are statistically different from each other
   1. Example: list of time necessary to finish tasks from system A or system B. Check they are reliably different.
   2. Example: we have sample of number of errors of each user receives. We want to check whether we can achieve less than 15 errors for any user with confidence 90%
2. Web app: search engine, give lists of information about topic you are interested/ query on different field.

* Main innovation:
  + feature search which propose some recommendation to user profile.
  + Using different scale of image to show image in grid: innovative and delightful
  + Feedback button always on the right of website: convenient and supportive
* Use some method that we mention above (A/B test, user feedback)