Experiment 3

PART A

A.1 Aim

To implement heuristic principles on the designed webpages.

A.2 Prerequisite

Understanding of basic knowledge of designing rules and implementation of website designing.

A.3 Outcome

After experimentation, students will be able:

- To understand the importance of designing rules for good interfaces
- To understand the concepts of heuristic principles for interaction process

A.4 Theory

A heuristic principle is usability inspection methods for computer software that helps to identify usability problems in the user interface (UI) design. It specifically involves evaluators examining the interface and judging its compliance with recognized usability principles.

1) **Visibility of system status**

The system should always keep users informed about current state and actions through appropriate visual cues and feedback within reasonable time.

2) **Match between system and the real world**

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms.

iBooks iPad application using the metaphor of wooden book shelf.

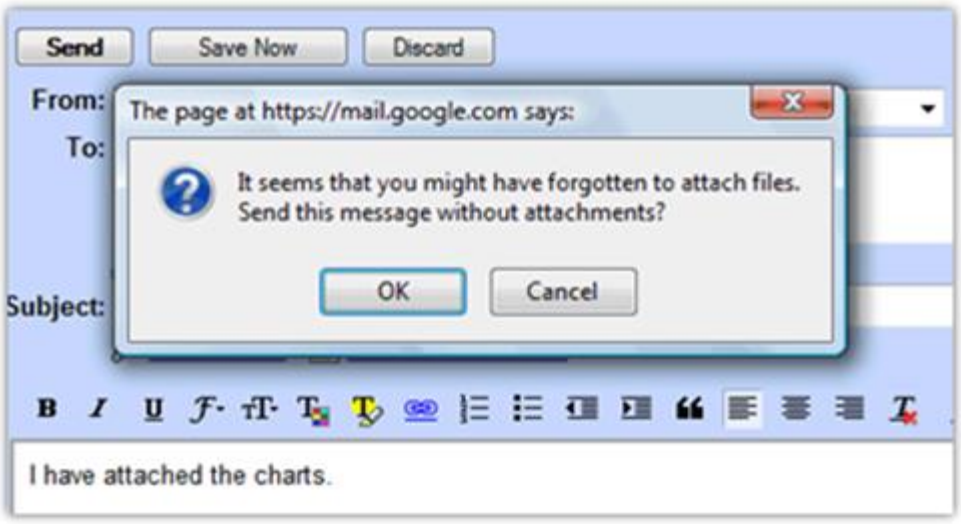
3. User control and freedom

Users often choose system functions by mistake and will need a clearly marked “emergency exit” to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

History in Photoshop helps user in recovering previous steps.

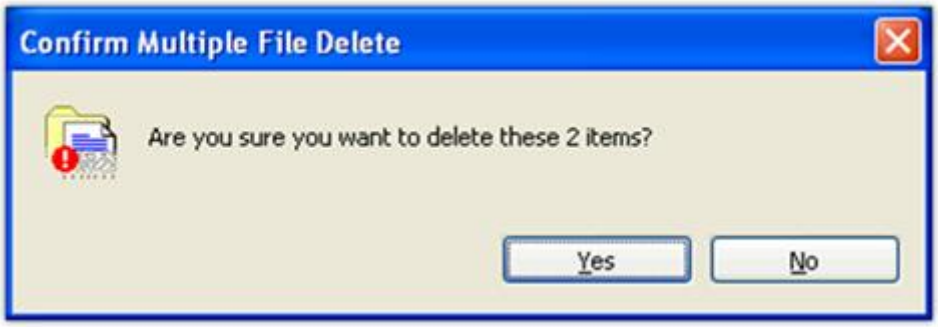
4. Error prevention

Even better than good error messages are a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.



5. Help users recognize, diagnose, and recover from errors

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.



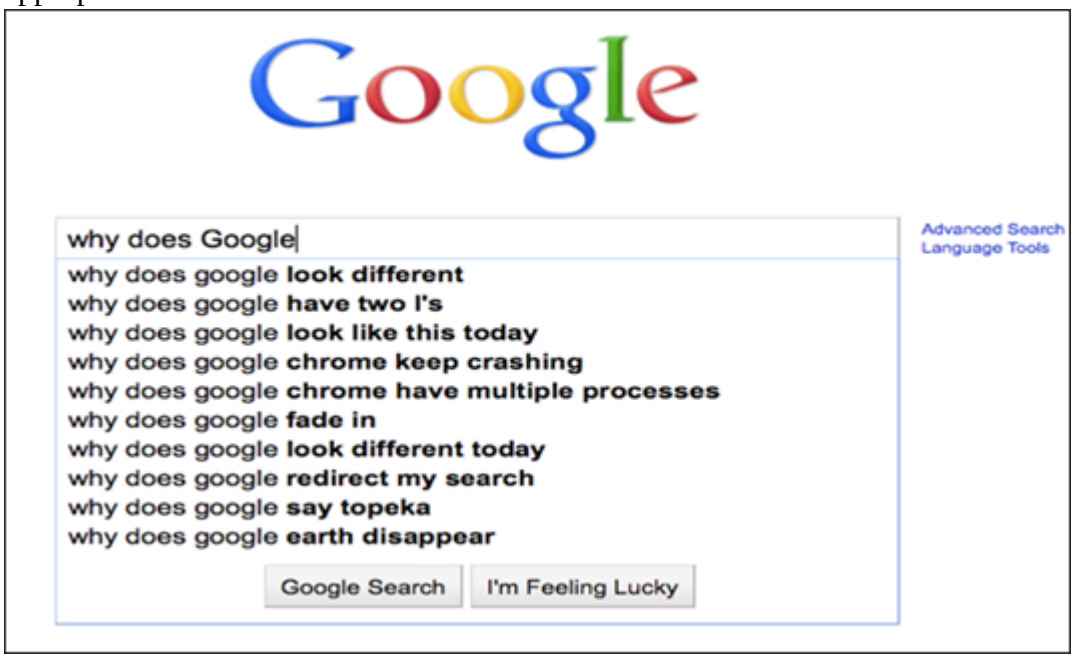
6. Consistency and standards

Users should not have to wonder whether different words, situations, or actions mean the same thing.

Inconsistent Icons.

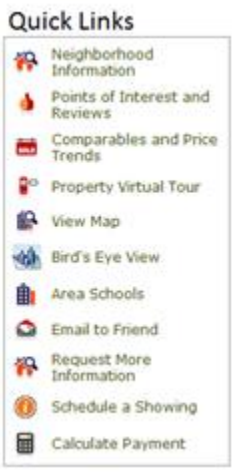
7. Recognition rather than recall

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

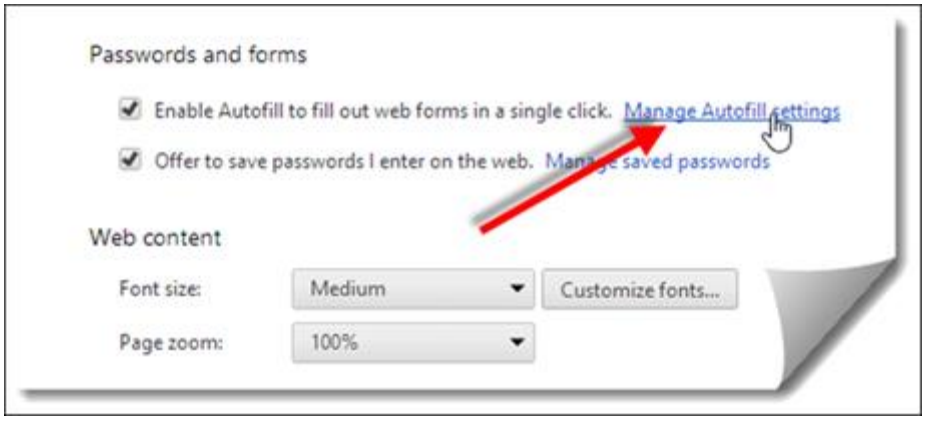


8. Flexibility and efficiency of use

Accelerators --unseen by the novice user --may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

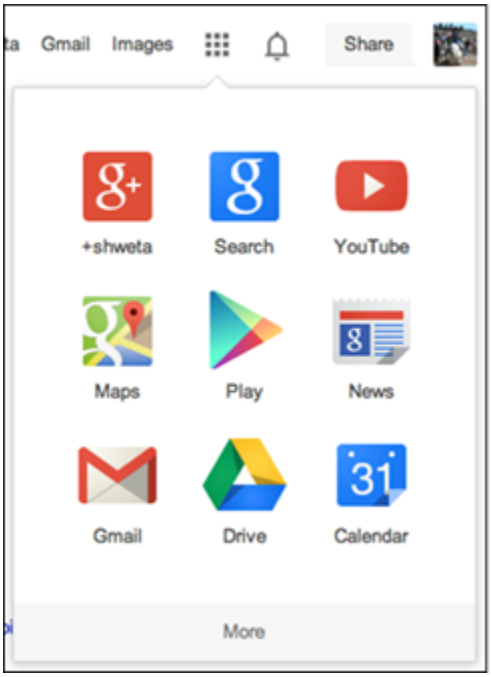


Auto-fills



9. Aesthetic and minimalist design

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

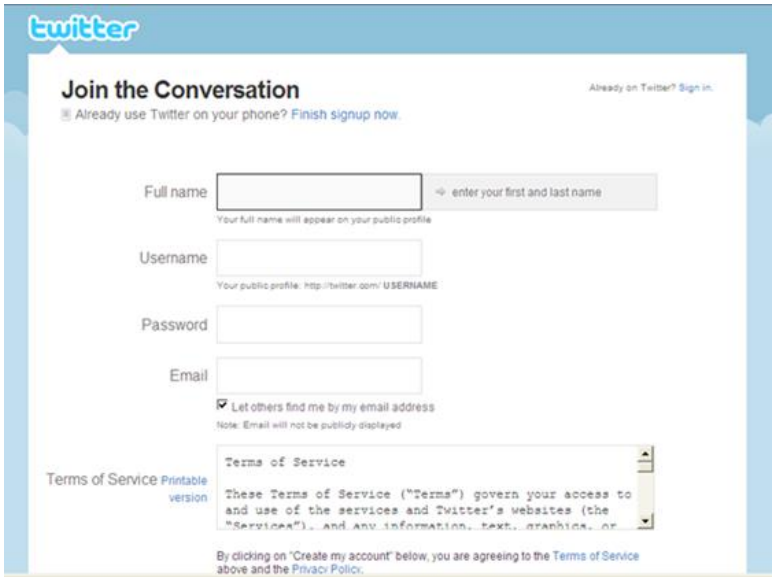


The icons belong to one family.

The design of icons is minimalistic with simple and creative graphics.

10. Help and Documentation

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.



Contextual help is the best way to help!
Also, telling users about the consequences of their actions is also very helpful.

A.5 Tasks to perform

1. Visit the following links to understand real analysis of heuristic principles

https://uxdesign.cc/heuristic-evaluation-of-bigbasket-application-4a69f43be47d

https://medium.com/@rtmdeb/heuristic-evaluation-ux-case-study-grofers-com-website-a50e2d475393

2. Consider your previous project (website/app) and mark ✓ and X symbols in the following heuristic principles table wherever is applicable in designed project

Heuristic Principles	**Mark ✓ and X**	**Reason where Heuristic principles is applicable**
1) Visibility of system status		
2) Match between system and the real world		
3) User control and freedom		
4) Consistency and standards		
5) Error prevention		
6) Recognition rather than recall		

7) Flexibility and efficiency of use		
8) Aesthetic and minimalist design		
9) Help users recognize, diagnose, and recover from errors		
10) Help and documentation		

(PART - B)

(TO BE COMPLETED BY STUDENTS)

(Students must submit the soft copy as per following segments within two hours of the practical)

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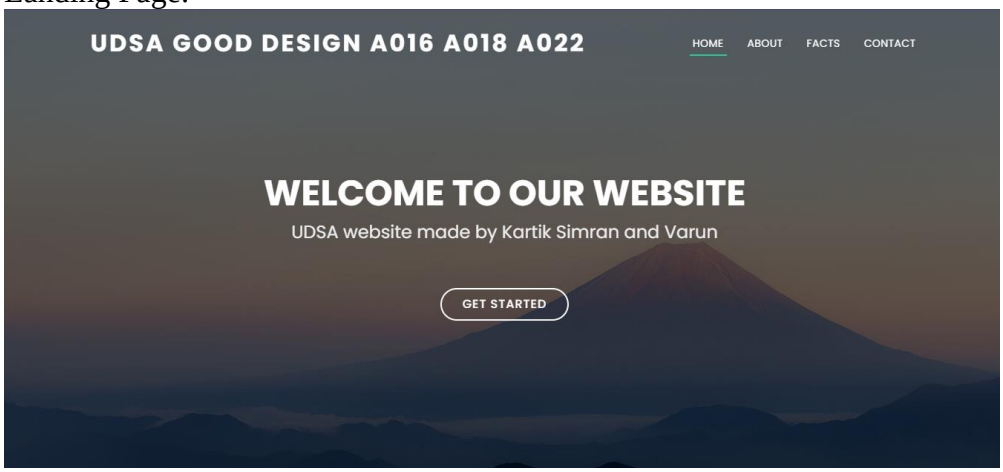
Sem/Year: SEM 7	Batch: 1
Date of Experiment: 26/08/2022	Date of Submission: 26/08/2022
Grade --	

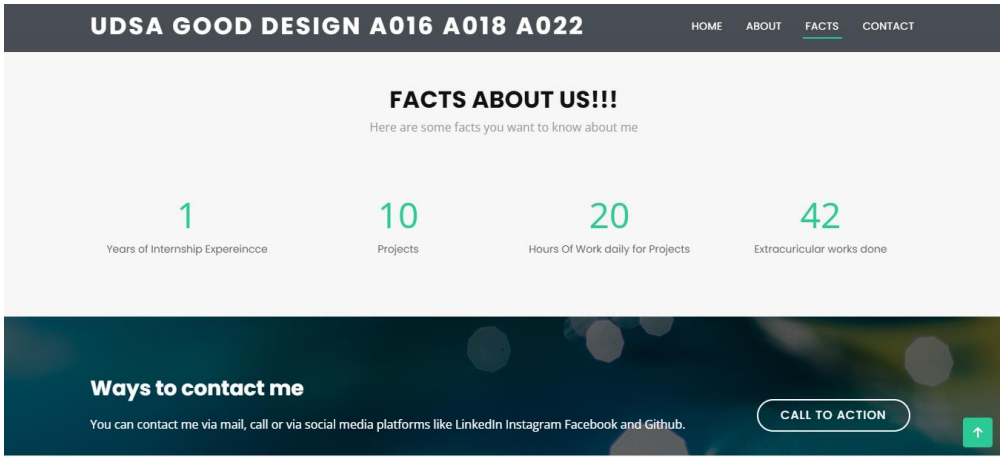
B.1: Output of performed tasks

1: Paste the screen shots or provide project link of developed webpages/app.
2: Paste the table of task 2 and give the proper reason wherever heuristic principles are applicable or not. Students are supposed to paste the screenshot wherever is applicable.

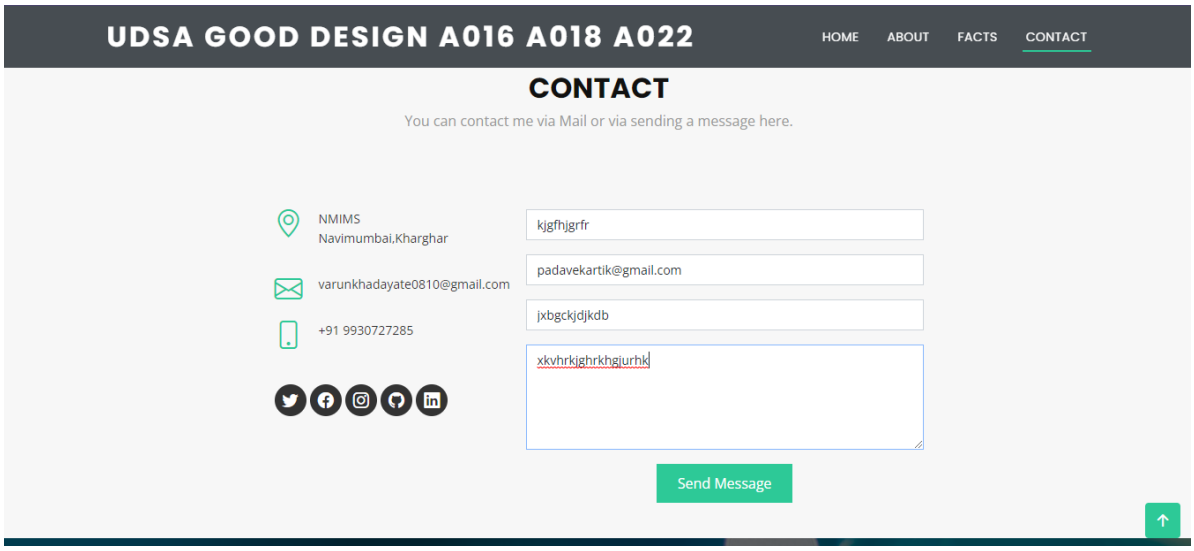
Landing Page:



Facts Section:



Contact Section:



Heuristic Principles	**Mark ✓ and X**	**Reason where Heuristic principles is applicable**
1) Visibility of system status	✓	The navigation of the website is clear and understandable, it also provides an arrow at bottom right corner which helps users to go to landing page. The design also keeps the user informed about the actions being performed.
2) Match between system and the real world	✓	The website uses real-world mapping examples for contact page which includes contact details email address and social connect options.
3) User control and freedom	✓	In case wrong credentials are entered by user in Contact form, it shows an error pop up message while submitting the form. And also prompts the user to correct the error.
4) Consistency and standards	✓	The website maintains the consistency by putting the navbar at the top which tells the user where they are currently at. It's also convenient for the user

		and does not make them think much.
5) Error prevention	✓	If the contact form details are left empty, the user is not able to submit and therefore the system prompts the user to enter all the fields before submitting.
6) Recognition rather than recall	X	Recent search options or search history is not available for the website.
7) Flexibility and efficiency of use	✓	The novice users don't have to remember anything while using as the navigation bar contains all upfront and follows while scrolling the page.
8) Aesthetic and minimalist design	✓	The look and feel of the website help users to quickly navigate from one section to another It also follows basic standards of visual design.
9) Help users recognize, diagnose, and recover from errors	✓	In the contact form when the user has entered incorrect credentials it shows an error pop up while submitting the form. And also prompts the user to correct the error.
10) Help and documentation	✓	The website provides help/ support to the users and prompts the user to enter correct credentials in case errors in email, contact, address

B.2: Observations and Learnings:

The 10 heuristic principles helped in understanding how usability could be improved by applying these principles in our design and how it will impact overall user experience. Also, functionality related to recognition rather than recall can be added to make website more user friendly.

B.3: Conclusion:

By analysing the website based on the 10 heuristic principles we identified that 9 out 10 principles were applicable to the website. However, including recognition rather than recall

could reduce memory load of user by making previous search history or suggestions available to provide users with good experience.