EXPERIMENT 6

Aim: To understand how to design appropriate icons.

Theory:

Icon is a visual symbol that has symbolic meaning, conveys information and is easy to recognize and remember. It can be divided into many types. According to the platform it can be divided into computer icon, mobile phone icon, website icon, game icon. In the same platform it can be divided into the program icon, toolbar icon and button icon; on the same operating system it can be divided into system icon and application icon. Icon is an important part of the graphical interface. It is "a kind of the language used by interface designers that particular application users can understand. It eliminates the communication barriers between the user and the computer. The icon design requires simplicity, nature, friendliness, convenience effectively.

and uniformity. The design concept of "human first" should be reflected. And a perfectly designed icon [4], allows users to prefer reading [5], and it will be identified and remembered .

A good icon often reflects the certain information of an interface or a producer.

Especially for a commercial interface, you can basically understand the type or content of the web site. In a network link page full of all kinds of icons, it will be highlighted. When an audience wants to find a site with specific content in a lot of websites, an icon will have obviously great advantage that one can easily understand the type and the content of the web site it represents.

History of Pepsi and their Logo Success

The first Pepsi-Cola was created by Caleb D. Bradham (1866–1934), a pharmacist in New Bern, North Carolina. Hoping to duplicate the recent success of Coca-Cola, Bradham named his sweet cola-flavoured carbonated beverage Pepsi-Cola in 1898. The drink proved so popular that in 1902 Bradham incorporated the Pepsi-Cola Company. After many years of moderate prosperity, the company fell on hard times after World War I and was reorganized and reincorporated on several occasions in the 1920s.

In 1931 the company's trademark and assets were picked up by Charles G. Guth (1876–1948), founder of the modern Pepsi-Cola. He established a new Pepsi-Cola Company, had a chemist formulate a better drink, set up new bottling operations, and began merchandising a hugely successful 12-ounce bottle for five cents. Guth was also president of Loft, Incorporated, a candy manufacturer and soda-fountain chain (founded 1919), and in legal battles in 1936–39 he lost a controlling interest in the Pepsi-Cola Company to the new management of Loft. When in 1941 the Pepsi-Cola Company was merged into Loft, the name Loft, Inc., was changed to Pepsi-Cola Company.

Many timeless brands are timeless because they keep the logos that people know and trust. Pepsi is a brilliant exception. The history of the Pepsi logo is one of constant reimagination. Over it's 122 year history, the logo has seen 12 redesigns. And that's not even counting the smaller changes for flavor variations like Diet Pepsi and Pepsi Max.

Who designed the first Pepsi logo

In 1898, a pharmacy owner named Caleb Bradham invented and started to sell the so-called "Brad's Drink". In 1903, he patented the Pepsi Cola beverage that included two main ingredients — pepsin (digestion enzyme) and cola nuts. It was then that Bradham came up with the first logo for his delicious product. It was the word "Pepsi Cola" in a red hand-written font, with the letters P and C linked with each other.

Logo evolution

In 1905-1906, the original logo went through a series of improvements. First, the emblem got a more massive font. Then it was decided to add the word "Drink" to the composition. The resulting design served the company for several decades.

In the early 40s, CEO of Pepsi came up with the idea to put the company logo onto the bottle cap and add the blue color to the mix. The redesign pursued two goals – to stand out from Coca Cola and show support for the United States during World War II (red, white, and blue are the three colors of the US national flag). The revamped design received a warm welcome from the public and remained without changes all the way until the 70s.

In 1973, Pepsi introduced a new minimalist emblem that looked great on the Pepsi bottle label. Over the next 20 years, the company played around with hues and rearranged the elements on the logo. In 1998, to celebrate Pepsi's 100th anniversary, the logo underwent another overhaul, changing the white background for a blue one and gaining a striking 3D effect.

The Pepsi logo as we know it today is a textbook illustration of all modern design trends. A concise red and blue circle with a white curvy stripe makes you think of a happy, smiling face. Simple and up-to-the-point, the emblem fits any carrier, from mobile apps to T-shirts.

Required steps:

i) Analyse the client- the business, customers etc

ii) Study of existing icons based on characteristics of designing

- Too simple a design
- Unattractive
- Failing to market the brand

iii) Choice of screen elements to improve the logo

iv) Impressive changes overall to make the logo better

In this paper, an icon design method based on a combination of users' cognitive psychology.

Our design:

- We believe that a logo signifying our catch phrase is essential.
- Also we studied that a logo depicting the name exactly is not a good practice, hence the logo does not include any yoga element
- We believe that a logo signifying our catchphrase is essential.
- We also studied that a vintage style to a logo, adds a feeling of trust in the users.
- So we have develop the the logo for e-learning platform to connect books with Computer.

Conclusion:

The icon (re)designed tries to serve the purpose better and is much clearer, attractive and easy to remember. Thus we have studied the do's and don'ts in icon designing using the above case study**.**

Reference:
https://www.researchgate.net/publication/312564488_An_Icon_Design_Approach_Based_on_Symbolic_and_Users'_Cognitive_Psychology

Experiment No 8

Aim: To implement online book store system

Theory:

Today it is becoming very difficult to maintain records manually. Software system easily does the job of maintaining daily records as well as the transaction according to the user requirements. Only basic knowledge of computers is required for operations. The main objective of the project is to create an online book store that allows users to search and purchase book online based on title, author and subject. The proposed system provides lots of facility to the user to store information of the books and it provide information in quick time in a systematic manner. The processing time on the data is very fast. All the information of books changes is given to the user and also the reports are also generated according to requirement of the user. Using this website the user can purchase a book online rather than of going out to a book store and wasting time.

Using online book store project the user can purchase books online instead of going out to a book store. The purpose of the project is to make a full functional online book store system that allow its users to buy book via internet. The selected books will be displayed in tabular form and then user can pick and order one or more books online through cash on delivery option. The online book store project provides customers with online shopping facility through a web browser. The objective of the project is to develop a basic website where a consumer is provided with a shopping cart application and also to know about the technologies used to develop such an application. All the information of the books changes is given to the user and also the reports are also generated according to the requirement of the user.

This project has the following functionalities:

1) A Home page with product catalog:

This is the page where the user will be navigated after a successful login. It will display all the book categories and will have a search keyword option to search for the required book

2) Search:

A search by keyword option is provided to the user using a textbox .The keyword to be entered should be the book title.

3) Advanced Search:

Advanced search helps the user to search for a book based on Title, Author, Category All the books which match the particular search criteria .From here the user can select a book.

4) Book list:

The user can manage a shopping list which will include all the books he selected. The user can edit, delete and update his shopping list . A final shopping list summary is displayed which includes all the items the user selected.

5) Managing user accounts:

Each user should have an account to access all the functionalities of website. User can login using login page and logout using the logout page.

6) Administration:

The Administrator will be provided with special functionalities like:

• Add or delete a book category

• Add or delete a member

• Manage member orders.

• Add or delete a Credit Card type

UI/UX Elements:

The following things were kept in mind while designing the UI.

- The users should automatically get an intuition about the next process.

- Data is displayed in tabular manner so that each data is visible completely

- Theme is kept same across all the pages to avoid any confusion

- Task perform is cleared and complete

- System provides error if user performs action wrongly

Implementation:
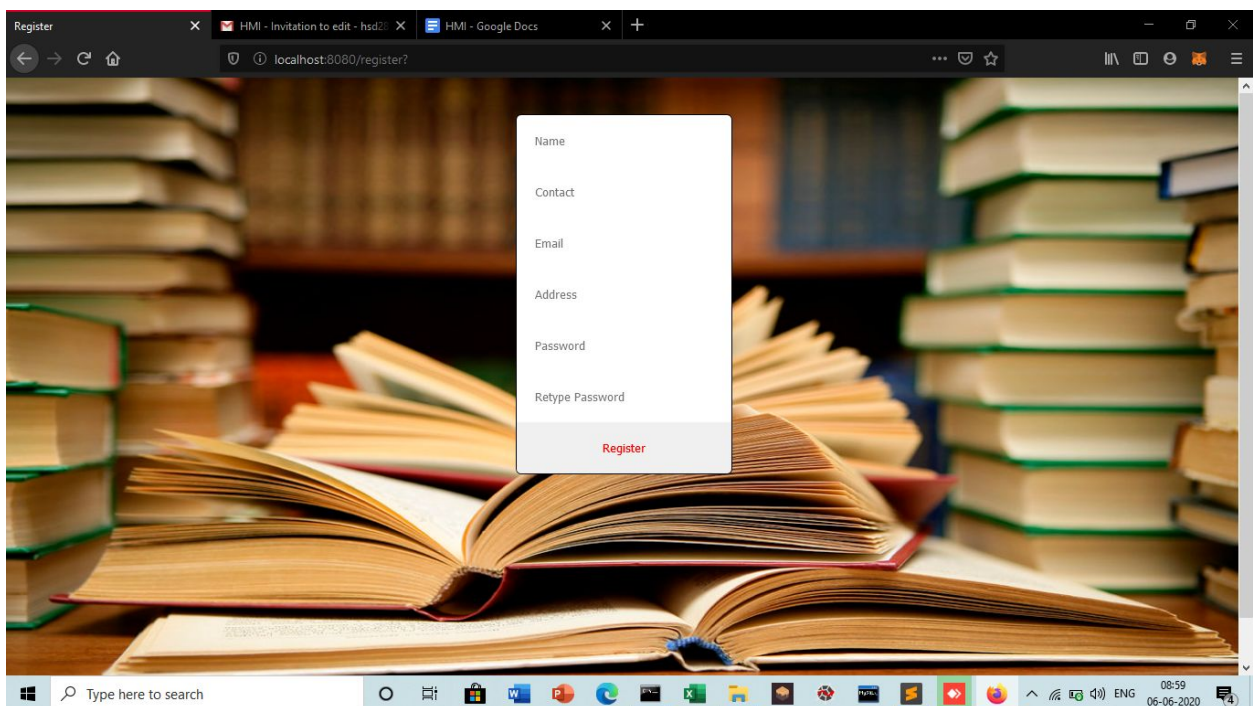
Fig 1 : Welcome page
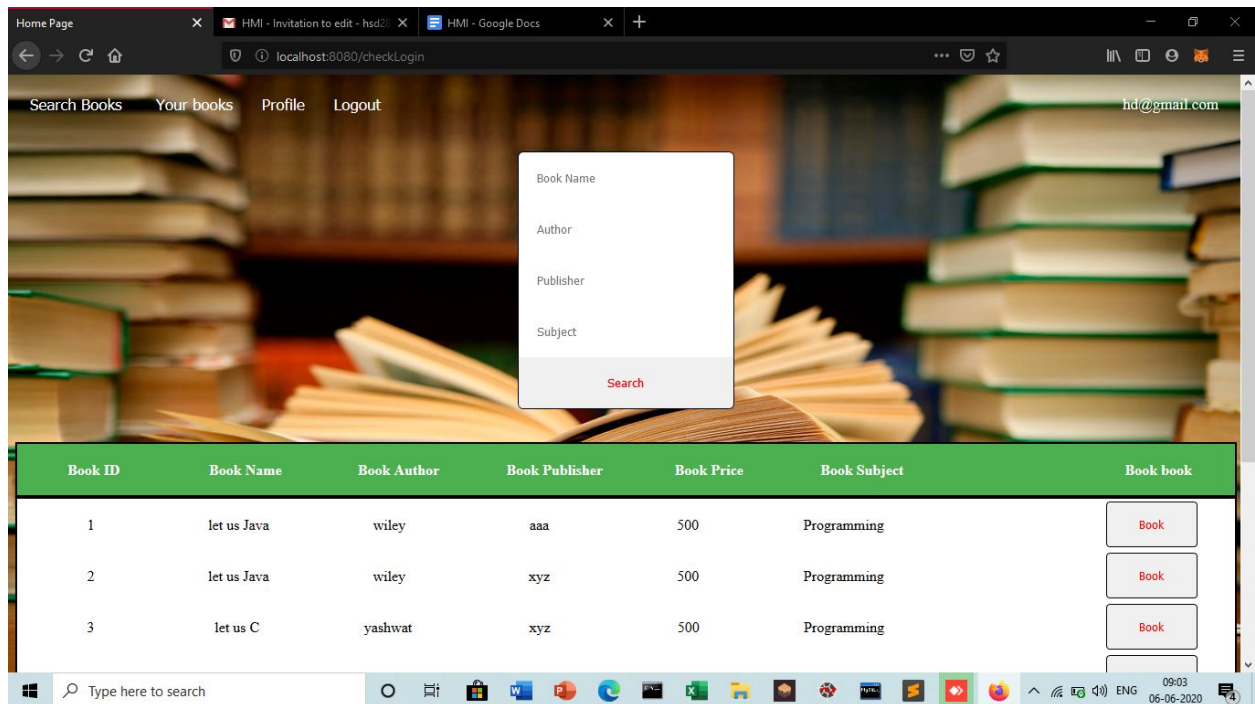

Fig 2 : Registration page

Fig 3 : Search book by user
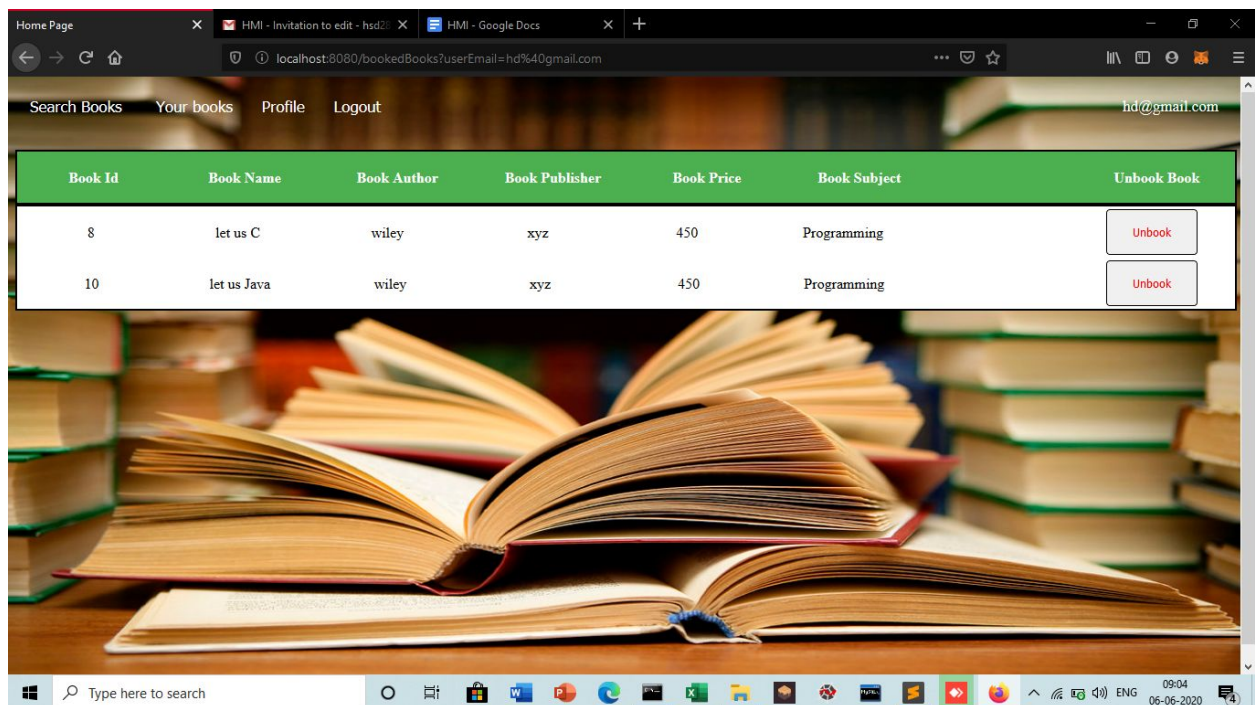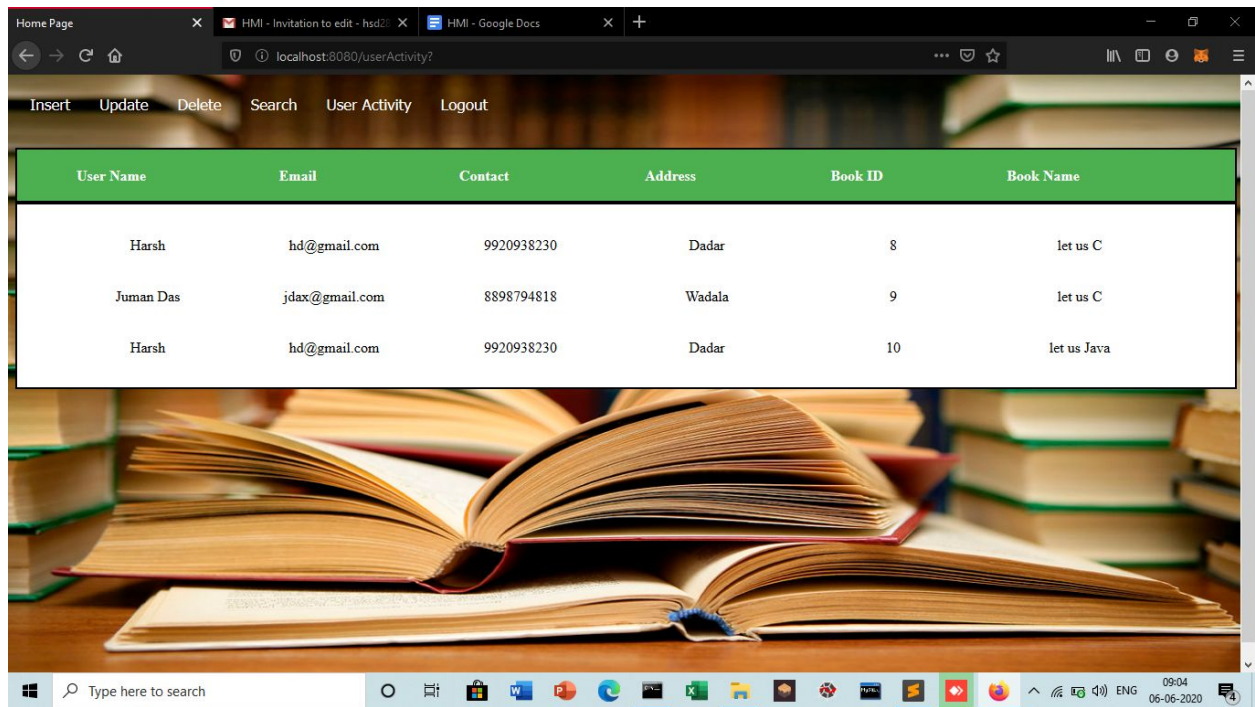

Fig 4 : Books booked by user

Fig 5 : User activity displayed at admin panel

Conclusion:

Sr. No.	Principles	Poor	Average	Good	Very Good	Excellent
1	Aesthetically Pleasing				✓	
2	Compatibility			✓		
3	Comprehensibility					✓
4	Consistency			✓		
5	Control			✓		
6	Efficiency				✓	
7	Flexibility			✓		
8	Forgiveness					✓
9	Recovery				✓	
10	Responsiveness				✓	

Thus, we have successfully designed a website considering the different HMI principles and clients. The website uses a combination of warm colors, interactive screen elements and great features to enhance user experience which in turn provides easy steps for reserving books online.

References:
http://people.cs.ksu.edu/~vamsim/vamsi_Report_Draft1.pdf
https://www.ijraset.com/fileserve.php?FID=6763