Terna Engineering College
Computer Engineering Department

Program: Sem VIII

Course: Human-Machine Interaction (HMI)

Faculty: Mr Umesh B Mantale

LAB Manual

PART A

(PART A : TO BE REFFERED BY STUDENTS)

Experiment No.01

A.1 Objective

a) Analyze and rate existing at least 3 websites or Applications and users for any specific Domain of your choice.

b) Visualize the ratings using graphs.

A.2 Prerequisite:

1. Knowledge about various domain.
2. Knowledge of user interface and various parameters of user interface

A.3 Outcome:

After successful completion of this experiment students will be able to

1. analyze existing complex interface designs and suggest modifications
2. to present the ratings in the graphical form.

A.4 Theory:

- A website is a set of related web pages containing content (media), including text, video, music, audio, images, etc. A website is hosted on at least one web server, accessible via a network such as the Internet or a private local area network through an Internet address known as a Uniform Resource Locator.

- Sometimes study of other user interfaces of same domain help to identify the problems as well as advantages of it. This helps to build user interface per user requirement.

A.5 Procedure

1. Select any domain such as bank sites, hospital sites, social networking sites, online video viewing sites, search engines-shopping sites etc.

2. Analyze any Three different web sites of the selected domain based on; General principles of HMI.

   (Hint please refer The book by Galitz The essential guide for user interface deisgn.)

3. Prepare the comparison tables.

PART B

(PART B: TO BE COMPLETED BY STUDENTS)

(Students must submit the soft copy as per following segments within two hours of the practical. The soft copy must be uploaded on the ERP or emailed to the concerned lab in charge faculties at the end of the practical in case the there is no ERP access available)

Roll No.: A43	Name: Shruti Naresh Rathod
Class: BE-A	Batch: A3
Date of Experiment:	Date of Submission:
Grade:	

B.1 Domain selected by student:

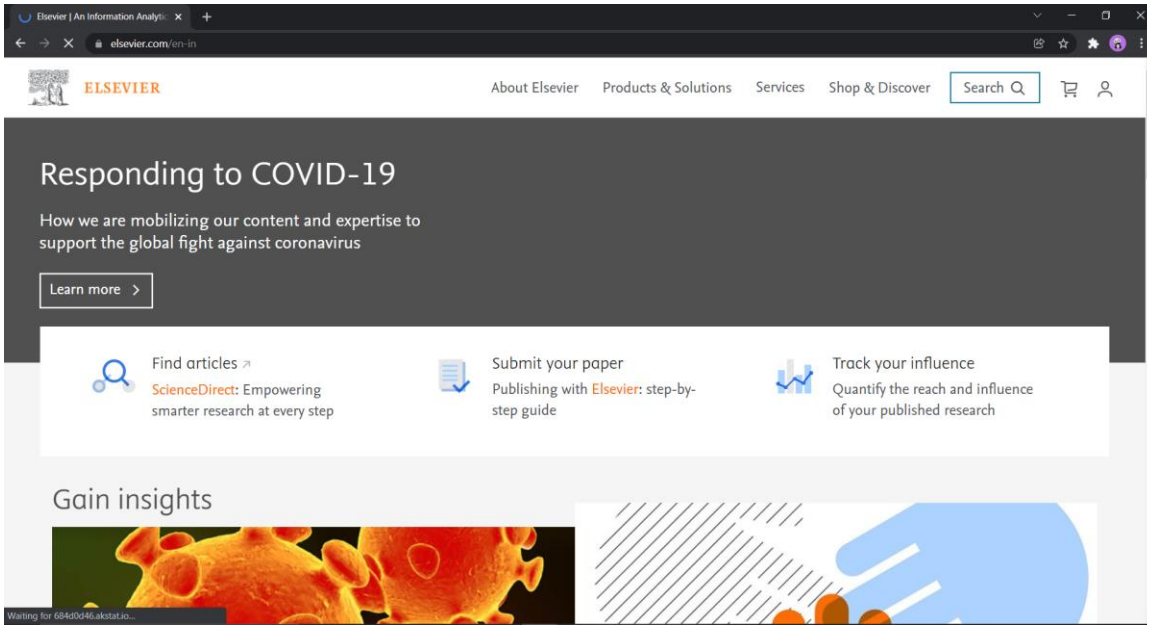
Domain Name – Research Paper Publishing Websites

Websites selected under the domain are:

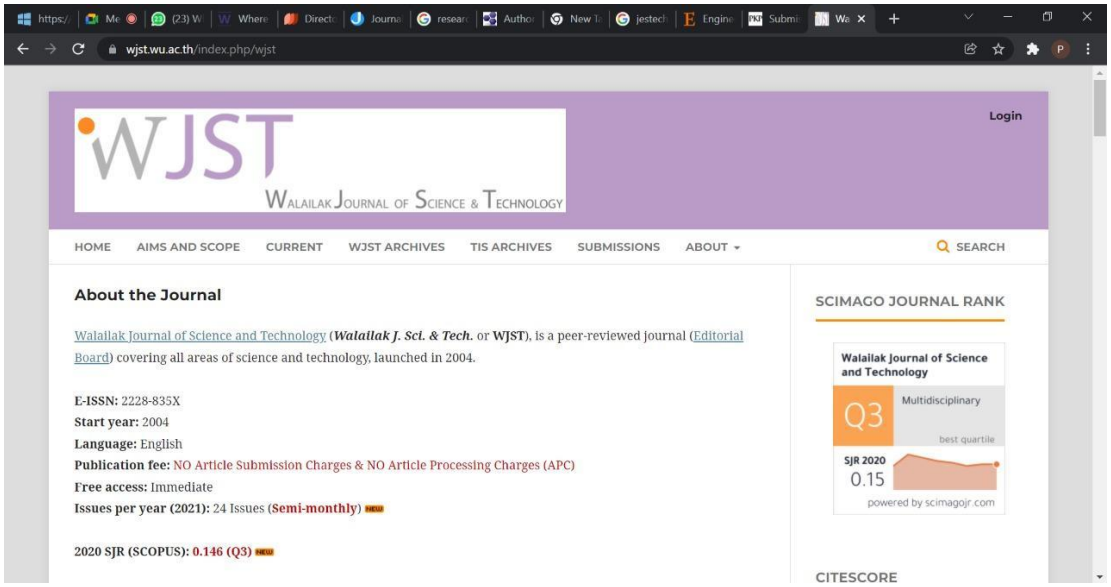
1. Elsevier
2. Walailak Journal of Science and Technology
3. International Journal of Emerging Technology

B.2. Home Page Screen Snapshot:

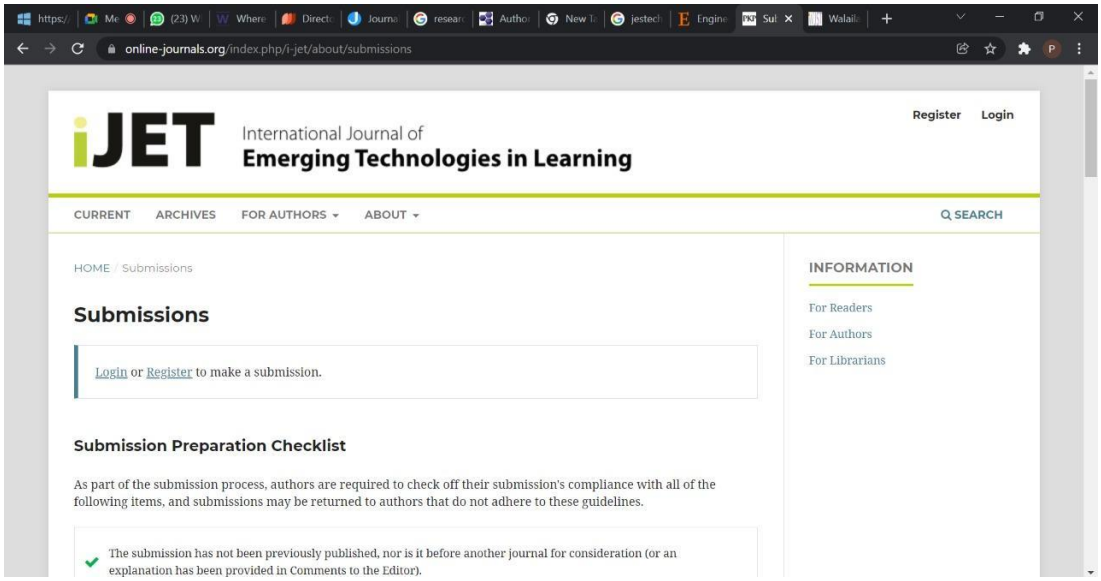
1. Elsevier:



2. Walailak Journal of Science and Technology (WJST)



3. International Journal of Emerging Technology



B.3 Analysis of website:

Table No. 1

Sr. No	Parameters	Elsevier	WJST	iJET
1	Accessibility	Research Paper can be easily accessed by users without any subscription.	No free access to paper requires a subscription	No free access to paper requires a subscription .
2	Aesthetically Pleasing	Elsevier has a great user-friendly GUI which makes it look much more personal	Compared to Elsevier, there is not much user-friendly GUI.	GUI is way simpler. Requires more surfing of websites to search content.
3	Availability	All features are properly displayed on the Home page itself.	Requires more surfing to find features.	Search Bars are available for desired features.
4	Clarity	The interface is visually, conceptually and linguistically clear	The interface is conceptually and linguisticall y clear	It has quite clear visual elements and functions.
5	Compatibility	Elsevier is more compatible as it provides compatibility with the user.	It is moderately compatible.	It is less compatible as compared to Elsevier.
6	Configurability	Permits easy personalization and configuration.	It doesn’t permit an easy reconfigurati on of settings.	It encourages an active role in understandi ng.
7	Consistency	The Consistency of the project is great. The features, looks	The consistency is good.	The Consistency is good

		have had no disturbing changes for a long time.		
8	Control	The User has whole control of the website. without any errors.	The user doesn't have complete control over the interaction.	It permits the user to customize aspects of the interface, while always providing a proper set of defaults.
9	Directness	It provides all possible options on same page without surfing more. Directness is High	Requires a bit of surfing. Directness is moderate.	Requires a lot of surfing website. Directness is low.
10	Efficiency	The Efficiency is high.	The Efficiency is moderate.	The Efficiency is moderate.
11	Familiarity	It has quite familiar concepts to users.	It uses real-world metaphors for users' familiarity.	It has natural interfaces.
12	Flexibility	Sensible to users' response. Highly Flexible.	Moderate Flexibility	Low Flexibility
13	Forgiveness	If any changes require after publishing there is a systematic procedure and will add those changes by adding comments	Changes have a procedure after full confirmation the system will amend the error.	Change is quite hazy. The task is quite complicated

		keeping the previous content readily available to the user.		
14	Immersion	The website provides attendees with real tangible experiences.	Low Immersive Property	Low immersive property
15	Obviousness	The flow of actions, responses, visual presentations, and information is in a sensible order.	Obviousness is moderate	Obviousness is moderate
16	Operability	Can be Operated by anyone	Can be Operated by anyone	Can be Operated by anyone
17	Perceptibility	The website can be highly perceived by user	Low Perceptibility	Low perceptibility
18	Positive First Impression	The First Impression was quite satisfying. Very user-friendly website.	The first expression was moderate	The first expression was moderate
19	Predictability	The website fulfills users' expectation and show all the natural progress.	The website fulfills users' expectation.	The website fulfills users' expectation.
20	Recovery	It has an easy and quick recovery response to the admin.	The recovery time is more.	The recovery process is complicated.

21	Responsiveness	It rapidly responds to the user's requests	It rapidly responds to the user's requests	It rapidly responds to the user's requests
22	Safety	Safety is high.	Safety is moderate.	Safety is low.
23	Simplicity	Provides simple interface as possible	Simplicity is low.	Simplicity is moderate.
24	Transparency	Transparency is high. No disturbance while working	Transparency is moderate	Transparency is moderate
25	Trade-Offs	It gives more importance to user's requirements than the technical things. The trade-off is good.	The trade-off is good.	The trade-off is low.
26	Visibility	A system's status and methods of use are clearly visible.	A system's status and methods of use are visible.	A system's status and methods of use are moderately visible.

Table No. 2

Sr.No	Parameters	Website 1 Rate out of 10	Website 2 Rate out of 10	Website 3 Rate out of 10
1	Accessibility	9	8	8
2	Aesthetically Pleasing	9	8	10
3	Availability	9	7	8
4	Clarity	10	9	8
5	Compatibility	10	9	9
6	Configurability	9	7	8
7	Consistency	9	8	8
8	Control	9	7	8
9	Directness	9	8	7
10	Efficiency	10	9	9
11	Familiarity	10	8	9
12	Flexibility	10	8	7
13	Forgiveness	9	8	7
14	Immersion	9	6	6
15	Obviousness	9	7	7
16	Operability	10	9	9
17	Perceptibility	10	8	8
18	Positive First Impression	10	8	8
19	Predictability	9	7	8
20	Recovery	9	7	7
21	Responsiveness	9	9	9

22	Safety	10	9	8
23	Simplicity	9	6	8
24	Transparency	10	8	8
25	Trade-Offs	9	7	6
26	Visibility	10	10	8

B.4 Conclusion:

We compared the three websites for Research Paper Publishing namely,

1. Elsevier
2. Walailak Journal of Science and Technology
3. International Journal of Emerging Technology

As per the ratings of all the websites, The Elsevier is quite efficient for users in maximum dimension than the WJSAT and IJET.