Experiment 4

PART A

A.1 Aim

To implement heuristic principles and evaluate NMIMS student portal using heuristic evaluation techniques.

A.2 Prerequisite
Understanding of heuristic principles and its evaluation

A.3 Outcome

After experimentation, students will be able:

- To understand the evaluation process of heuristic principles for good interface designing
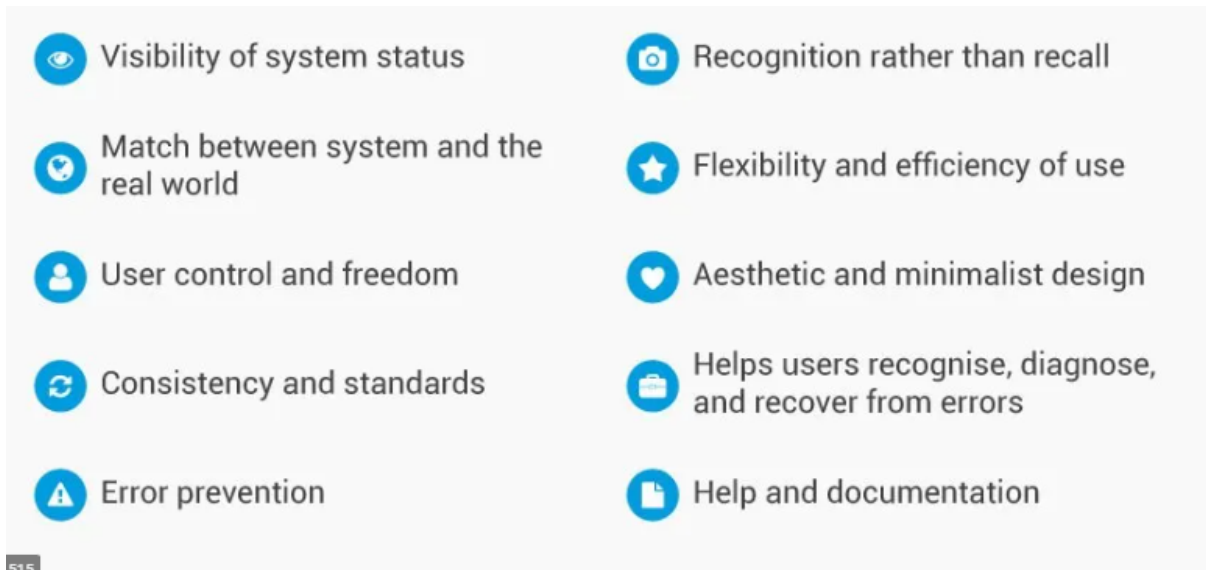- To generate report of heuristic analysis

A.4 Theory

A Heuristic Analysis is an inspection methodology to evaluate a website using a number of evaluation criteria based on a broad set rules of thumb and not necessarily specific usability guidelines. This type of evaluation is usually done on an existing product, or it can be conducted at a later stage in the development of a new product to iron out usability issues before implementation.

Evaluation Process:

1. **Establish an appropriate list of heuristics.** You can choose Nielsen 10 heuristics and stepping stones.
2. **Select your evaluators.** Make sure to carefully choose your evaluators. Your evaluators should not be your end users. They should typically be usability experts and preferably with domain expertise
3. **Brief your evaluators** so they know exactly what they are meant to do and cover during their evaluation.
4. **Evaluation phase.** The evaluation generally takes 1-2 hrs, depending on the nature and complexity of your product. The evaluators will use the product freely to gain a feel for the methods of interaction and the scope. They will then identify specific elements that they want to evaluate. The evaluators will carry out another run-through, whilst applying the chosen heuristics to the elements identified during the first phase. The evaluators would focus on individual elements and look at how well they fit in the overall design.
5. **Record problems.** The evaluators must either record problems themselves or you should record them as they carry out their various tasks to track any problems they encounter. Be sure to ask the evaluators to be as detailed and specific as possible when recording problems.

A.5 Tasks to perform

1. Visit the following link for heuristic evaluation understanding
   https://uxplanet.org/heuristic-evaluation-of-amazon-prime-video-bc09f62cd793

2. Visit the NMIMS student portal. Students will keep in mind heuristic principles while visiting the website. Heuristic principles are:

👁 Visibility of system status	📷 Recognition rather than recall
🌐 Match between system and the real world	⭐ Flexibility and efficiency of use
👤 User control and freedom	❤ Aesthetic and minimalist design
🔄 Consistency and standards	💼 Helps users recognise, diagnose, and recover from errors
⚠ Error prevention	📄 Help and documentation

3. Evaluate the NMIMS student portal website using heuristic evaluation process.
4. Generate the heuristic analysis report

(PART - B)

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

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Sem/Year : IV/7	Batch: 1
Date of Experiment : 23/09/2022	Date of Submission: 23/09/2022
Grade --	

B.1: Task assigned:
  I.   Login to NMIMS Student portal
  II.   Navigate main screen to perform following actions
      a) Upload the assignment
      b) Download the syllabus
  III. After performing the actions, logout from the account

B.2 Evaluate the tasks using heuristic evaluation process:
Step 1: *Identify evaluators who are very much familiar with the product. Give brief introduction about evaluators.*
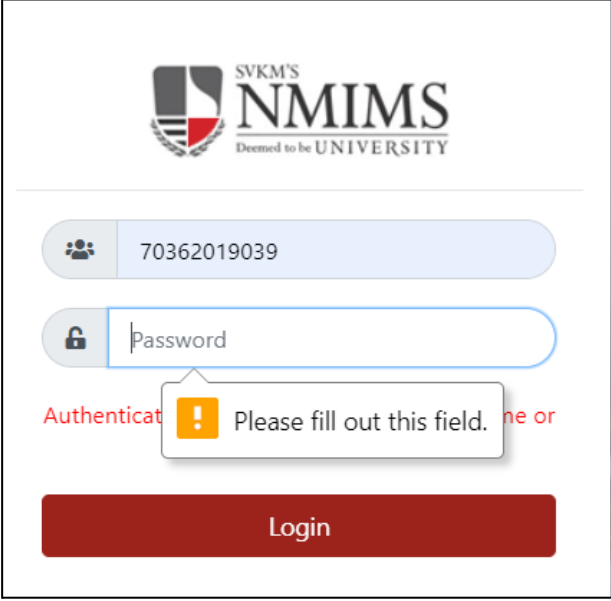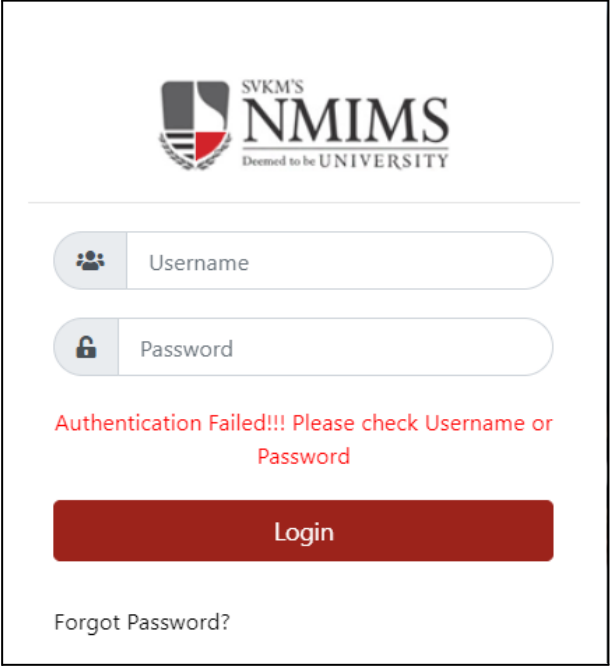
Varun Khadayate (A016)
Simran Kumari (A018)
Kartik Padave (A022)
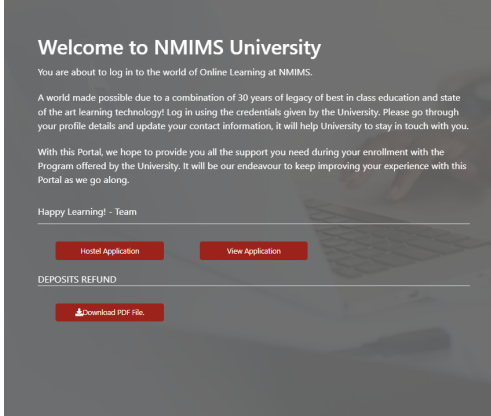
Step 2: *Perform the assigned tasks given in section B.1 using heuristic principles and identify the problems.*
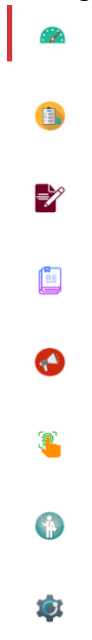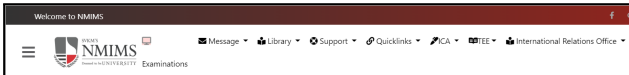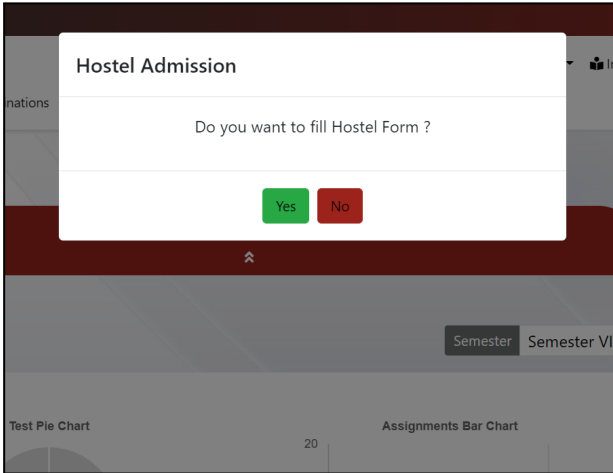
1. Visibility of system status - Visibility

2. Match between system and the real world – Mapping

3. User control and freedom – Freedom

4. Consistency and standards – Consistency

5. Error prevention

6. Recognition rather than recall

7. Flexibility and efficiency of use

8. Aesthetic and minimalist design – Minimalism

9. Helps users recognize, diagnose, recover from errors – Error recovery
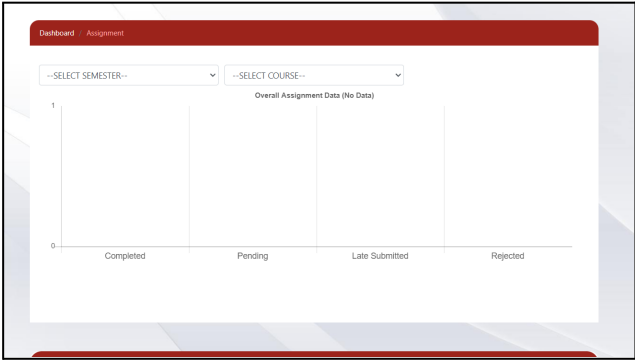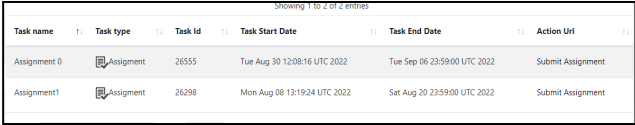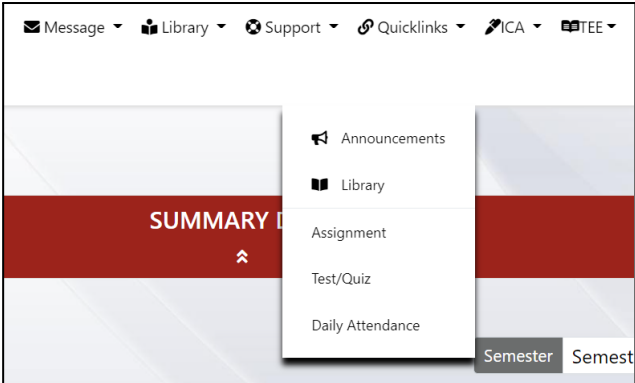
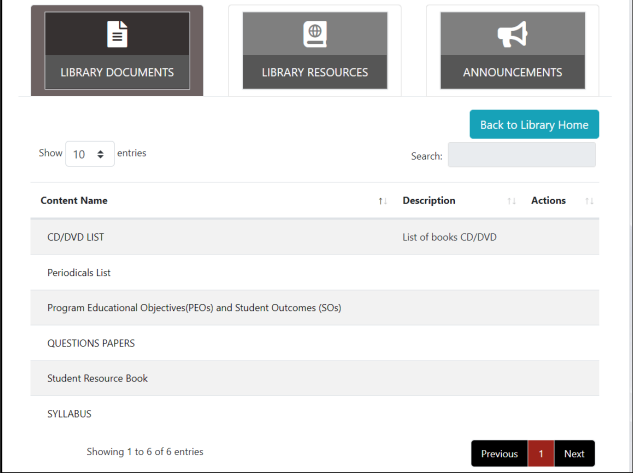10. Help and documentation – Help

***Step 3:*** *Fill the evaluation sheet*

Table 1: Evaluation Sheet

Actions	Heuristic principle followed/not followed	Generated error (if any)
Login to NMIMS Student portal	1. **Visibility:** This principle is followed for the most of it except for forgotten passwords where affordance is missing. 2. **Mapping:** This principle is followed since there are icons and text is written in layman words. 3. **Consistency and standards:** This principle is followed since the colors and font are consistent throughout the screen.	Cluttered with extra information. Not pleasing to look at.

	4. **Error prevention:** This principle is followed since the system gives an error when a certain field is not filled. 5. **Recognition rather than recall**: This principle is not followed since when a field is filled, the tag\ disappears. 6. **Aesthetic and minimalist design:** This principle is not followed as a lot of information is given on the login screen and it is crowded instead of minimalistic. 7. **Help users recognize,** **diagnose and recover from the errors:** Its not followed as it doest not specify the error.	
Navigate main screen	1. **Visibility:** This principle is not followed because in most of the navigation tags, affordance is missing. 2. **Mapping:** This principle is mostly followed since there are icons and text is	Bugs in the design cause feedback to appear in some cases and not appear in others

	written in layman words but some of the terms are hard to understand. 3. **Consistency and standards:** This principle is not followed since affordance is there for some tags and isn't for some. 4. **Aesthetic and minimalist design:** This principle is not followed as it is not consistent. Also, the hostel pop-up coming up initially isn't necessary. 5. **User control and freedom:** It is followed because we can easily navigate and cancel or go back. 6. **Help and documentation:** It is followed and available in the form of support.	
Upload assignment	1. **Visibility:** This principle is not followed because the submit or upload assignment	Upload assignment feature could not be found, nor is there an

	is very hard to find and has hidden affordance so poor visibility. 2. **Mapping:** This principle is followed since there are icons and text is written in layman terms 3. **Consistency and standards:** This principle is followed. 4. **Aesthetic and minimalist design :** This principle is not followed as to many things are shown to user rather then a simple upload option 5. **User control and freedom:** It is followed because we can cancel or go back. 6. **Help and documentation:** It is not followed as you cannot raise a query to faculty.	indication that the feature is not available.
Download syllabus	1. **Visibility:** This principle is not followed because users will have to take time and go through all options to finally find it in the library option. 	If we go deep into folders, there is no backtrack option. Description is available with no data.

	2. **Mapping:** This principle is followed since there are icons and text is written in layman words. 3. **Consistency and standards:** This principle is followed since the colors and font are consistent throughout the screen. 4. **Aesthetic and minimalist design :** This principle is followed. 5. **User control and freedom:** It is followed because we can easily navigate and cancel or go back. 6. **Flexibility and Efficiency of Use:** A new user will find it hard to find syllabus options so not followed.	
Logout from the portal	1. **Visibility:** The Logout option is easy to find and has proper affordance but doesn't provide any feedback on successfully logging out.	There is no feedback when the mouse hovers on profile to discover the Logout option.
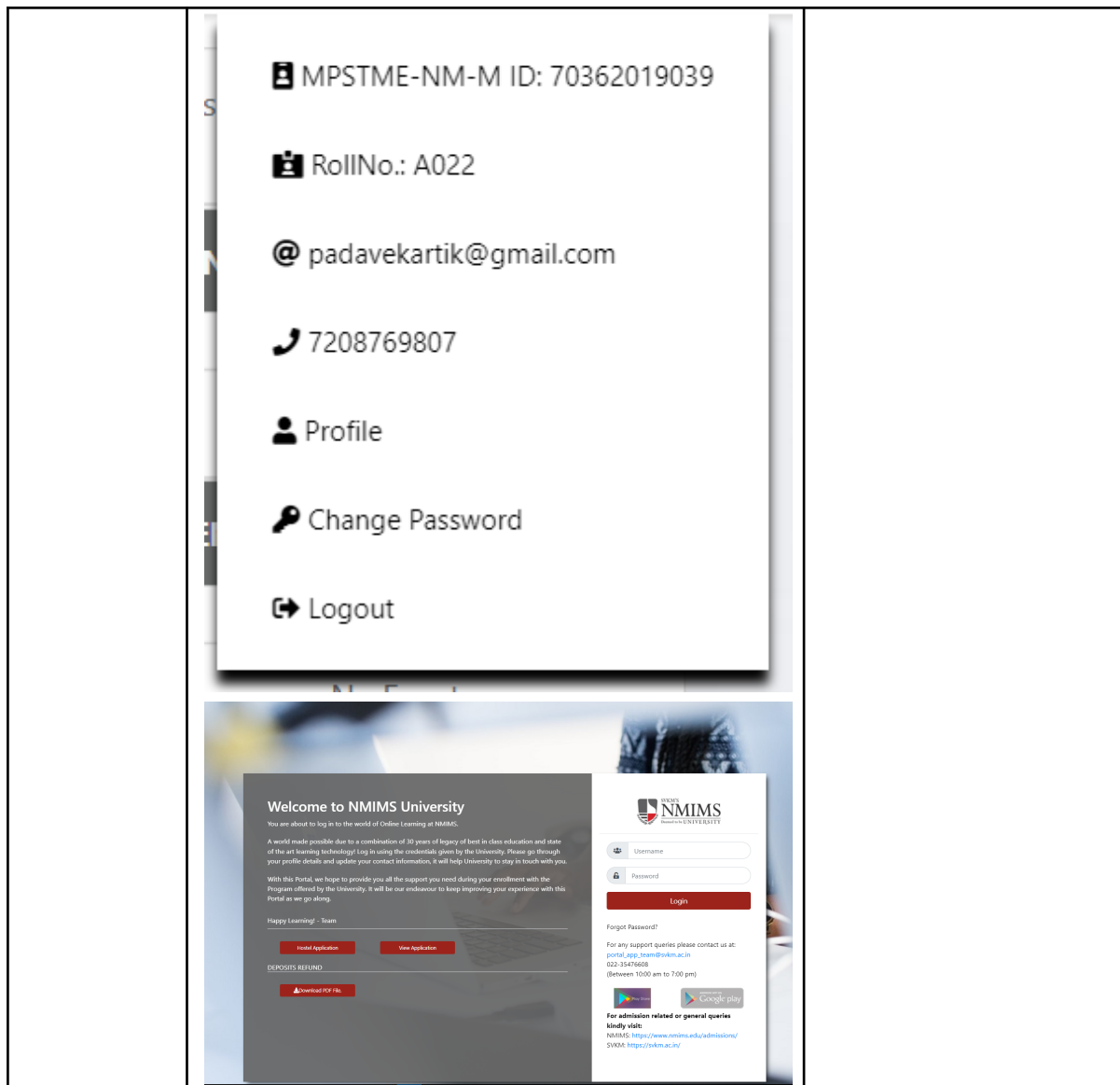
(Students are supposed to divide the actions in to sub-actions to perform the tasks. Students will write which heuristic principle is not following for the particular action)

Step 4: *Assign the severity ratings (as given in Table 2) and generate the heuristic analysis report for the performed tasks.*

Severity ratings can be used to allocate the most resources to fix the most serious problems and can also provide a rough estimate of the need for additional usability efforts. The following 0 to 4 rating scale can be used to rate the severity of usability problems. (visit the link https://ucabli5.wordpress.com/category/uncategorized/ for analysis report)

TABLE 2   SEVERITY RATINGS

Note	Severity
0	This is not a usability problem at all.
1	Cosmetic problem only-need to be fixed unless extra time is available on project.
2	Minor usability problem-fixing this should be given low priority.
3	Major usability problem-important to fix, so should be given high priority.
4	Usability catastrophe-imperative to fix before product can be released.

Table 3: Heuristic Analysis Report

Problems	Severity ranking	Broad heuristic principle
Login to NMIMS Student portal: Cluttered with extra information.	1	Aesthetic, minimalistic design
Navigate main screen: Affordance for navigation links	2	Visibility, Consistency, standard
Upload assignment: Upload assignment feature could not be found easily	4	Visibility
Download syllabus: Syllabus not easy to find	3	Visibility, Flexibility, Efficiency of use
Logout from the portal: There is no feedback when the mouse hovers on profile to discover the Logout option	1	Visibility

B.2: Observations and Learnings:
Write down the possible improvements to the interface based on your web interaction

- Cluttered with extra information. Unnecessary information like the welcome message, PDF links and admission enquiries, should not be mentioned on the login page. This violates the minimalistic design principle nd takes up too much of the user's time. Essentials like Login ID and password are not highlighted, as users get distracted from the information on the left.

- The labelling of the navigation bar should be more consistent.
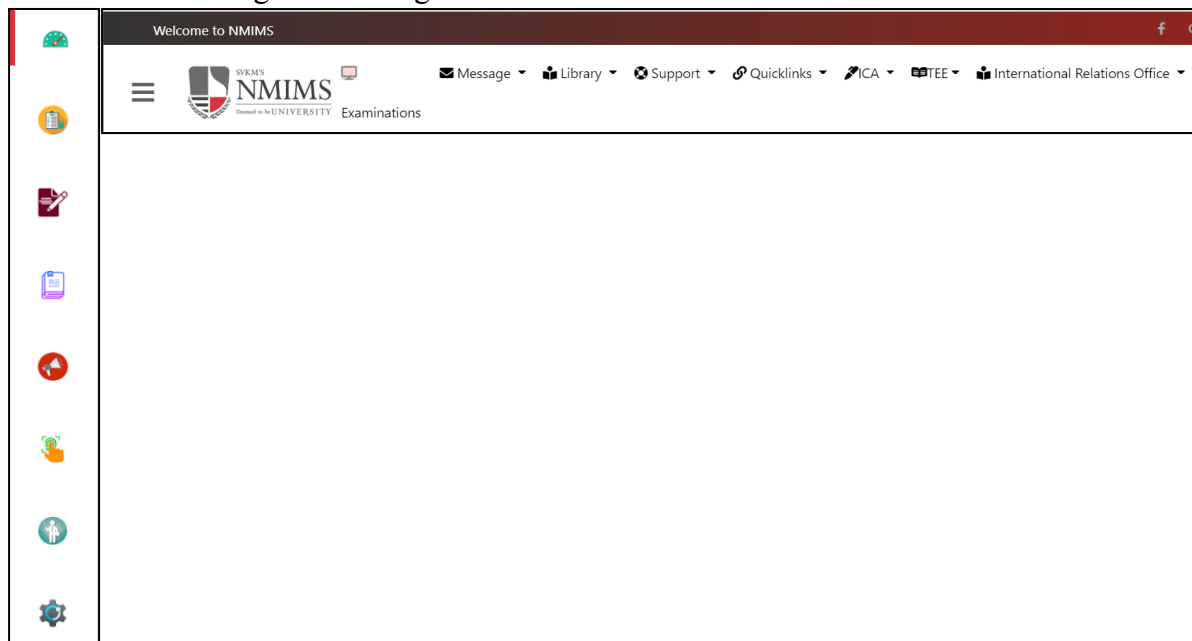
- In case of an incorrect input during login, the login screen shouldn't refresh and there should be better recovery and help and the forgot password option should be more clear by using signifiers in order to ensure visibility and affordance.
- While entering the username and passwords, the label should be consistently visible to ensure fulfilling the principle of recognition instead of recall.

● The button for submitting the assignment should be more clearly visible and easy to locate as well, using appropriate signifiers. This will help improve visibility. There should be an option to raise a query in the assignment section.

Showing 1 to 2 of 2 entries

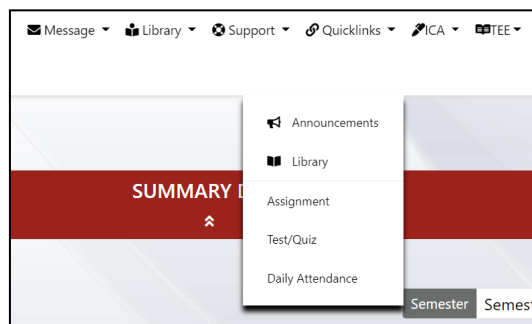| Task name ↑↓	Task type ↑↓	Task Id ↑↓	Task Start Date ↑↓	Task End Date ↑↓	Action Url ↑↓
Assignment 0	📝 Assigment	26555	Tue Aug 30 12:08:16 UTC 2022	Tue Sep 06 23:59:00 UTC 2022	Submit Assignment
Assignment1	📝 Assigment	26298	Mon Aug 08 13:19:24 UTC 2022	Sat Aug 20 23:59:00 UTC 2022	Submit Assignment

Search: [   ]   Show [10 ▼] entries   [Previous] [1] [Next]

● The course syllabus is not easy to find, and this affects the efficiency and flexibility to use since the new users will not have any idea where to find it. The syllabus is found in the library section and other sections like course details, etc exist. So the syllabus should be easy to find.

B.3: Conclusion:
We have successfully understood, implemented and evaluated the heuristic principles in the given website and generated the evaluation sheet, heuristics severity table and listed out the problems, according to us will help get a website that is designed better and is satisfactory according to all heuristic evaluation techniques.