

Sri Lanka Institute of Information Technology



IT3060 Human Computer Interaction
Assignment 3 – High Fidelity Prototyping -
Project report

NIE.lk

2022-WD-S1-25|Team NIE

Submitted by:

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Group member details:

Student ID		Name	Website interface distribution
1.	IT20083564	Yapa Y.A.D.C.H.	Home Page, General Information, Payment details, Courses
2.	IT20616410	Wickramasinghe W.A.C.P.	Home Page, About us (2 pages), Course materials page
3.	IT20639730	Thrilakshani T.Y.	Home Page, Contact Us, Login (Student & Staff Logins)
4.	IT20638290	Dayaratne K.M.A.K.H.	Home Page, Register Page, Course selections, Related Institutes
5.	IT20640484	Bandara K.M.A.P.	Home Page, Suggestions, Enter Suggestions, Display Suggestions

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1. Introduction:

NIE.lk (nie.lk) is a popular website among the Sri Lankan students for gaining additional knowledge. It acts as an intermediary platform for both lecturers and students. It is a Sri Lankan government educational institution. Although it may or may not be true, the popularity cannot mask the issues within the website. The current users as well as the new users who will get registered to this website will be exposed to the complex, confusing navigation, defective color scheme, defective layouts, spelling mistakes and many more problems. However, for this website to successfully interact with their users, they should have a deep understanding of their users, what their users need, their values and their limitations.

Since there were many usability problems associated with the website, it must be redesigned to meet its users' requirements. In order to do that, the context of use should be understood at first. And this can be done by conducting usability tests. Afterwards, the users of the system should be understood. Therefore, in order to redesign NIE.lk, different users were identified, and usability tests were conducted using contextual inquiries. This project will be comprised of the abovementioned criteria.

2. Methodology

The web-based application, which was developed for the National Institute of education named "www.nie.lk" was selected to perform a new look and simply provide greater convenience to the users. In this project, the web-based application was developed for the National Institute of education to facilitate high-fidelity prototypes that look like live software to customers, which means users would be more likely to behave naturally and users friendly.

Data Analysis is one of the important activities that should be followed the web application elicitation. For this project, in-depth interviews with contextual inquiries and video transcripts were used as data collection methods. Contextual inquiries are personal and unstructured interviews whose aim is to identify participant's emotions, feelings, and opinions regarding usability issues in the interfaces of the selected web application. As far as data collection tools were concerned, the conduction of the project involved the use of a semi-structured questionnaire, which was used as contextual inquiries and video transcripts to guide for the project.

For this project, Sketching is one of the important activities that should be followed before design high fidelity prototype for selected interfaces of the web application. Sketching is a technique mainly used by designers for web and graphic design projects. Figma prototyping

tool were used to design high fidelity prototypes for selected interfaces of the web application. Figma is a vector graphics editor and prototyping tool for design high fidelity prototypes

3. Content

3.1 The link of our Video record:

https://mysliit-my.sharepoint.com/:f:/g/personal/it20639730_my_sliit_lk/EjQ7-LcNm0JBnmGgTThE8lkBVbJzkCFn2679-Mxm3fUCw?e=ptNmgQ

3.2 Fully integrated project link:

<https://www.figma.com/file/UKeUSmUJqWVr0BGbbTzoGH/HCI?node-id=0%3A1>

Instructions – Click on the link given above and it will navigate to the Figma Application. Now it will show the UIs that we have designed. After that click on the UI, you wish to Preview and click on the present button on top right corner.

3.3 Prototype UI links

IT20083564 – Yapa Y.A.D.C.H.

<https://drive.google.com/drive/folders/1rvOYdCK8pisQdFSQBdsTD9b9ulDtYXei?usp=sharing>

IT20616410 – Wickramasinghe W.A.C.P.

<https://drive.google.com/drive/folders/1wHX6vtdWfrD96WUilQm-yxO-IlnRI6X>

IT20639730 – Thrilakshani T.Y.

https://mysliit-my.sharepoint.com/:f:/g/personal/it20639730_my_sliit_lk/EnX7aYBpBhJJpMXLzU9fTR4BxSyblgYx_6-iFxUITceZcg?e=ZqEWkX

IT20638290 – Dayaratne K.M.A.K.H.

https://drive.google.com/drive/folders/16jOc8zjbbUUIqCERw5k8JKj8nGDoR-cl?usp=share_link

IT20640484 – Bandara K.M.A.P.

<https://drive.google.com/drive/u/0/folders/1hIG-iUOOH4NbEFpPqvZ9H3GDQnZ0EUrT>

3.4 Test Cases:

3.4.1 Dayaratne K.M.A.K.H – IT20638290

❖ Test Plan for Register Page, Course Selection and Related Institutes UI.













- What is being tested (features and tasks)

1. Page navigation using buttons
2. Properly navigate to the Register page.
3. All functions are perfectly visible.
4. Button Clicks
5. Colors and Font Size
6. Clearly identify the details of the pages without getting confused.
7. User can understand how to fill the required fields correctly

- How it is going to be measured

1. When clicking buttons, if it navigates to the correct page, it is a pass, if not fail.
2. If user can successfully register to the degree program it is pass, if not fail.
3. If the user can see all the buttons in the UI properly, it is a pass. Otherwise, it is a failure.
4. If the font and font size match, it is a pass, if not fail
5. If the colors used in the UI are strong/tough to the user's eye, it fails otherwise, it passes.
6. If main functions are easily access and visible it is a pass, otherwise it is a failure.
7. If the user can submit the register form by filling all the necessary columns without having trouble, it is a pass. Otherwise, it is a failure.

❖ Generating dummy data

Name of participant	Page navigation using buttons	Navigate to the Register page When the button is clicked	Submitting a form to the NIE website using Register form.	Note
Chamodi				All tasks are passed.
Amanda				All tasks are passed.
Yashodha				All tasks are passed
Paranga				All tasks are passed.

Success rate 100%

❖ Sample analysis of data

Prototype screen / UI	User's feedback /Problem	Reason for negative feedback	Severity (high/ medium/ low) and justification.	Way(s) to rectify and any tradeoffs
Register Page	No negative feedback given	None	None	None
Course Selection page	No negative feedback given.	None	None	None
Relative Institutes and Centers page	No negative feedback given.	None	None	None

3.4.2 Yapa Y.A.D.C.H. – IT20083564

❖ Test Plan for General information page, NIE Programs and Enter payment details UI.

- What is being tested (features and tasks)













1. Page navigation for General information page.
2. The colors used for the website are suitable for all type of users.

3. Page navigation using buttons.
4. User friendliness.
5. Properly navigation to Enter payment details page.

- How it is going to be measured

1. When clicking buttons, if it navigates to the general information page, it is a pass, if not fail.
2. If colors are too harsh for eyes, cannot clearly visible the functions and texts it is fail, if not pass or states as a good UI component.
3. When clicking buttons, if it navigates to the correct page, it is a pass, if not fail.
4. If the user interfaces are friendly and easy to work with, it's a success, if not fail.
5. If user can successfully enter payment details it is pass, if not fail.

❖ Generating dummy data

Name of participant	Page navigation using buttons	Navigate to the general information page When the button is clicked	Submitting a form to the NIE website using Enter payment details page.	Note
Anushani				All tasks are passed.
Amanda				All tasks are passed.
Yashodha				All tasks are passed
Paranga				All tasks are passed.

Success rate 100%

❖ Sample analysis of data

Prototype screen / UI	User's feedback /Problem	Reason for negative feedback	Severity (high/ medium/ low) and justification.	Way(s) to rectify and any tradeoffs
General information page	No negative feedback given	None	None	None
Course Selection page	No negative feedback given.	None	None	None

NIE programs page	No negative feedback given.	None	None	None
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3.4.3 IT20639730 – Thrilakshani T.Y.

❖ Test Plan for Student Login, Staff Login, Reset Password and Contact Us UI.













- What is being tested (features and tasks)

1. All the functions are perfectly visible.
2. Colors.
3. Button clicks.
4. Page navigations from Home.
5. Clearly identify contact options.
6. Understand and clear how to contact NIE via email, fax, contact person etc.
7. Button and Hover effect.
7. Find How to successfully log staff members and students.

- How it is going to be measured

1. If main functions are easily accessible and visible it is a pass if not failed.
2. If colors are too harsh for eyes, cannot clearly visible the functions and texts it is fail, if not pass or states as a good UI component.
3. When clicking buttons, if it navigates to the correct page, it is a pass, if not fail.
5. If user can successfully log to the system it is pass, if not fail.
6. If user can correctly change the password it is pass, if not fail.
7. If hover effects are working, it is a pass. Otherwise, it is a failure.

❖ Generating dummy data

Name of participant	Page navigation using buttons	User successfully logging to the NIE and after logging it will get a message show that it has been successfully added.	Navigate to the contact us page clicking navigation bar and after find Contact details easily	Note
Chamodi				All tasks are passed.
Amanda				All tasks are passed.
Anushani				All tasks are passed
Paranga				All tasks are passed.

Success rate 100%

❖ Sample analysis of data

Prototype screen / UI	User's feedback /Problem	Reason for negative feedback	Severity (high/ medium/ low) and justification.	Way(s) to rectify and any tradeoffs
Student Login page	No negative feedback given	None	None	None
Staff Login page	No negative feedback given.	None	None	None
Contact us page	No negative feedback given.	None	None	None

3.4.4. Wickramasinghe W.A.C.P – IT20616410













❖ Test Plan for Member of the Council page, Members of the Academic Affairs Board page, Special page, Setting page UI.

What is being tested (features and tasks)

1. The colors used for the website are suitable for all type of users.
2. User can easily navigate to the contact us page.
3. User can understand how to fill the required fields correctly.
4. Find the favorites items easily.

5. Filter through saved favorite items.
 6. Find a way to remove an item easily when needed.
 7. Properly navigate to the Materials page.
 8. Using search option to search for a course using related words.
 9. Can easily figure out the functionality of courses categorization.
 10. Fill the form to the user has without getting confused.
- How it is going to be measured
1. If the colors that are used in the UI are too strong to the user, it is a failure. Otherwise, it is a pass.
 2. If the user can filter their desired materials through all the materials they have saved, it is a pass. Otherwise, it is a failure.
 3. If the user can remove a saved special item from the UI, it is a pass, otherwise, it is a failure.
 4. If the user can sort special items saved items according to date, it is a pass. Otherwise, it is a failure.
 5. If the user can see all the buttons in the UI properly, it is a pass. Otherwise, it is a failure.
 6. If the user can submit the special courses form by filling all the necessary columns without having trouble, it is a pass. Otherwise, it is a failure.
 7. If the user can use search option properly, it is a pass. Otherwise, it is a failure.

❖ **Generating dummy data**

Name of participant	Page navigation using buttons	User successfully filling the special courses form and after filling user can submit form	Navigate to the setting page by clicking setting icon , after user can update email, password and another personal details	Note
Chamodi				All tasks are passed.
Amanda				All tasks are passed.
Anushani				All tasks are passed
Yashodha				All tasks are passed.

Success rate 100%

❖ Sample analysis of data

Prototype screen / UI	User's feedback /Problem	Reason for negative feedback	Severity (high/ medium/ low) and justification.	Way(s) to rectify and any tradeoffs
Member of the Council page	No negative feedback given	None	None	None
Members of the Academic Affairs Board page	No negative feedback given.	None	None	None
Special page	No negative feedback given.	None	None	None
Setting page	No negative feedback given.	None	None	None

3.4.5. Bandara K.M.A.P. – IT20640484

❖ Tests plans for Suggestion home page, study materials page, suggestion form page, and form display page.

- What is going to be tasted (Features and tasks)













1. Navigate to the “suggestion home” page using the navigation bar.

2. Properly navigate to the “Suggestion home page”.
3. All the fonts are properly visible to the user.
4. Buttons are working properly.
5. Each page has a backward navigation button.
6. Dropdowns in the form are working properly.
7. After filling out the form, the fill data will display on another page.

- How it is going to be measured

1. When clicking buttons are clicked, if it navigates to the correct page, the task is passed. If it does not navigate to the correct page, it fails.
2. If the user fills out the form successfully, the test will pass. If it is not, the test will fail.
3. If the user can find the buttons easily in the UI, the test will pass. If not, the test will fail.
4. If the user clicks on each button they are working properly, the test will pass. If not, the test will fail.
5. If the user clicks on the backward navigation button, it will work properly, and the test will pass. If not, it will fail.
6. If the drop downs in the form are working properly, the test will pass. If not, the test will fail.
7. If the user fills out the form and clicks on the “save” button, the data will display on another page, and the test will pass. If not, the test will fail.

❖ Generating dummy data

Name of participant	Page navigation using buttons	Navigate to the Suggestion page when the button is clicked.	Submitting a form to the NIE website using the suggestion form.	Note
Chamodi				All tasks are passed.
Anushani				All tasks are passed.
Yashodha				All tasks are passed
Paranga				All tasks are passed.

Success rate 100%

❖ Sample analysis of data

Prototype screen / UI	User's feedback /Problem	Reason for negative feedback	Severity (high/ medium/ low) and justification.	Way(s) to rectify and any trade-offs
Suggestion home page	No negative feedback was given.	None	None	None
Study materials page	No negative feedback was given.	None	None	None
Suggestion form page	No negative feedback was given.	None	None	None
Suggestion form display page	No negative feedback was given.	None	None	None

4. Summary

Initially, nie.lk website is a famous educational website in Sri Lanka. Mainly famous because of the educational service they provide rather than other competitive institutes. But from a user-experience perspective, this site has been not good at all. Because this website is outdated appearance and complexity are the main problems. After we studied the website, we identified so many issues. So, our main objective is to correct these issues and make this website attractive, user-friendly, efficient, and eye-catching website to users. We decided what attractive colors we are going to use for every user's eye comfortable. We must focus on the main functions, font colors, language, and font sizes. Our final goal was to design a creative, user-friendly, informative website.

5. Gantt Chart

