Sri Lanka Institute of Information Technology



Human Computer Interaction (IT3060)

Assignment 3 High Fidelity Prototyping

Group ID – 2025-WE-S2-14

Group members

Student ID	Name	Workload Distribution
IT22063564	RAJAWARDHANA M.B.G.T.N	Online payment page Dashboard, SLBFE training program page, SLBFE News and Alert page
IT22547774	ARIYARATHNA L.M.N.R	Login page, Foreign Job Vacancies pages, SLBFE job bank profile page
IT22548078	CHATHURI M.T.K	Landing Page, Complaint Submission Form, Complaint Status View
IT22553478	DARMASENA M.S.T	Licensed foreign employment agencies (recruitment agencies), List of valid recruitment agencies as at (current date), List of temporarily suspended agencies/Cancelled agencies as at (current date), SLBFE job bank create new account

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1. Introduction

This report details the process of creating a high-fidelity, interactive prototype for the official website of the **Sri Lanka Bureau of Foreign Employment (SLBFE)**, accessible at https://www.slbfe.lk/. The foundation for this work was established in our initial assignment, where we conducted comprehensive user research to identify significant usability challenges. Our findings from contextual inquiries and heuristic evaluations revealed critical issues across key user groups—including job seekers, recruitment agencies, and SLBFE staff—such as poor navigation, non-responsive design, overwhelming form complexity, and a general lack of visual hierarchy.

Building upon these insights, the primary aim of Assignment 3 is to transition from problem identification to solution generation. The objective is to design a high-mobility prototype that directly addresses the documented usability problems. This prototype will serve as a tangible proposal for a redesigned SLBFE website, focusing on enhancing the user experience (UX) by improving intuitiveness, accessibility, and efficiency. By creating a functional model of the improved interface, we demonstrate how the application of Human-Computer Interaction (HCI) principles can transform a critical public service portal into a more user-centric and effective digital tool.

2. Methodolog

To ensure a structured and effective approach to high-fidelity prototyping, we adopted a multi-stage methodology that builds directly on our previous research findings.

1. Review of Assignment 1 Findings:

 We began by thoroughly reviewing the usability issues, user personas, and contextual inquiry transcripts from Assignment 1. This served as our primary "problem backlog" and ensured that our design decisions were grounded in real user needs and empirical data.

2. Tool Selection:

For creating the high-fidelity prototype, we selected Figma. Figma is a cloud-based design tool renowned for its powerful prototyping capabilities, real-time collaboration features, and ability to create interactive, near-realistic user interfaces. Its capability to simulate user flows and share a live prototype link aligns perfectly with the project's requirements.

3. **Design and Prototyping Process:**

- Information Architecture Restructuring: Based on the navigation issues identified (e.g., unclear menus, redundant links), we first reorganized the site's information architecture to create a more logical and intuitive content hierarchy.
- Wireframing: We created low to mid-fidelity wireframes for the key interfaces analyzed in Assignment 1 (e.g., Login, Job Vacancies, Complaint Portal, Agency Search). This step focused on layout, content placement, and user flow without the distraction of visual design.
- High-Fidelity UI Design: We then applied a modern, consistent visual design language to the wireframes. This included defining a cohesive color palette, typography, and UI component library to address the inconsistencies and outdated aesthetics noted in our initial analysis.
- Interactivity and Prototyping: Using Figma's prototyping tools, we linked the designed screens to create a fully interactive prototype. This simulates the core user journeys, such as registering an account, searching for jobs, submitting a complaint, and filtering agency lists, thereby solving the critical usability problems related to navigation and task completion.

4. Testing and Iteration:

 The interactive prototype will be tested internally by simulating the tasks defined in our Assignment 1 scripts. This allows us to validate the proposed solutions and make iterative refinements to the design before final submission.

Member 1: RAJAWARDHANA M.B.G.T.N(IT22063564)

Test case

Name of the Page	Test ID	Task to be given to the user	Expected Output	Actual Output	Result (True/ False)
Online payment page Dashboard	1	Try to navigate to the Online Payment Dashboard from the navigation bar on the Home page.	Navigate to the Online Payment Dashboard.	Navigate to the Online Payment Dashboard.	True
	2	Try to make a payment using a valid card number and amount.	Successful transaction confirmation and receipt display.	Successful transaction confirmation and receipt display.	True
SLBFE training program page,	3	Try to make a payment using an invalid card number. Try to navigate to the SLBFE	Display error message and prevent payment.	Display error message and prevent payment.	True
	4	Training Program Page from the main menu.	Successfully navigate to the Training Program Page.	Successfully navigate to the Training Program Page.	True
SLBFE News and Alert page	5	Try to register for a selected training program.	Form submitted successfully with confirmation	Form submitted successfully with confirmation message.	True
	6	Try to open the SLBFE News and Alerts Page.	message. Display list of latest news and alerts.	Display list of latest news and alerts.	True

Task Description

Name of the Participants	Feature/Task 1 - Online Payment Dashboard	Feature/Task 2 – Training Program Page	Feature/Task 3 — NewsNote and Alerts Page
Job Seeker	Made a payment easily but expected instant email confirmation.	Registered for a program but wasn't sure if payment was required for enrollment.	Read news but expected anull "share" button for social media.
Foreign Worker	Found payment process easy, but international card support unclear.	Appreciated clear course information but wanted translation support.	Found alerts useful but The layout wished for notification in the subscription. status view lacked step guidance for new users.
HR Officer	Tested payments for multiple workers successfully.	Suggested a downloadable calendar for training dates.	Found news updates null timely and informative.

Total number of tasks = 8Total number of successful tasks = 8success Rate = 100%

Rating of the Data Identify Based on the Task Description

Prototype screen/UI	User's feedback/ problem	Reason for negative feedback	Severity (high/medium/low) and justification.	Way(s) to rectify and any tradeoffs
1. Online Payment Dashboard	Users expected immediate email or SMS confirmation after payment.	Null	Medium – Doesn't affect payment completion but impacts user confidence. Low – Minor issue; does not affect core navigation.	Add automatic confirmation email/SMS. Tradeoff: Requires email/SMS service integration.
2. Training Program Page	Some users unclear about payment requirement before registration.	No clear note about whether training is paid or free.	High – Causes confusion and delays registration	Add "Free/Paid" label with price before registration. Trade-off: Slight UI clutter but higher clarity.
3. News and Alerts Page	Missing share and subscription options.	Lack of interaction features for engagement.	Low – Core information is accessible, but engagement is limited.	Add social share buttons and alert subscription. Trade- off: Slightly increases UI complexity

Member 2: ARIYARATHNA L.M.N.R(IT22547774)

Test case

Name of the Page	Test ID	Task to be given to the user	Expected Output	Actual Output	Result (True/ False)
Login page	1	Try to navigate to the Login Page from the Home Page.	Navigate to the Login Page.	Navigate to the Login Page.	True
	2	Try to log in using valid credentials	Successfully log in and redirect to user dashboard.	Successfully log in and redirect to user dashboard.	True
SLBFE training program page,	3	Try to log in using invalid credentials.	Display "Invalid Username or Password"	Display "Invalid Username or Password" message.	True
	4	Try to navigate to the Foreign Job Vacancies Page.	message. Display list of foreign job vacancies.	Display list of foreign job vacancies.	True
SLBFE News and Alert page	5	Try to filter job vacancies by country or category.	Show relevant filtered job listings.	Show relevant filtered job listings.	True
	6	Try to click a job to view details.	Display detailed job information with apply button.	Navigate to job bank profile section.	True

Task Description

Name of the Participants	Feature/Task 1 - Login Page	Feature/Task 2 – Foreign Job Vacancies	Feature/Task 3 – Job Bank Profile	Note
Job Seeker	Logged in successfully but wanted a "Forgot Password" option.	•	Updated profile easily but profile picture upload failed once.	
Foreign Worker	Faced language difficulty on login labels.	Liked job listings but wanted country flags beside listings.	job history as PDF.	The layout in the status view lacked step guidance for new users.
HR Officer	Logged in smoothly and viewed dashboard.	Found vacancy data helpful but wanted export to Excel.	Needed to view multiple job seekers in a single view.	

Total number of tasks = 8 Total number of successful tasks = 8 success Rate = 100%

Rating of the Data Identify Based on the Task Description

Prototype screen/UI	User's feedback/ problem	Reason for negative feedback	Severity (high/ medium/ low) and justification.	Way(s) to rectify and any tradeoffs
1. Login Page	Missing "Forgot Password" and language toggle.	Limited accessibility and recovery options.	Medium – Login still works but usability reduced. Low – Minor issue; does not affect core navigation.	Add password reset link and Sinhala/Tamil language switcher. Trade-off: Slightly more backend setup.
2. Foreign Job Vacancies Page	Wanted better sorting and country indicators.	Lack of visual cues and sorting tools.	Medium – Users can still find jobs but slower.	Add filters (country, salary, posted date) and country flags. Trade-off: Slightly more data loading time.
3. SLBFE Job Bank Profile Page	Profile photo upload unstable and no download option.	Unclear upload validation and missing export feature.	High – Affects user record accuracy.	Improve upload validation and add "Export as PDF" button. Trade-off: Requires PDF generation backend.

Member 3: MTK Chathuri (IT22548078)

Test case

Name of the Page	Test ID	Task to be given to the user	Expected Output	Actual Output	Result (True/ False)
Complaint Portal Entry Page	1	Try to navigate to the complaint portal entry page from the navigation bar on the Home page.	Navigate to the complaint portal entry page.	Navigate to the complaint portal entry page.	True
	2	Try to navigate to the Home page from the navigation bar on the complaint portal entry page.	Navigate to the Home Page.	Navigate to the Home Page.	True
Complaint Submission Form	3	Try to access the complaint submission form from the complaint portal entry page	Successfully access to complaint submission	Successfully access to complaint submission form.	True
	4	Try to access the enter of personal information in the complaint submission form directly click on the new complaint form.	form. Successfully access to the personal information.	Successfully access to the personal information.	True
Complaint Actions/Status View	5	Try to access the complaint actions/status view by using the complaint portal entry page.	Access to the complaint actions/status view Page.	Access to the complaint actions/status view Page.	True
	6	Try to search complaint progress entering complaint number and passport number.	Display the result with complaint number, passport number, action date, action taken by SLBFE officers and status.	Display the result with complaint number, passport number, action date, action taken by SLBFE officers and status.	True

Task Description

Name of the Participants	Feature/Task 1 - Complaint Portal Entry Page	Feature/Task 2 – Complaint Submission Form	Feature/Task 3 —Note Complaint Actions/Status View
Job Seeker	Try to navigate to the complaint portal entry page from the navigation bar on the Home page.	complaint	Try to access the null complaint actions/status view by using the complaint portal entry page.
Foreign Worker	Found and accessed the complaint portal entry page easily from the homepage.		Struggled to understand The layout which field to fill first in the status view lacked step guidance for new users.
HR Officer	Navigated between the homepage and complaint portal smoothly		Checked complaint null progress successfully and clearly saw the action timeline.

Total number of tasks = 9 Total number of successful tasks = 8 success Rate = 88.88%

Rating of the Data Identify Based on the Task Description

Prototype screen/UI	User's feedback/ problem	Reason for negative feedback	Severity (high/ medium/ low) and justification.	Way(s) to rectify and any tradeoffs
3. Complaint Portal Entry Page	Some users initially overlooked the "New Complaint" and "Check Status" buttons because they blended with the background. Users easily recognized Sinhala, English, and Tamil options but expected hover or highlight effects to confirm selection.	Null	Medium – Poor visibility can cause minor confusion during navigation, but the function remains accessible. Low – Minor issue; does not affect core navigation.	Null Null
2. Complaint Submission Form	A few users struggled to find where to start entering personal information; they scrolled past the initial section.	The layout lacked clear step indication or progress separation between complaint type, personal info, and upload sections.	High – Users may abandon form submission if the flow is unclear.	Introduce a step-by-step guided form (multi-section with progress bar and icons). Trade-off: adds slightly more navigation but improves clarity.

3. Complaint Actions/Status View	Some users were unsure which details to enter first (complaint number or passport number) and couldn't easily compare multiple complaint updates.	Lack of input field labeling guidance and timeline grouping made it confusing.	Medium – Information is available but not well structured for quick understanding.	Add placeholder hints ("Enter your complaint number here") and display actions in a table format with clear headers. Trade- off: slightly denser UI but higher readability.
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Member 4: M.S.T. DARMASENA (IT22553478)

Test Cases

	Test ID	Task to be given to the user	Expected Output	Actual Output	Result (True/F alse)
Search for Licensed Agencies	1	Try to navigate to the agency search page from the homepage.	Navigate to the agency search page.	Navigate to the agency search page.	True
	2	Try to search for an agency using the "Name of Agency" field.	Display a filtered list of agencies matching the search term.	Display a filtered list of agencies matching the search term.	True
	3	Try to use the "Agency	Display a list of agencies	Display a list of agencies	True

	Test ID	Task to be given to the user	Expected Output	Actual Output	Result (True/F alse)
		Directory A-Z" to filter agencies by letter.	starting with the selected letter.	starting with the selected letter.	
Valid Recruitment Agencies List	4	Try to view the "List of Valid Recruitment Agencies" from the search page.	Navigate to the page showing a table of all valid agencies.	Navigate to the page showing a table of all valid agencies.	True
	5	Try to find a specific agency's contact email from the table.	Locate the email address in the correspondin g table row.	Locate the email address in the correspondin g table row.	True
Suspended/Ca ncelled Agencies List	6	Try to view the "List of Temporarily Suspended/Ca ncelled Agencies" from the search page.	Navigate to the page showing a table of suspended/ca ncelled agencies.	Navigate to the page showing a table of suspended/ca ncelled agencies.	True
	7	Try to identify the status and reason for an agency's suspension.	View the 'Status' column which clearly explains the reason.	The 'Status' column shows "- (Contribut Agency)" which is unclear.	False

	Test ID	Task to be given to the user	Expected Output	Actual Output	Result (True/F alse)
Create New Account	8	Try to access the registration form from the main site.	Navigate to the "Create New Account" page with the form.	Navigate to the "Create New Account" page with the form.	True
	9	Try to fill out and submit the registration form with valid details.	Form is submitted successfully, and a confirmation is shown.	Form is submitted successfully, and a confirmation is shown.	True

Total number of tasks = 9

Total number of successful tasks = 8

Success Rate = 88.88%

Task Description

Name of the Participant s	Feature/Tas k 1 - Agency Search	Feature/Tas k 2 - Valid Agencies List	Feature/Tas k 3 - Suspended Agencies List	Feature/Tas k 4 - User Registratio n	Note
Job Seeker	Successfull y searched for an agency by name.	Found a valid agency but found the table cluttered and hard to read.	Could not understand what "- (Contribut Agency)" meant in the status column.	Registered a new account without any issues.	The user was confused by technical jargon in the suspended list.

Name of the Participant s	Feature/Tas k 1 - Agency Search	Feature/Tas k 2 - Valid Agencies List	Feature/Tas k 3 - Suspended Agencies List	Feature/Tas k 4 - User Registratio n	Note
Foreign Worker	Used the A-Z directory easily to find an agency.	Scrolled through the long list but could not find a 'Search within page' function.	Wanted to know why an agency was suspended but the reason was not provided.	The 'Get Code' step for mobile verification was clear and worked.	The user felt the valid and suspended lists were not mobile-friendly.
HR Officer	The search function was sufficient for quick checks.	Needed to contact multiple agencies; copying phone numbers from the cluttered cell was difficult.	The list was useful, but sorting by suspension date would be helpful.	N/A - Did not test registration as it's not part of their role.	The officer needed more advanced data manipulatio n features.

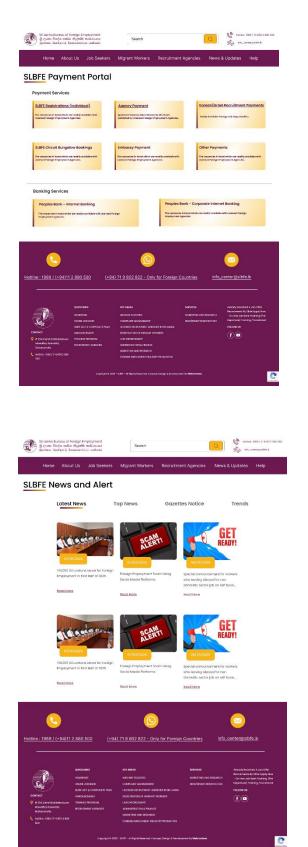
Rating of the Data Identified Based on the Task Description

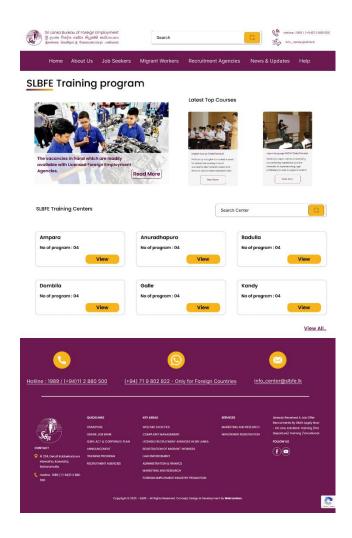
Prototype screen/UI	User's feedback/probl em	Reason for negative feedback	Severity (high/medium/lo w) and justification	Way(s) to rectify and any tradeoffs
1. Search for Licensed Agencies	Users found the A-Z directory and search box functional but basic.	The search lacks advanced filters (e.g., by district, license type).	Low - The core functionality works, but lacks efficiency for power users.	Add filter dropdowns for District and License Status. Trade-off: A slightly more complex UI for significantly improved utility.
2. Valid Recruitment Agencies List	The table is overcrowded; phone numbers are in one cell without formatting; no search, sort, or pagination.	Poor informatio n design and lack of basic data table features.	High - This makes the data practically unusable for finding specific information among 974 entries, leading to user frustration and task abandonment.	Implement a searchable, sortable, and paginated table. Format phone numbers into a list. Trade-off: Requires more development effort for a fundamental ly necessary feature.
3. Suspended/Cancel led Agencies List	Status labels like "- (Contribut Agency)" are cryptic and meaningless to	Use of internal jargon instead of plain language	High - Defeats the purpose of a public list meant for consumer protection and transparency.	Replace jargon with clear statuses (e.g., "Licence

Prototype screen/UI	User's feedback/probl em	Reason for negative feedback	Severity (high/medium/lo w) and justification	Way(s) to rectify and any tradeoffs
	users. No explanation for suspension.	(e.g., "Contribute d Agency"). Lack of transparenc y.	Users cannot make informed decisions.	Cancelled," "Temporaril y Suspended") . Add a column for "Reason." Trade-off: Requires backend data structure changes to include reasons.
4. Create New Account	The registration form was completed successfully by all test users.	No significant usability issues were reported for this specific form in the tests.	Low - The form is straightforward and performed its intended function without confusion in this test scenario.	No immediate rectification needed based on the provided feedback.

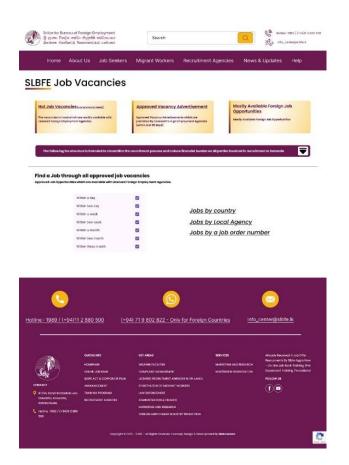
Screenshots of the user interfaces

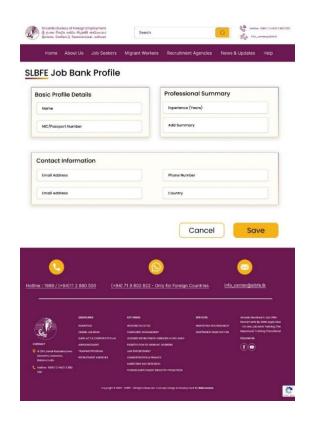
RAJAWARDHANA M B G T N - IT22063564

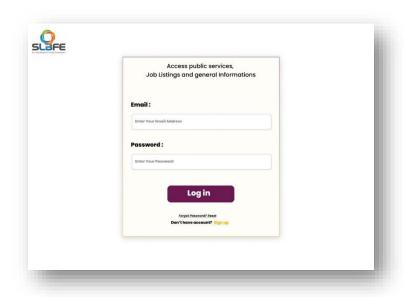




ARIYARATHNA L M N R - IT22547774

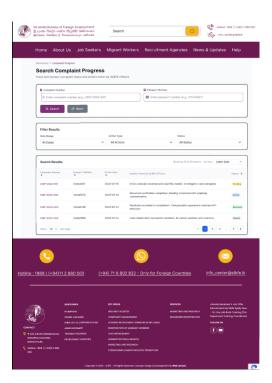


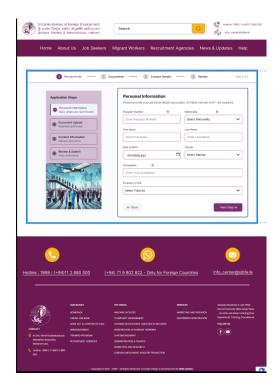




MTK Chathuri - IT22548078

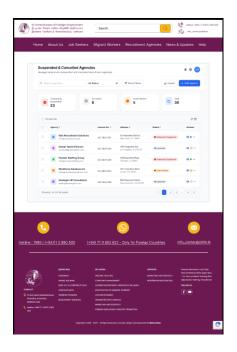


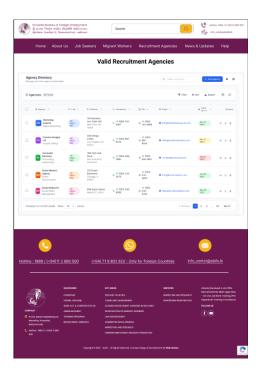


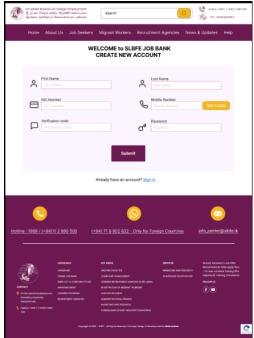


M.S.T. DARMASENA - IT22553478









Figma Link: -

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Grant Chart

