Project Report

Product Name	Advanced Certificate in Web Development	
Qualification Name (ITSF)	NICF-Advanced Certificate in Information Technology (Software & Applications)	
Product Name	NICF-UI Frameworks	
Module Name (ITSF)	NICF-UI Frameworks	

Student name			Assessor name
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Date issued		Completion date	Submitted on
14/07/2022	16	/07/2022	22/08/2022

Project	Design & Develop Front End Community Portal RIA
title	application.

Learner declaration

I certify that the work submitted for this assignment is my own and research sources are fully acknowledged.

Student signature: Chathushi Date: 22/08/2022

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01) Project Background

Project Definition

ABC Jobs Pte Ltd as a website developer to develop a community portal for software developers. The scope of the project is to design a community portal similar to Linkedin.com. The platform is primarily used for professional networking and career development, allowing job seekers to post their CVs and job to employers.

According to this project

Using the registration page user can register to the community portal and using the login form users can log in by entering their email/username and password. Only registered users can log in to their profile (community portal). If a user forgets their password, they can recover the password also. After registration users can see user profiles and they can update some features in it. And they can find people, using the search bar in it, and can connect with them also. Mainly angular, HTML, CSS, and bootstrap are used to implement this community portal.

Project Objective

• Create Wireframes & Prototypes

The software programmers of ABC Jobs Pte Ltd make wireframes and prototypes of what the community portal needs Such as the Community portal Home page, Registration page, registration confirmation page, Update profile page, Search users page, List search results, Public profile page, Registration confirmation email, login page, Forget password page and password confirmation page

Angular Installation & Working on it

- Step 1 Install NodeJS
 - ✓ Follow the link https://nodejs.org/en/download/
- **Step 2** Download the node.js installer for Windows and install it.
 - ✓ npm -v (type in cmd)
- **Step 3** Install TypeScript
 - ✓ Open the link https://www.npmjs.com/package/typescript
 - √ npm install -g typescript (type in cmd)
- **Step 4** Install Angular CLI (Angular command line interface)
 - ✓ Open the link https://cli.angular.io/ and follow the instructions to install Angular CLI and to create your first Angular app.
 - ✓ npm install -g @angular/cli
 - √ ng new <file name>
 - ✓ open local host: 4200 using command
 - √ ng serve --open
- **Step 5** After successful installation, we can implement a community portal

• Functional Requirements

- ✓ **Community Portal Home Page** Page with Login and Sign in button
- ✓ Registration page Form to register to the community portal
- ✓ Registration thank you Page Thank you page for registration

- ✓ Login Page Login form to ententer the community portal
- ✓ Forgot Password user can request to reset their password
- √ Forgot password confirmation page To confirm Email
- ✓ Public profile Once users register to this community portal, they can see their profile
- ✓ Update Profile Using this users can update their profile like profile picture, skills, education etc.
- ✓ Search user page users can search other users using this page.

User Research

- ✓ Conducting user interviews
- √ Ideations Creating personas

UX Testing

The simplest definition of UX or user experience testing is the process of testing all the different elements and aspects of an application to arrive at an iteration that provides the best possible user experience.

Tools and Platforms used

• Visual Studio Code - To implement this Community portal

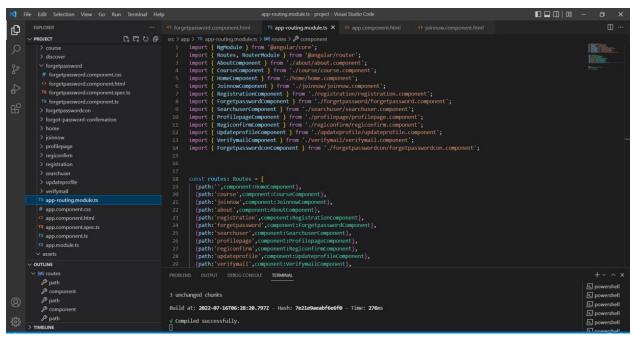


Figure 1: Screenshot of visual studio code

Axure RP 10 - To create Prototypes

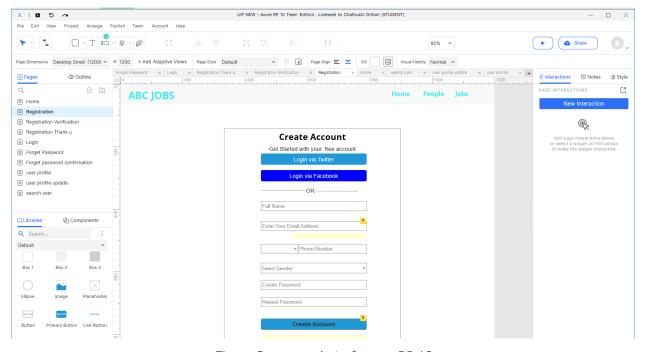


Figure 2: screenshot of axure RP 10

Angular CLI – To develop the application



Figure 3:Screenshot of Angular CLI

formerly Draw.io - To create flow charts

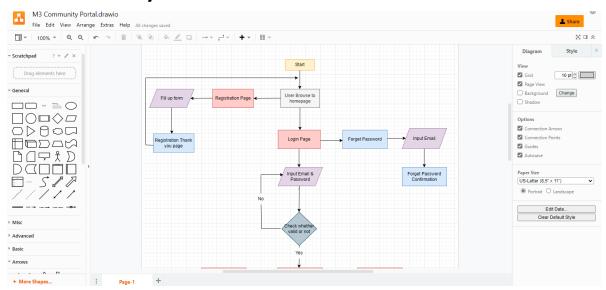


Figure 4: Screenshot of Regi. Drawio

• Chrome Browser To run the application

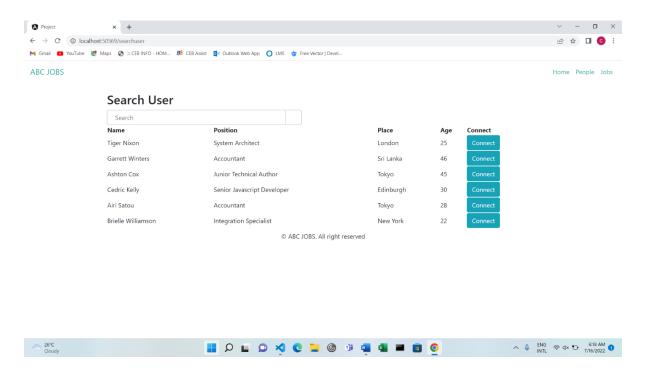


Figure 5:Screenshot of Google Chrome

Microsoft Excel – To calculation

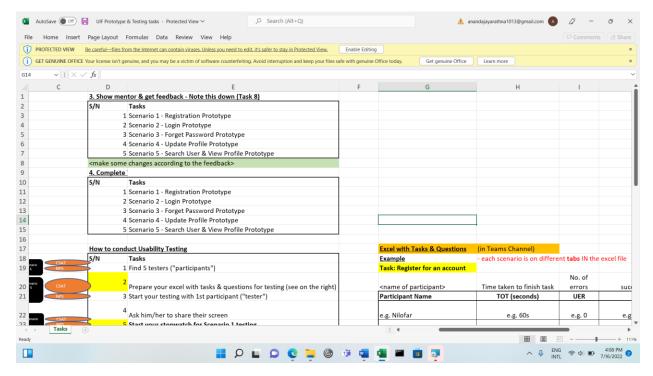


Figure 6:Screenshot of Microsoft Excel

Microsoft Word – To create a project Report

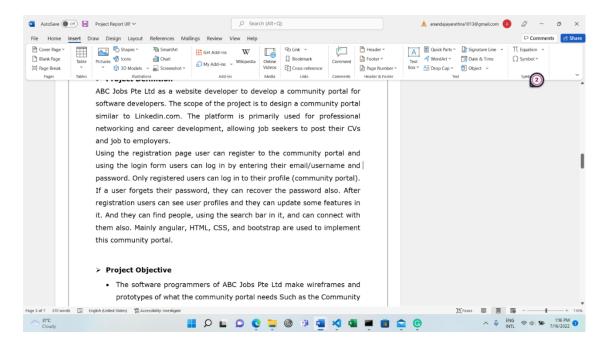


Figure 7:Screenshot of Microsoft Word

Microsoft PowerPoint – To create Project Presentations

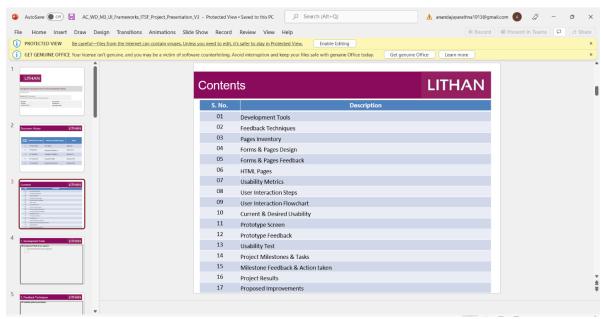


Figure 8: Screenshot of powerpoint

02) Business Process and Solution Architecture

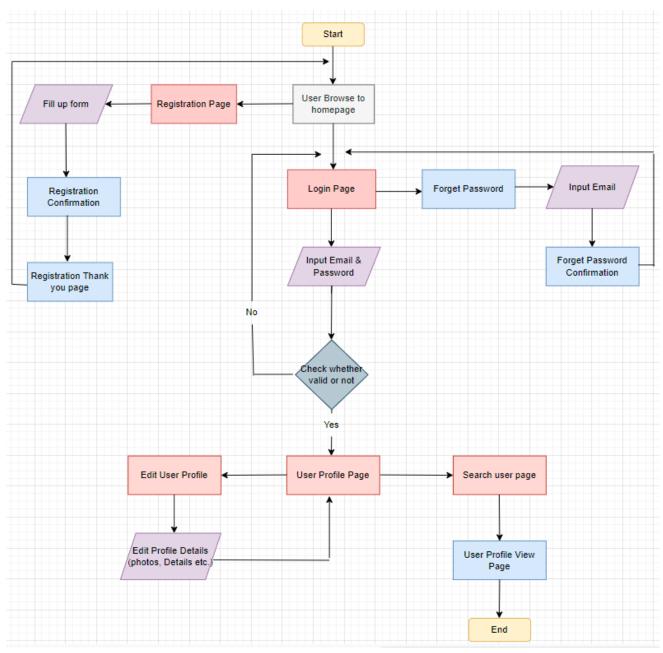
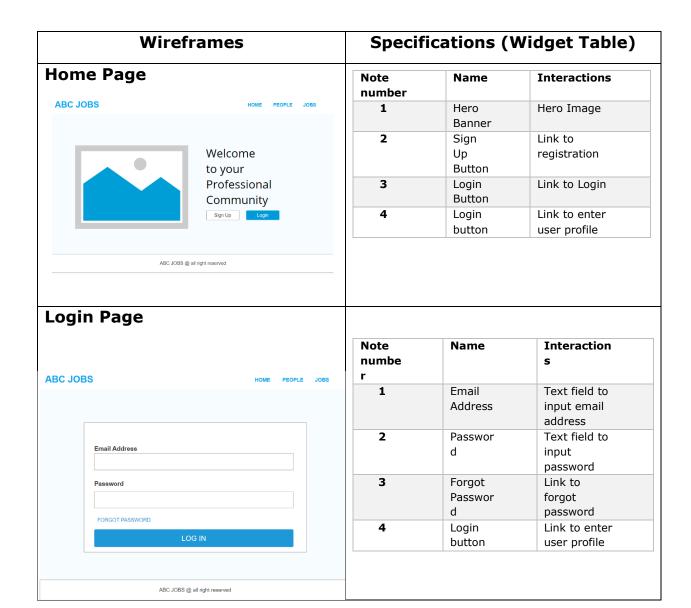
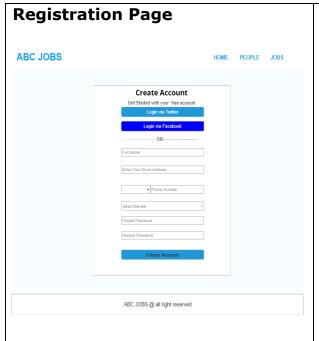


Figure 9:Business Process and Solution Architecture





Note numbe r	Name	Interaction s
1	Login as Twitter button	Link to login twitter
2	Login as Faceboo k button	Link to login Facebook
3	Full name	Text field to input full name
4	Email Address	Text field to input email
5	Phone number code	Dropdown list to select country code
6	Phone number	Text field to enter phone number
7	Create Passwor d	Text field to enter new password
8	Repeat passwor d	Text field to repeat password
9	Create account button	Link to create account

Forgot Password page

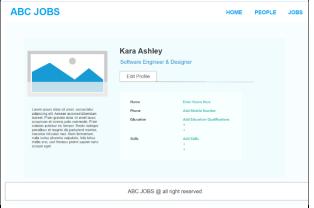


Note numbe r	Name	Interaction s
1	Email Address	Text field to enter email
2	Reset Passwor d button	Link to rest password
3	Register	Link to registration
4	Forgot passwor d	Link to Forgot password
5	Login	Link to login



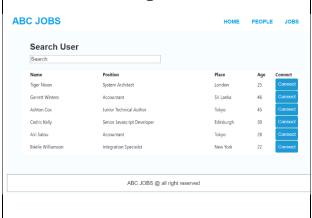
Note numb er	Name	Interactio ns
1	Forget Password Confirmati on button	Link to login

Update Profile page



Note numbe r	Name	Interaction s
1	Profile photo	Update Profile photo
2	Edit Profile button	Link to edit profile
3	Name	Edit name text field
4	Phone	Edit phone number text field
5	Educatio n	Add educations
6	Skill	Add Skills

Search User Page



Note numbe r	Name	Interaction s
1	Search bar	Search user text field
2	Lists of user	Search user list
3	Connec t button	Link to connect user profile

03) Techniques and methods for gathering and analyzing user feedback.

Live chats, short surveys, and social media are among the most common tools for gathering user feedback. Live chat is a way of direct communication with your customers. You can ask specific real-time questions or sort incoming feedback.

There are 2 types to collecting data, such as

Quantitative

Quantitative data is, quite simply, information that can be quantified. It can be counted or measured, giving a numerical value such as length in centimeters or income in dollars. Quantitative data tend to be structured in nature and lend themselves to statistical analysis.

- ✓ Surveys, tests, or questionnaires administered in groups, oneon-one, by mail, or online
- ✓ Reviews of records or documents using rubric: or
- ✓ Observations

Qualitative.

Qualitative data refers to both descriptive and descriptive data. Quality data can be monitored and reported. This data type is non-numeric in nature.

- ✓ Shadow Sessions (Observe the user when using the program)
- ✓ A/B Testing (Compare between 2 programs and decide which one
 is better)

Understand the overview of the Community Portal from the Project Mentor.

No	Questions	Answers
01	What are the Community Portal	LinkedIn
	that you are using?	
02	How many times a day do you	About 3 or 4 times

	use it?	
03	From which device do you log in?	Laptop or mobile phone but mostly Laptop
04	Why do you use it?	Find out what's going on in the IT (Software) industry. Such as what are the updated companies, what are the positions in those companies etc.
05	Can you share your experience with others?	Yes

Persona

List the different personas who will be using the Community Portal, with a brief description of each of the personas.

No	Persona	Brief Description
01	Ashley (Unemployed)	Ashely is a 26 years old girl who is a web designer. She wants to be a web designer in the World Recognize IT Company
02	Kevin (Graduated)	Kevin is a 20 years old boy who is a school leaver. He archived excellent grades at GCE A/L Combined Maths, Physics, and IT and graduated from NSBM University. He is keen to pursue a career in the IT industry.
03	Nethu (Employed)	Nethu is 35 years old Nurse who cares for people recovering from surgery. Has been a nurse for 8 years. She likes having the opportunity to help people feel better.

Create a Personas profile with Demographics, Behaviors & Beliefs, Characteristics & Goals for 2 Personas defined.

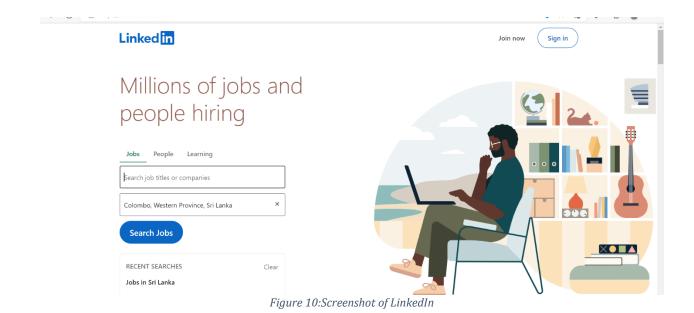
Persona (1):	Kevin
Demographics:	20 years, Male, Single, Sri Lanka, School Leaver
Behaviors and Beliefs:	Behaviors – Finding everything about computer software Beliefs - "Cast your net wide. Be courageous about meeting people, about having a go at something you haven't done before."
Characteristics:	Hard-Working Active Brave
Goals:	To be a Software Developer, Hacker

Persona (2):	Nethu
Demographics:	35 years, Female, Married, Romania, Nurse
Behaviors and	Behaviors – Finding all-new medical methods in the
Beliefs:	world
	Beliefs – "I can do anything I want to do"
Characteristics:	Hard-working
	Responsible
Goals:	More interactions with patients
	She wants to provide the best care

04) User Experience on 2 community portal websites

1. Linkedin.com

When I visit linkedin.com, my eyes are instantly drawn to a beautiful color combination. The text is easy to read and easy to find what I want to do. Then I tried to register by clicking the "join now" button. The registration form was good and easy to fill with validation to avoid user errors. After signing up I logged in and it was very smooth transitioning from page to page. I like the flow of the site.



2. Glassdoor.com

When I go to the glassdoor website, the home page is not really good when I first arrive on the website. We can directly use this community portal. I tried to register to the website. It takes little time to sign up process. They also provide way to register with google or Facebook that speeds up the registration progress for me. After that I tried to log in to the website and overall the layout and color of the website is very good and I like the color too.

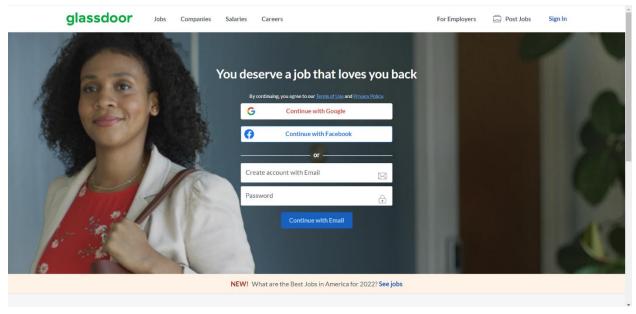


Figure 11:Screenshot of Glassdoor.com Home Page

05) Analyze the user experience based on the observations

✓ Likdein.com

• <u>Scenario</u> - Register Page

The opportunity to register on Linkedin.com is a great experience. The way the registration form pops up first displayed 2 fields, email and password, this way the user won't experience too many forms at once and won't get bored fast. Validation also alerts users for invalid or incorrect data entry.

Linkedin.com also provides registration with Google, which speeds up the process of registering on the site. The page color is nice and simple.

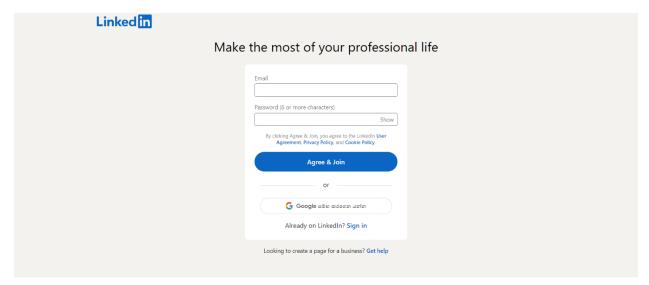


Figure 12:Screenshot of LinkedIn Registration Form

Scenario: Login Page

Linkedin.com login option provides a "Show" password feature, so if the user types in the correct password, it's easy. The login page also provides a forgotten password, which is great for users who have forgotten their password. The Linkedin.com login page also has a feature to remember login history, so when you log out and want to log back in, you need to click on your previous account and type the password again to enter the page.

Linked in

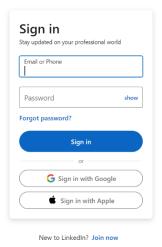
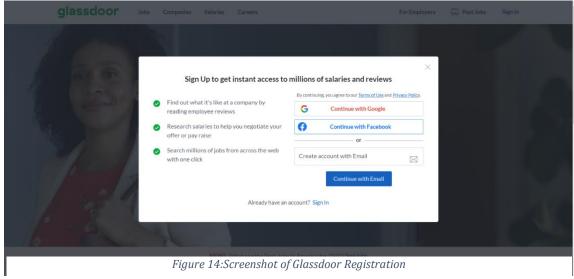


Figure 13:Screenshot of LinkedIn Login Form

√ Glassdoor.com

• Scenario: Registration

The opportunity to register on Glassdoor.com is a great experience. The way the registration form pops up first displayed 2 fields, email and password, this way the user won't experience too many forms at once and won't get bored fast. Validation also alerts users for invalid or incorrect data entry. Glassdoor.com also provides registration with Google and Facebook which speeds up the process of registering on the site. The page color is nice and simple



Scenario: Login

Glassdoor.com login option is directly provided in the home page. User can easily log in to this community portal. They added validations also. So if the user types in the correct password, it's easy. The login page also provides a forgotten password, which is great for users who have forgotten their password. The Glassdoor.com login page also has a feature to remember login history, so when you log out and want to log back in, you need to click on your previous account and type the password again to enter the page.

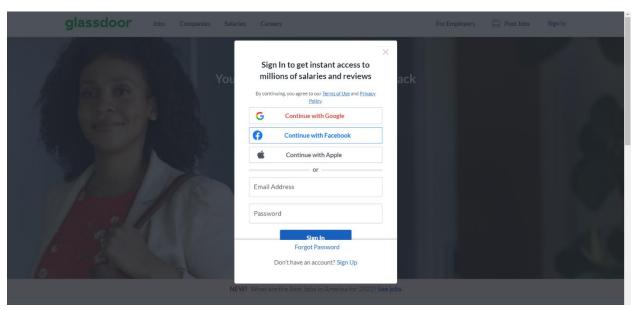


Figure 15:Screenshot of Glassdoor Login

06) The performance level & gaps between user experience & desired user experience along with level of user engagement

• LinkedIn.com

Scenario	TOT (seconds)	Expect	Performance	UER
		тот	Gaps	
Register	65	60	5	2
Login	20	22	2	0
Forgot	40	70	30	0
Password				

• Glassdoor. com

Scenario	TOT (seconds)	Expect	Performance	UER
		тот	Gaps	
Register	50	60	10	0
Login	30	20	10	2
Forgot	40	22	18	0
Password				

••

07) Develop and Document 3 user metrics

- TOT (Time on Task): How long the time that user take to complete the task
- UER (User Error Rate): Number of the mistakes that user make
- TSR (Task Success Rate): Success or fail when do the task. Success is 1 and fail is 0

√ Home Page

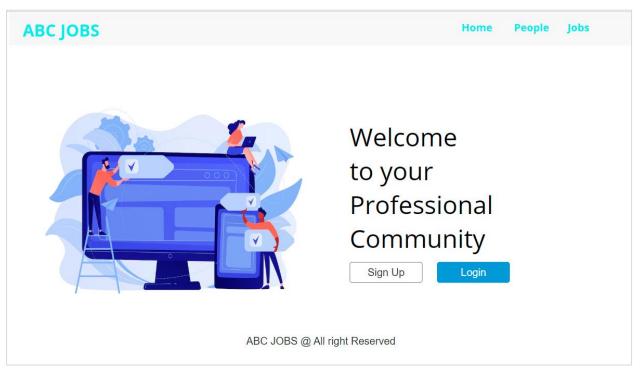


Figure 16:Screenshot of home page(prototype)

✓ Login Page

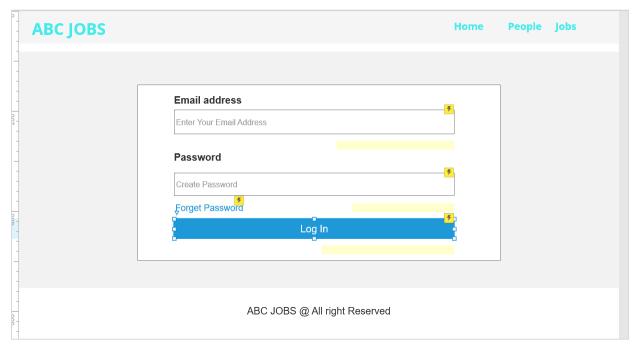
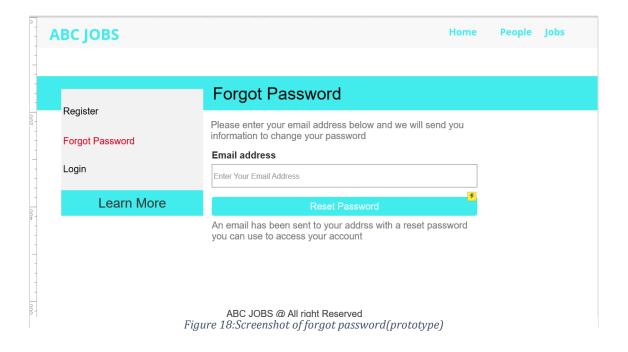


Figure 17:Screenshot of Login page (prototype)

√ Forgot Password Page



√ Forgot Password Confirmation

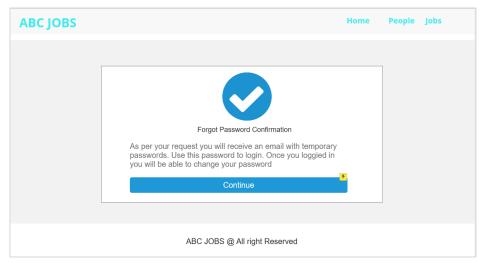


Figure 19:Screenshot of forgot password confirmation (prototype)

✓ Registration Page

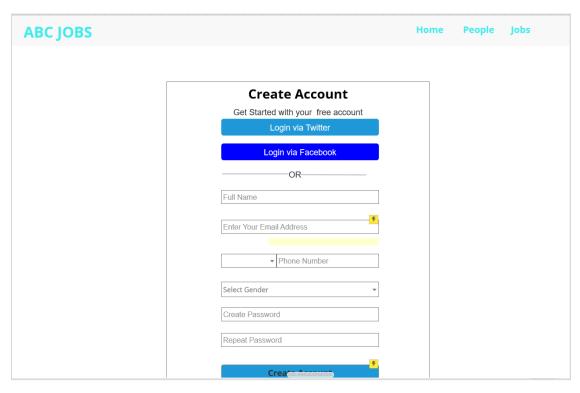


Figure 20:Screenshot of registration (prototype)

✓ Registration Confirm Email

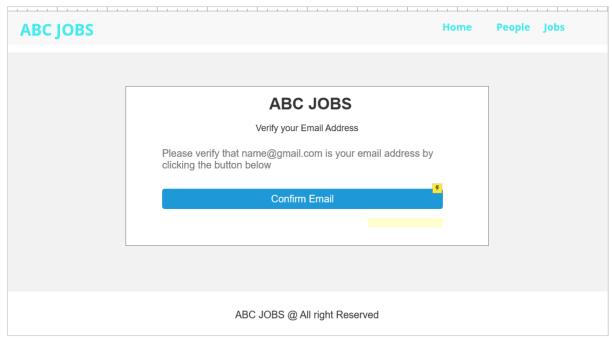
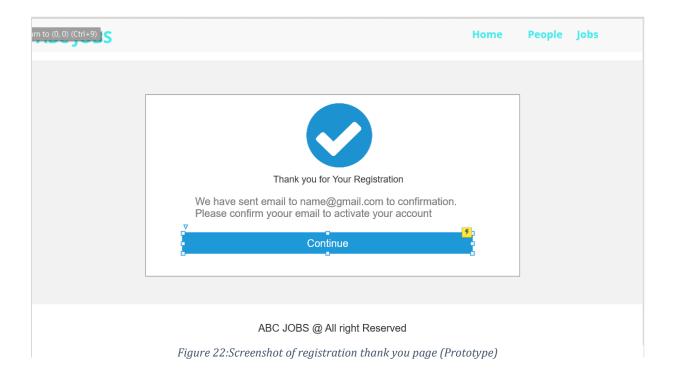


Figure 21:Screenshot of registration confirmation (prototype)

✓ Registration Thank you



√ User Profile Page

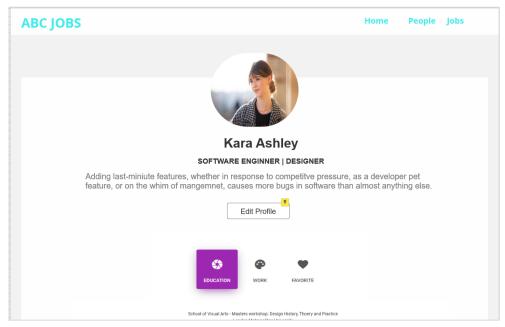


Figure 23:Screenshot of user profile page (prototype)

✓ Update Profile Page

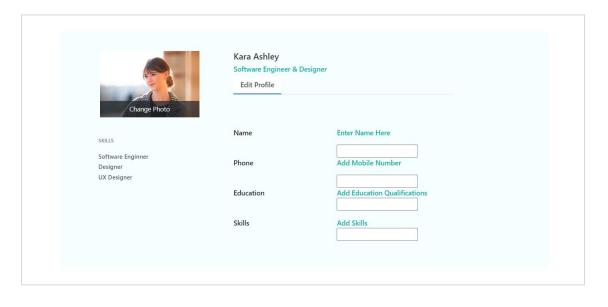


Figure 24:Screenshot of update profile (prototype)

✓ Search User Page

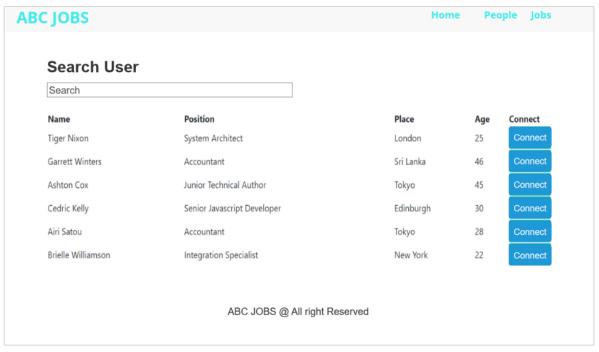


Figure 25:Screenshot of search user page (prototype)

07) User Interaction Process along with the flow chart

Scenario 1: Login Page

Interaction Process

Form Portal Home Page

- User clicks on "Login" button link and reaches the Login page
- User is required to key in all the required information (Email address and password)
- Upon clicking on the login button validation checks will be performed and error messages will be promoted
 - If cannot remember password user can click "Forgot password" link and reaches the forgot password page to reset password
 - User is required to add email address
 - Upon clicking on reset password button user can reset password
- If their no invalid details user will enters to the community portal successfully

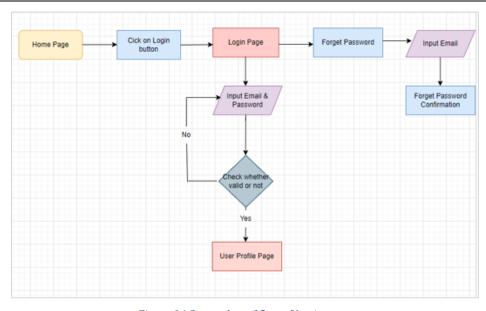


Figure 26:Screenshot of flow of Login

Scenario 2: Registration Form

Interaction Process

Form initial home page

- 1. User click on the "sign up" button reaches the login page.
- 2. User is required to key in the required information(first name last name email and password) and click on the "sign up" button
- 3. Upon clicking on the sign-up button, validation checks will be performed and error messages will be prompted to the user if any required information is missing.
- 4. Displaying the Registration confirmation page
- 5. Upon clicking on the "Continue" button reaches the registration confirmation mail page
- 6. Upon clicking the "Verify Email address" button reaches the Login page
- 7. User clicking "sign in" link reaches the login page

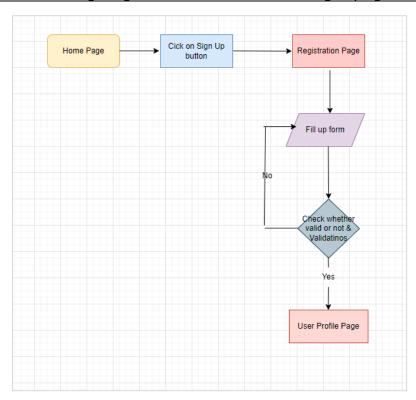


Figure 27: Screenshot of Flow of Registration

08) File for the details of the widget prototypes

√ Registration Page

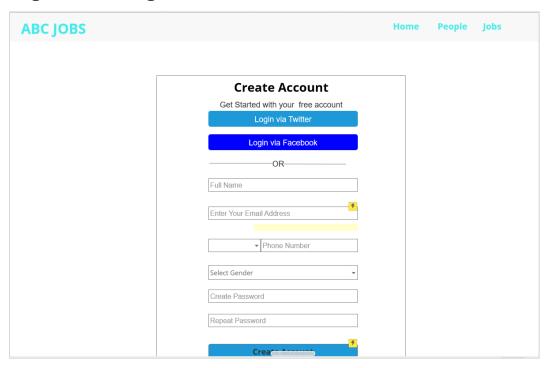


Figure 28: Screenshot of Registration Page

Note number	Name	Interaction	Note
	Email Address	CLICK OR TAP Case 1 If text on equals "admin@gmail.com" + Case 2 Else If true Show/Hide Show Email error message +	Text field to input email
	Create account button	■ CLICK OR TAP ■ Case 1 If text on FullName Text Field equals "admin" and text on Signup-Email Text Field equals "admin@gmail.com" and text on phone Text Field equals "0123456789" and text on Signin- CPassword Text Field equals "admin" and text on Signin-Password Text Field equals "admin" Open Link Registration Verification + ■ Case 2 Else If true Show/Hide Show signup-error +	Link to create account

• •

✓ Login Page

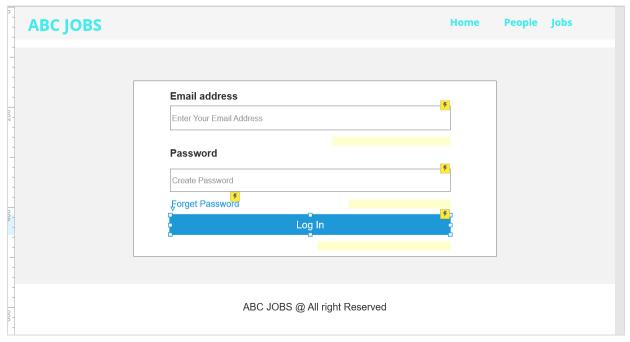


Figure 29:Screenshot of Login page

Note	Name	Interactions	Note
number			
1	Email Address	- CLICK OR TAP - Case 1 If text on login-Email Text Field equals "admin@gmail.com" + - Case 2 Else If true Show/Hide Show error error message +	Text field to input email address
2	Password	CLICK OR TAP Case 1 If text on login-Password Text Field equals "admin" + Case 2 Else If true Show/Hide Show p-error message +	Text field to input password
3	Forgot Password	Open Link Forget Password	Link to forgot password
4	Login button	■ CLICK OR TAP Case 1 If text on login-Email Text Field equals "admin@gmail.com" and text on login-Password Text Field equals "admin" Open Link user profile + Case 2 Else If true Show/Hide Show login-error message +	Link to enter user profile

√ Home Page

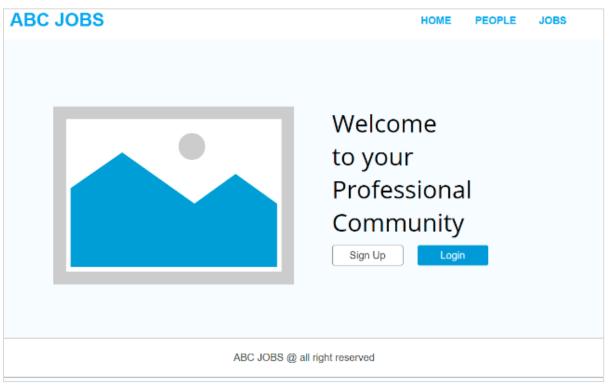


Figure 30:Screenshot of Home page

Note number	Name	Interactions	Note	
1	Sign Up Button	Open Link Login	Link to registration	1
2	Login Button	Open Link Registration	Link to Log	jin

09) Usability tests and execute the usability test with a user

Registration

Participant Name	TOT (Seconds)	UER	TSR	Observation	Feedback
Chathu	47	0	Success	All good	No feedback
Tharuka	53	2	Success	Not entering phone code	Easy to register
Thusith	39	1	Success	Not select gender	Better to add county field
Cara	41	0	Success	All good	You could make the font size little bit bigger
Rahul	43	0	Success	All good	Change colors

	тот	UER	TSR
Average Score	30	30%	100%

Analysis & Suggested

• password input field not yet been added a show password feature

Improvements

• adding validations for text fields

• Update Profile

Participant Name	TOT (Seconds)	UER	TSR	Observation	Feedback
Chathu	32	0	Success	All good	Try to add profile cove
Tharuka	52	1	Success	Trying to change email	Add dark colors
Thusith	44	0	Success	All good	You could make the font size little bit bigger
Cara	32	1	Success	Trying to change email	No feedback
Rahul	20	0	Success	All good	Add other qualification section

	ТОТ	UER	TSR
Average Score	36%	28%	100%

Analysis & Suggested

• add phone number change filed

CSAT

Participant Name	Satisfaction Score	Reason	
Chathu	9	Good color palette	
Tharuka	10	Easy to Handle	
Thusith	7	Cool website	
Cara	8	Superb website	
Rahul	8	like the color	

Average CSAT	20%
Score	

NPS

Participant Name	Promoting Score	Reason
Chathu	9	Good functionality
Tharuka	5	Could be improved at some point
Thusith	9	Easy to use
Cara	8 Easy to handle	
Rahul 7		Cool website

NPS 40%

10) Gather feedback for the prototypes and document, make suggestions for improvement.

C	Forms / Pages	Feedback Received	Modifications Implemented
01	Update Profile Page	It would be great if you could upload a cover photo	Add cover photo section

Before

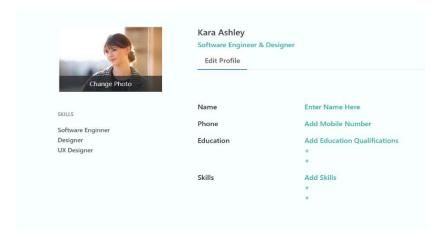


Figure 31:Screenshot of profile page before edit

After



11) Prototype and Wireframe File Wireframes.rp Prototypes.rp

