

E/L A02 - Project Handbook

ITECH3208 – PROJECT 1

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Revision

Use whichever style of versioning you prefer.

You may also include the main authors of each change and the list of pages that have been changed

Version Number	Date approved	Approved by	Description
1.0	2016-01-01	Team Member	The initial release of the plan

Preface

Describe the purpose and audience of this document, in your own words.

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Vision Statement

Overview

In this project, our team will be developing designing and evaluating a Moodle interface for Employability. Life provides a variety of online learning courses, in which we will be specifically working on the course Career Intelligence and developing a Career Intelligence web app that will help the client and students enrolled in that subject build their CVS Interactively. By the end of the project client, students or any individuals looking for career growth can be familiar with all the tools and technologies they should be learning to get effective in their respective industries. It must have a simple interface so that students can learn at their own pace. The key advantage of developing an easy and interactive interface platform is that it may keep students more engaged and inspire them to enrol in such Employability. life company courses and use such websites to enhance their career.

1. Introduction

1.1 Project Overview

The primary purpose of Career Intelligence development as part of E-learning product development is to provide an appropriate platform for students and to boost their engagement on that platform. The Employability. life company's key demand for career intelligence is the creation and deployment of the Career Intelligence web app, which is designed to aid learners in building interactive CVs.

The main deliverable of the project is the Career Intelligence web app. We will develop this web app in two phases. In the first phase, we are building the prototype and initial credentials of the web application. The main things required to successfully work on web app development are a brief knowledge of HTML, H5P, CSS, JAVASCRIPT, MYSQL, etc. There are no budget requirements for our project.

1.2 Project Deliverables

Throughout the project, the following objectives will be met:

- Develop requirements and conduct a review of current approaches
- Verification and testing of all H5P features
- Design and execution of the Career Intelligence web app, which allows students to develop their CVs actively by interacting with experts.

Deliverables	Approximate time
Initial Prototype or wireframes of web app	9 th May 2022
Sprint 1 Initial building of web app	Mid-week of June
Basic Frontend of the Web app	End of June
Whole working Web app	Next semester

1.3 Evolution of the Handbook

The handbook is a crucial part of the phase 1 development of the project. It is an outline or an overview of the whole project. Handbook is updated after every progress of the project. Also, the Handbook is updated after the client meetings and group meetings of the project team according to the suggestions and ideas discussed in the meeting. Scrum Master and Change Manager of the team are responsible for the update and changing control of the handbook according to the project needs. The teammates of the project are notified about the changes in group meetings and MS teams as parts are divided for each of the team members to work upon.

1.4 Reference Materials

This is a complete list of materials referenced elsewhere in the handbook, such as style guides, coding standards, documentation standards, methodologies, etc.

Indicate if you haven't used any external references.

Use any style that you like. If you don't know any good ones, then use IEEE or APA style

<http://www.ieee.org/documents/ieeecitationref.pdf>

<http://www.apastyle.org/>

1.5 Definitions and Acronyms

Term	Definition
API	Application Platform Interface
Figma	UI designing free platform

2. Organization

2.1 Process Model

In this project, we have planned to take two sprints to complete the first part of the project. We need to evaluate all the functionality of existing approaches available and the development of the Career intelligence web app that helps learners create their cv interactively. So, for the first sprint, we will be mostly focusing on research, defining UX strategy and developing wireframes for the website. We will be using the Figma app to define different UX strategies and design wireframes as the UX designer is adaptive to this tool. Also, for the development of the first homepage, we will be using a notepad++ editor for coding the website.

For the second sprint, we will be designing a template for CVS and developing a full fetch website Career Intelligence app and testing the functionality of all the websites that will help the users to develop their CVs interactively. Different APIs will be used to develop a cv.

All the progress of the project will be managed on GitHub to get access to all the team members, clients, and supervisors. We will be organising discussion meetings with the client and presenting the outcomes of the sprint and receiving the feedback. Apart from this scrum meetings will be conducted for different product backlogs.

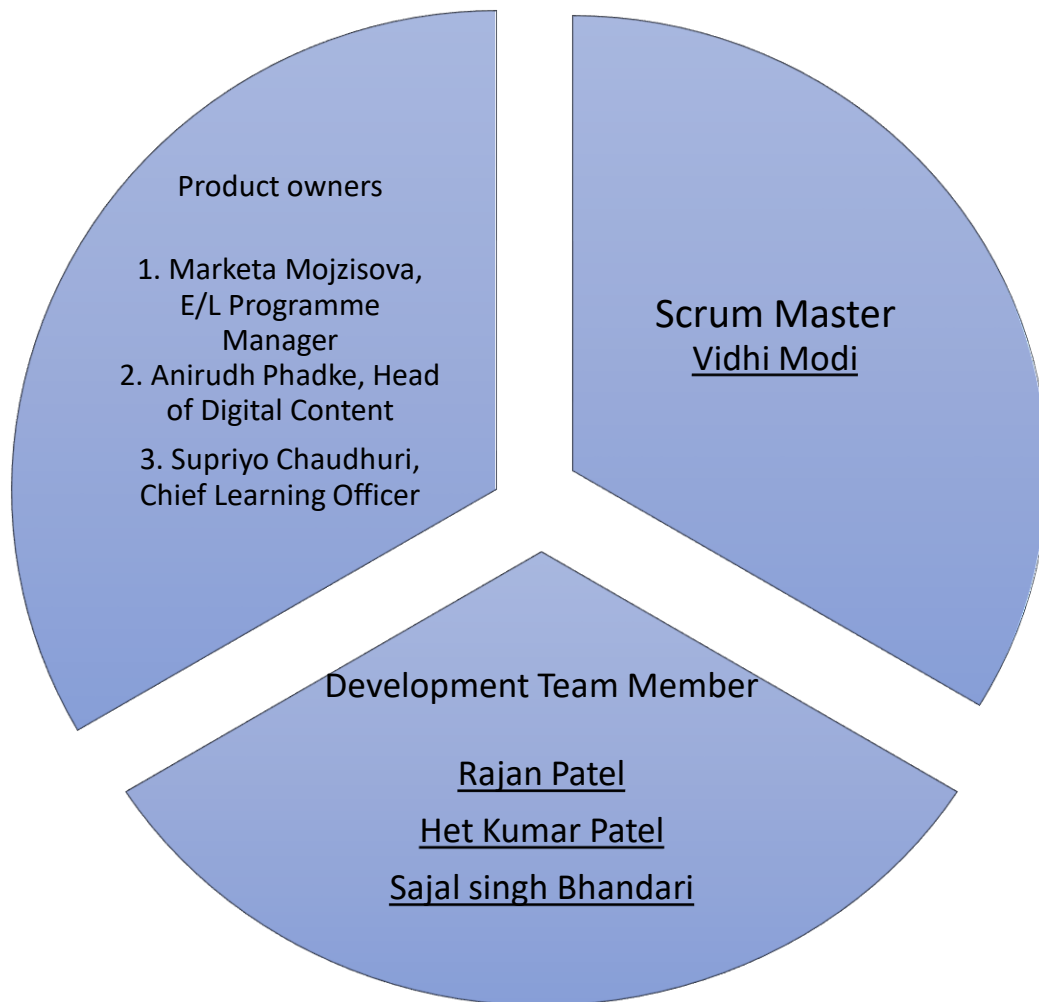
FUNCTIONS AND ACTIVITIES	TIMELINE
INITIAL PROJECT TEAM MEETING	1 week of April 2022
CREATE A REGISTRATION FORM FOR CV WITHIN MINUTES AND THE HOMEPAGE OF CAREER INTELLIGENCE.	28/04/22 Meeting with Client. 30/04/22 Meeting of teammates.
CREATING WIREFRAME AND PROTOTYPE	06/05/2022 Meeting with Anirudh Initial working on a prototype.
BUILT PROTOTYPE AND PRESENTATION	12/05/22 Group Presentation.
SPRINT 1 INITIAL BUILDING OF WEB APP	Mid-week of June
BASIC FRONTEND OF THE WEB APP	End of June
WHOLE WORKING WEB APP	Next semester

Sprint 1 and Sprint 2 Process Model

Requirement	Conditions of satisfaction	Tasks & Estimates
As a user, I want to log in through Employability. Life-course id on Career Intelligence website.	<p>Employability. life provides a connection to a career intelligence website in the process of career intelligence.</p> <p>That URL takes you to a login page.</p> <p>The user's supplied email id and password should be sent to the login page for verification.</p> <p>The user should be able to log in using the username and password after being validated.</p>	<p>T1 A web-based form should be available on the web page for the user to input their email address and password – for one day (Vidhi)</p> <p>T2 The user will be able to submit after entering their password online– ½ days (Sajal)</p> <p>T3 The entered data must be checked against the database, (Rajan) and the user must be able to log in and diverted to the successfully logged in page– (Het) for 2 days</p>
As a user, I want to register as a new user.	<p>The login page has a new registration link.</p> <p>A registration form appears after clicking the link.</p> <p>For verification, the form should send out an email to the user's supplied email address.</p> <p>The user should be</p>	<p>T4 The user's personal information should be entered into a registration form on the web page – for 1 day (Vidhi)</p> <p>T5 The user is required to submit the application form online, which will update the database with information –</p>

	able to log in using the username and password after being validated.	<p>for 1 day (Sajal)</p> <p>T5 In the database, create a user table with the appropriate metadata entered by the user - 2 days (Rajan)</p> <p>T6 Create a web page to demonstrate the successful login creation – 1 day (Het)</p>
As a user, I want to provide the details to help me make my CV.	<p>Create a new CV tab Must be present on the dashboard.</p> <p>A Tell us more about yourself page appears after clicking the tab.</p> <p>The user can be able to input details of himself on the form.</p> <p>For the record, the data entered in the form must be saved in the database.</p>	<p>T7 Create a new CV tab available on the front end of the dashboard of the website – 1 day (Vidhi)</p> <p>T8 Question & Answer kind of form available for the user after clicking the CV tab. 2 days (Rajan)</p> <p>T9 Users can submit the form and get a review based on their selection – in 3 days (Het & Sajal)</p>

2.2 Organizational Structure



This is the structure of our Project team and we have further allocated the major roles of every team member in the group which are mentioned below:

- Vidhi Modi (30391470) – Project Manager and Scrum Master
- Rajan Patel (30391474) – Process Analyst and Change Manager
- Sajal Singh (30376237) – Developer and UX/UI Designers
- Hetkumar Patel (30391427) – Operational Manager and Analyst

The Scrum roles are decided based on the individual skills and abilities in a specific area of work. Changes are handled in such a way that the project's standards remain intact. A revised Plan incorporates all authorised revisions. All project stakeholders must agree on changes to the goods, which will be reflected in an updated description of the project scope.

2.3 Organization Boundaries and Interfaces

It is critical to recognise the boundaries and interfaces that people and organisations respond to differently in different contexts. Stakeholders' ability to influence organisational policy, strategy, and projects are determined by their relationship to the organisation or the issues at hand. Our project team and client are maintaining professional terms with each other while working on the project.

In the project team, the roles are specified based on the work performed by individual team members. The role of the client is to specify the requirement of the product and technical requirements are mentioned by Anirudh.

In the Project team the Roles are mentioned below:

Vidhi is the Project Manager and Scrum Master, so her role is to maintain and update the product backlog, ensure effective communication between the client and the development team, and Plan, schedule and supervise the development team.

Rajan is a Process Analyst and Change Manager who is authorized to do the needed changes to the project's requirements, documentation, technical aspects, and timelines and make sure that a solution is designed and deployed, and the clients' needs are accurately recorded and documented.

Sajal is Developer and UX/UI Designer, and his main duties are to develop the features laid out in the sprint, analyse the functional requirements, and make wireframes and prototypes for better understanding.

Het is an Operational Manager and Analyst, and his key role is to ensure that an organisation is working as efficiently as possible, with a seamless, efficient service that fulfils customers' and clients' expectations and demands furthermore he does the testing of the technical aspects of the project.

The meeting and communication with the client are maintained by the project manager of the team Vidhi. The meeting is scheduled based on requirements and clients' availability.

2.4 Project Responsibilities

TEAM MEMBER	ROLES	RESPONSIBILITIES
VIDHI MODI	Project Manager and Scrum Master	<ul style="list-style-type: none"> • Managing Meetings and communications • Developing user stories for the product. • Combining the documentation work of individual group members. • Helping the developer with the technical aspects of the product.
RAJAN PATEL	Process Analyst and Change Manager	<ul style="list-style-type: none"> • Taking Minutes of the meeting. • Making a layout of the project deliverable. • Managing the documentation of the project. • Changing the requirements suggested by the operational manager.
SAJAL SINGH	Developer and UX/UI Designers	<ul style="list-style-type: none"> • Designing wireframe and prototype of the web app. • Handling the backend of the web app. • Maintaining the technical and coding aspects of the project.
HETKUMAR PATEL	Operational Manager and Analyst	<ul style="list-style-type: none"> • Handling the product backlog. • Sprint breakdown of the project. • Testing the work done by the developer.

Matrix of the Project

R=Responsible

A=Accountable

C=Consulted

I=Informed

	Vidhi	Rajan	Sajal	Hetkumar
Initial Project Discussion	R	R	R	R
Defining a website User Experience strategy	R	I	A	C
Client Meetings	R	A	I	I
Meeting Minutes	A	R	AI	I
Project Handbook	AR	R	AC	AR
Sprint Documentation	C	R	I	AC
Observation and survey of functions and functionality of existing Moodle of Employability. life	I	I	A	R
Research about the aspects of the sprint	R	I	A	C
Creating wireframes for the career intelligence web app and the website's first home page	I	A	R	C
Testing the prototype wireframe	C	A	I	R
Changes in the prototype of the web app	I	R	C	A
Designing questions and details for the user to display the correct CV format	R	I	A	C

3. Managerial Process

3.1 Management Objectives and Priorities

When it comes to choosing priorities, we make sure to keep our company's goals in mind. As soon as a task is received, it is categorised as High Priority, Medium Priority and Low Priority. This allows us to do the most important tasks first and then move on to other tasks. Setting priorities does not imply that you must complete things as they arise. It entails prioritising the jobs that demand urgent attention. This might help you avoid damage control later. When duties are handled properly, with a simple continual evaluation of these objectives, we are better prepared to cope with problems as they arise.

Conflict develops from both great and little differences. It happens when people have different values, goals, perspectives, thoughts, or desires. These differences may look little at times, but when a disagreement causes intense conflicts. It is a must to resolve the internal conflicts for a good

output of a project. To do that we will Clarify the situation, encourage discussion within the team, and find a solution which suits every member of the project team.

3.2 Assumptions, Dependencies, and Constraints

State:

- *The assumptions upon which this project is based*
- *The external events or inputs that the project depends on*
- *The constraints under which the project is operating, for example budgetary, staffing, availability, and hardware.*

4. Technical Process

The technical process includes two subpoints such as methods, tools, techniques, and Software documentation. These two points are discussed below:

4.1 Methods, Tools, and Techniques

Technical aspects of the project

- GitHub – Project Management
- MS-teams- Team meeting and client meeting
- Figma – UX designing

Coding

- CSS
- JAVA
- H5P
- Html, MySQL
- Software testing
- Web loaded

This project discussion is discussed face to face and online with the help of existing tools which would work perfectly. Basically, as a communication tool, we have been communicating in Microsoft teams in which we created a group, and the participants are group members, clients, technical advisors, and supervisors. We share the important documents in the team's group and whenever we want to discuss the project, we usually

connect via teams meeting. So, this is how we have been managing our project work. According to the Scrum framework, we all are working together and equally collaborating on the work which is asked to do.

Additionally, as we will be building a web app, we have been taking the help of GitHub for managing the code of a web app. GitHub significantly helps to manage the technical aspects of the project. As we all are on the GitHub page, we individually upload and delete files or text. Moreover, we have been following the Scrum framework. And we started working on the project backlog then planning the sprint and then a review of the sprint document.

Furthermore, we have made a wireframe for the career intelligence web app using Figma software. The reason to use Figma is that once clicking on one button the user should be directed to the relevant page where the path is created. For the project handbook which is the most important documentation for the whole project, we are using Microsoft Word. And as discussed previously, GitHub is being used as a code management system for this project. Another thing is that we are also using Trello with which we manage our task and their status which would be helpful for us to work interactively. Thus, these were some of the methods, tools and techniques which are being used by our group to work on the project.

4.2 Software Documentation

The discussion points provided in the software documentation are discussed. The user can easily understand the technical aspects, functions, and functionality of the career intelligence web app with the help of wireframes as technical documentation. If the user will be provided developed wireframes and some sort of essential instructions then the user can easily try the functionality, functions, and the use of an app.

Furthermore, this project documentation will be read thoroughly and when it comes to the testing, the web app will be tested using various criteria so that it can be observed whether every step is working correctly or not. And the level of accuracy of the web app will be perfect. Moreover, the style guide might not be used for this project but if it will be used then the reference will be given to it. Thus, this was a brief discussion on the software documentation as part of a career intelligence project.

5. High-level Project Plan

For this project, we plan to complete the first part of the project in two sprints, which includes evaluating all the functionality of existing approaches and developing a Career intelligence web app that allows learners to create their cv interactively. So, for the first sprint, we will primarily focus on research, defining UX strategy, and developing website wireframes. We will use the Figma app to define different UX strategies and design wireframes because UX

designers are well adapted to this tool. In addition, for the development of the first home page, we will use the notepad++ editor to code the website.

In the second sprint, we will design a CVS template, develop a full fetch website Career Intelligence app, and test the functionality of all the websites that will allow users to develop their CV interactively. A variety of APIs will be used to create a CV.

The project's progress will be managed on GitHub so that all team members, clients, and supervisors can access it. We will arrange a discussion meeting with the client to present the sprint results and receive feedback. Aside from that, scrum meetings for various product backlogs will be held. Thus, for this assignment, the details of sprint 1 and sprint 2 are discussed below and the user stories related are also stated below.

Sprint 1	Sprint 2
<ul style="list-style-type: none"> ➤ Defining a website User Experience strategy ➤ Research about the aspects of the sprint ➤ Creating wireframes for the career intelligence web app and the website's first home page ➤ Observation and survey of functions and functionality of existing Moodle of Employability. life 	<ul style="list-style-type: none"> ➤ Designing questions and details for the user to display the correct CV format ➤ Creating the interface in which the user can add his/her details. ➤ The entered data which is filled by the user will be saved to SQL data. ➤ User data will be fetched to the display in the CV format ➤ Testing

User Stories	Success Criteria
User Story 1: - The user wants to log in to Employability. life-course on the Career Intelligence website.	<p>In the process, Employability. life provides a link to a career intelligence website.</p> <p>This URL will take the user to a login page.</p> <p>The user's email address and password should be sent to the login page for validation.</p> <p>After being validated, the user should be able to log in with the username and password.</p>

<p>User Story 2: - The new user wants to register himself/herself as a new user, as he/she is not the already logged in user.</p>	<p>A new registration link has been added to the login page.</p> <p>After clicking the link, a registration form appears.</p> <p>The form should send an email to the user's provided email address for verification.</p> <p>After being validated, the user should be able to log in with the username and password.</p>
<p>User Story 3: - The user is asked to provide certain details that would help in making a CV.</p>	<p>After clicking the tab, a page titled Tell us more about yourself appears.</p> <p>The user needs to enter personal information on the form for making the CV.</p> <p>The data entered that is filled in the form must be saved in the database for the record and to fetch the data to display the CV on the screen.</p>
<p>User Story 4: - The wants to know more about the ideas for making a CV.</p>	<p>If the user wants to create a perfect and detailed CV, he/she must add more details about himself/herself, so that the CV would be more attractive.</p>
<p>User Story 5: - The user wants to sign up via other account credentials.</p>	<p>In this case, the user can simply connect to the career intelligence web app via a google (Facebook, Instagram, LinkedIn, Twitter etc.) account by clicking on the icon.</p>
<p>User Story 6: - The user wants to create a CV.</p>	<p>After the signup or registration process of the user, the user will be redirected to the page where he/she can create a CV by clicking on the plus icon for basically building a CV.</p>
<p>User Story 7: - The user wants to look at some of the popular templates.</p>	<p>Users can click on the Templates tab and the provided popular templates can help users to get a perfect and attractive CV.</p>
<p>User Story 8: - The user wants to save the CV.</p>	<p>After providing the details, the user can save his/her CV details into the database.</p>

User Story 9: - The user wants to upload the CV that is already made by the user.	When asked for details from the user, the user can fetch saved changes to the CV from the database.
User story 10: - The user wants to download the templates that are provided in the web app.	The user can download the templates by clicking on the download button provided on that page itself.
User Story 11: - The user wants to have a look at the recommended templates.	The user can just click on the button recommended template to get to see the templates that are recommended for the user.
User Story 12: - The user wants to go to the home page of the career intelligence web app.	Users just need to click on the logo of career intelligence logo on the top-left hand corner of the web page.
User Story 13: - The user wants to save the filled details into the text fields.	The user must click on the Save and continue button to save the details which are filled for making the CV.
User Story: 14: - The user successfully registered into the career intelligence web app.	If the user already registered or logged into the web app, he/she can simply click on the build your CV button from the home page itself.
User Story 15: - The user wants to register as a new user.	While registering as a new user, he/she must create a new password, if he/she does not want to join via various account credentials.
User Story 16: - The user wants to join a career intelligence web app via a google (Facebook, LinkedIn etc.) account.	He/she just needs to select the account he/she wants to select and then click on the signup button.
User Story 17: - The user wants to know after the signing process.	After clicking on the signup button, the user will finally be at the page to build the CV. This page is the most important as the CV will be built using this page's provided or written details.
User Story 18: - The user wants to get more ideas about the CV.	Once clicking on the build your CV button, the user will have a page in which he/she has to fill out essential details that are asked for the completion of the CV.
User Story 19: - The user wants more ideas that make his/her CV more interesting and perfect.	The user will be provided with some sort of important tips and points that would be beneficial for the user.

User Story 20: - The user wants to give more details for better CV building.	The user will be provided with a list of details that need to be filled incorrectly.
User Story 21: - The user wants to save his/her filled details.	The user will have a button called to save and continue which will save his/her filled details to the database.
User Story 22: - The user wants to edit the details that have been entered into the text fields.	Users can significantly edit or update the details about himself/herself.
User Story 23: - The user wants to look at how his/her CV is built.	The CV that will be built using the career intelligence web app will be displayed to the user in the CV format which can be viewed
User Story 24: - The user wants to see the previously built CV.	As the CV of the user is saved to the database, it can be again fetched to display.
User Story 25: - The user wants to add the asked details to himself/herself.	The details can easily be added to the file by clicking on it.
User Story 26: - The user wants to see what his/her would look like.	After filling in all the required details, the user needs to finalize the process of making a CV.
User Story 27: - As a user, he/she wants to have a look at the outcome of the CV.	After submitting all the vital details, the user will be provided with a prototype of the CV in which he/she can have a look at their CV.
User Story 28: - The user wants to know about the CV data.	Once the filling of data into the form is finished, then the user must click on the save button and this data will be saved into the SQL database.
User Story 29: - The user wants his/her CV o to be visible on the display to have a look at what it would look like.	Once the user's entered data is stored in the database, then all the information of the user will be fetched out on the display.
User Story 30: - The user wants his/her CV in the format of CV.	The user was provided with the fetched data from the database in the CV format. And that formatted CV can be used by the user for his/her use.

Provide a link referencing your online project board (e.g. in GitHub project board or Trello board) here.

GitHub Link: <https://github.com/ITECH3208andITECH3209feduni/project-repo-project-a02>

6. Non-functional Requirements

6.1 Platform

The platform covers the Career Intelligence web's hardware and software requirements. The Employability. life Moodle platform will be used to access the career intelligence portals. The CV should be uploaded to the website in Word or PDF format. The user will fill out their information on the website pages that will be open in Google Chrome. This website will be supported by laptops, computers, and mobile devices, and users will be able to run the website with ease on this platform. Many more platforms would be used to build the website.

6.2 Communication

When data does not come through as it should, the Internet Control Message Protocol (ICMP) delivers messages from the website to the user. TCP (Transmission Control Protocol) will be used to link the Career Intelligence website to the HTTPS server.

6.3 Performance

The website's frame rate should be 30 frames per second. The website's input latency should be at least 100 milliseconds. The website should have a network utilisation of 70%. Each of our websites will have 512MB to 1GB of RAM. Our website battery capacity is 70 amp-hours, with a capacity of 250 mAH and a 2-mA average current to a load. The website's load time should not be more than one second for users. When a user goes to the Navigation screen of the Career Intelligence website and enters the information, the route should be calculated within a few seconds.

6.4 Security and Privacy

The user data is protected using the two-factor authentication (2FA) screening process. The website should have an automatic backup system that collects user data regularly. GlobalSign will be used on the website to keep consumer information safe and secure. The password must contain a mix of numbers and symbols. TLS encryption would be used to secure data and information transfers. We will employ an SSL certificate and a data privacy policy on our website. For security reasons, we shall implement GDPR customer data protection on our website. To secure a user's information, a security system may freeze an account after a set number of login attempts on the Career intelligence website. A user can create a new password to unlock their account. The applicant's verified phone number is only visible to individuals with the position "site admin." In log files, the ODBC logging properties would be utilised.

6.5 Audience, Usability and Accessibility

The Career Intelligence website will be used by all users who wish to strengthen their CV and resume to secure future employment. The website's target audience would include students, organisational managers, and anybody involved in career-related technologies. The website's interface would be simple and user-friendly. The internationalisation and Localisation process would be kept in mind while developing the website. The website will employ simple language to assist the student in completing the login process. The website will include pictures when appropriate to ensure that it is error-free. When a user visits the website, the homepage is designed in such a way that they can quickly locate the Career intelligence portal due to the large format text utilised and the bright colour and picture of the site. By entering their details, the user may quickly log in to the site. Once a person has registered an account on the website, they may quickly access it whenever they want by just logging in.

6.6 Reliability

Users can access their resumes 98% of the time without failure. We would properly manage the website and implement an updating mechanism that would keep it free of errors. It would take less time for the website to update pages and fill in the information where it is needed. System ups and downs, as well as defect recording, would be checked and fixed regularly.

6.7 Modifiability

By clicking the edit option, the user would be able to change the website's background colour, text size, and other characteristics. The change may be made by anybody, with or without programming skills. The app requires maintenance and upgrading to avoid future problems and the user is notified via a notification. If the login services do not work properly they would fix and maintained within 3 hours.

6.8 Economic

Employability. life funds the development of the website, which involves the use of tools and technology. We will not have to invest any money to create the website for this project.

6.9 Legal

Employability. life would provide legal requirements, licencing, and certification.

6.10 Standards

The Career Intelligence website will be developed for the needs of the clients and will be built on the Moodle of Employability. life platform.

6. XX Other Non-Functional Requirements

Scalability

It will define how the website can grow and increase its features and functionality without impacting the performance of our website. We would be able to add more features, sessions, and opportunities for encouraging more users to use our website. On the features side, entering new options for users like finding a job or any other feature like boosting the website's growth.

7. Software and Systems Architecture

7.1 Architecture objectives

It also helps us to identify the functional, and non-functional requirements of the project and enhance and application's overall quality. The main theme of system architecture in our web development is to ensure stability, efficiency, scalability, reliability, and availability of the web page. As we will be designing a static website for our project it won't be for commercial purposes as of now but for the creators and client, we can access the web through a file server in the localhost.

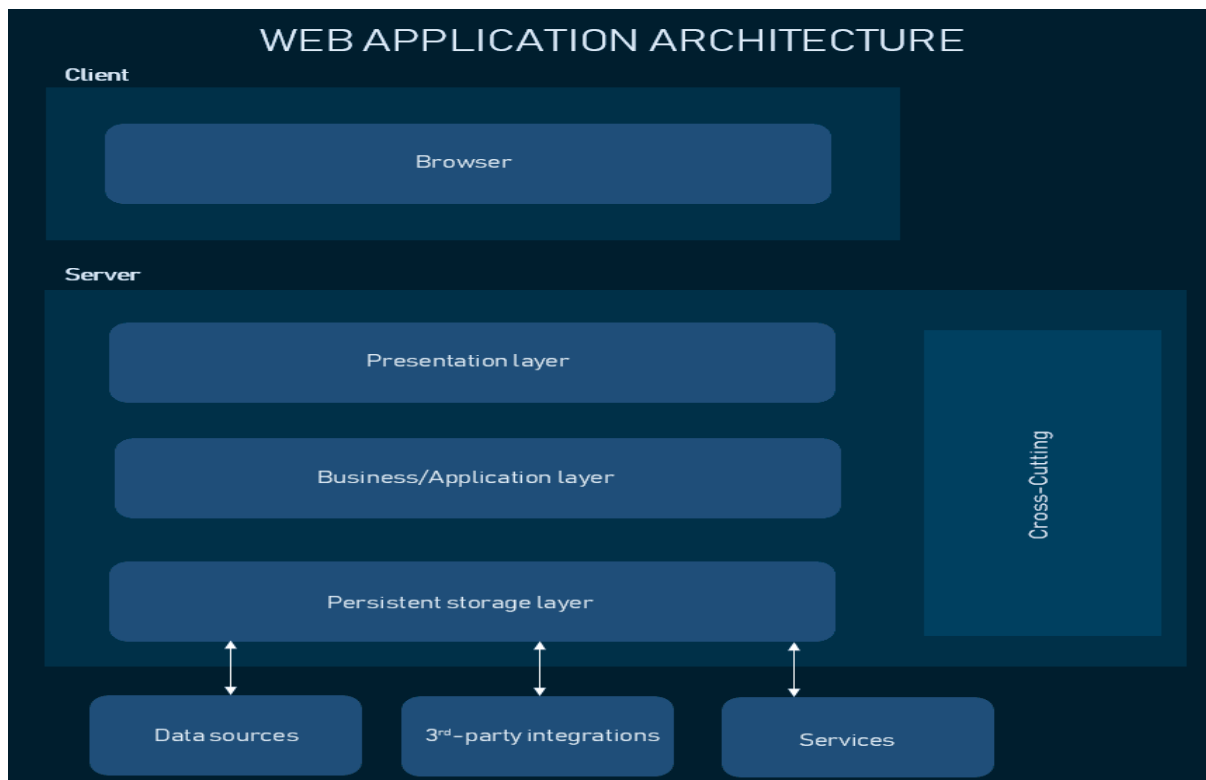
7.2 High-level architecture

We have opted to work on the principle of different software architectural patterns like Client-server, model view controller and n- tier that will be working together for interaction between the application middleware systems and databases to ensure multiple apps can work together.

Client-Server

We have designed our website based on the principle of client-server application i.e. client inputs sth on the web and the browser responds to that input i.e. front end development and their other thing backend development which lies in the server and responds to the HTTP request for the browser but here we are not modelling the whole commercial website rather we will be hosting the website locally so if the client wants to get access through our website and function properly he /she can access through the file server.

Success criteria – Install the Deno application for the runtime of JavaScript and connect to localhost 4507 by making an HTTP file server request then open the files related to the website and u will be directed to the homepage of the website.



Source: <https://content.altexsoft.com/media/2019/07/word-image-40.png>

Presentation layer

The presentation layer comprises user interface components and UI process components that will be facilitating interaction with the system and is available to users via a browser. HTML, CSS, and JavaScript are the three main technologies that are used to facilitate the browser.

Business Layer

This layer takes user requests from the browser, processes them, and decides the data access routes. This layer contains the procedures that guide data and requests through the back end.

Persistence layer

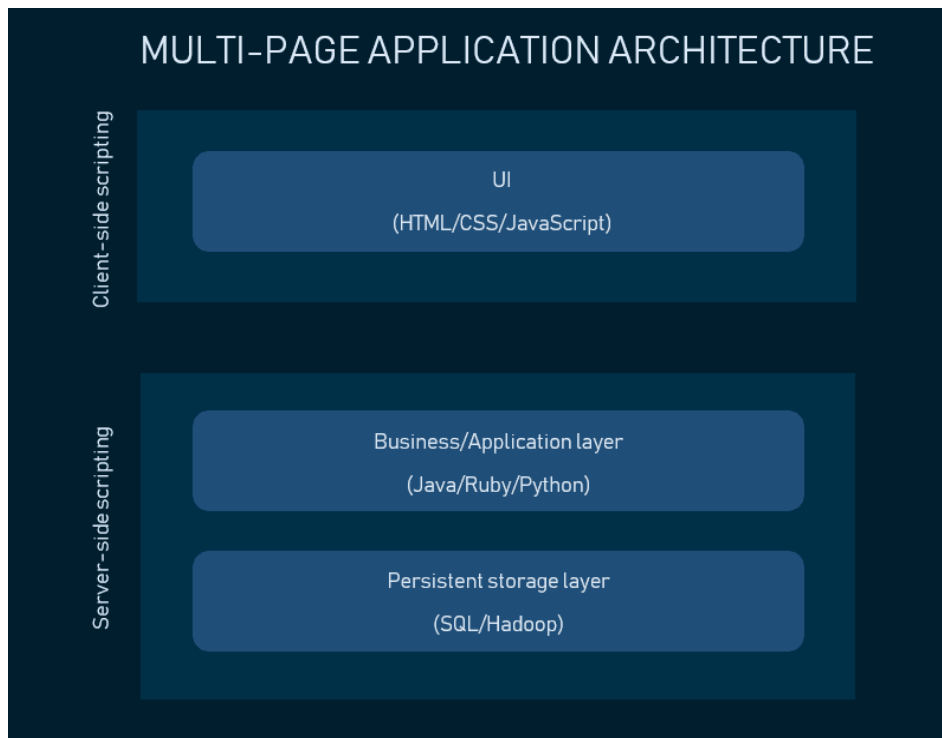
This layer is a centralized place that will be receiving all data calls and give users access to an application's data. The data storage server will be MYSQL where all the user's credentials and information provided will be stored and with the aid of DBMS, this server will communicate with the client and user interfaces to obtain data and parse it.

Third-Party Integration

Social Logins will be the third-party integration of our website that is connected to the

backend and processed through API.

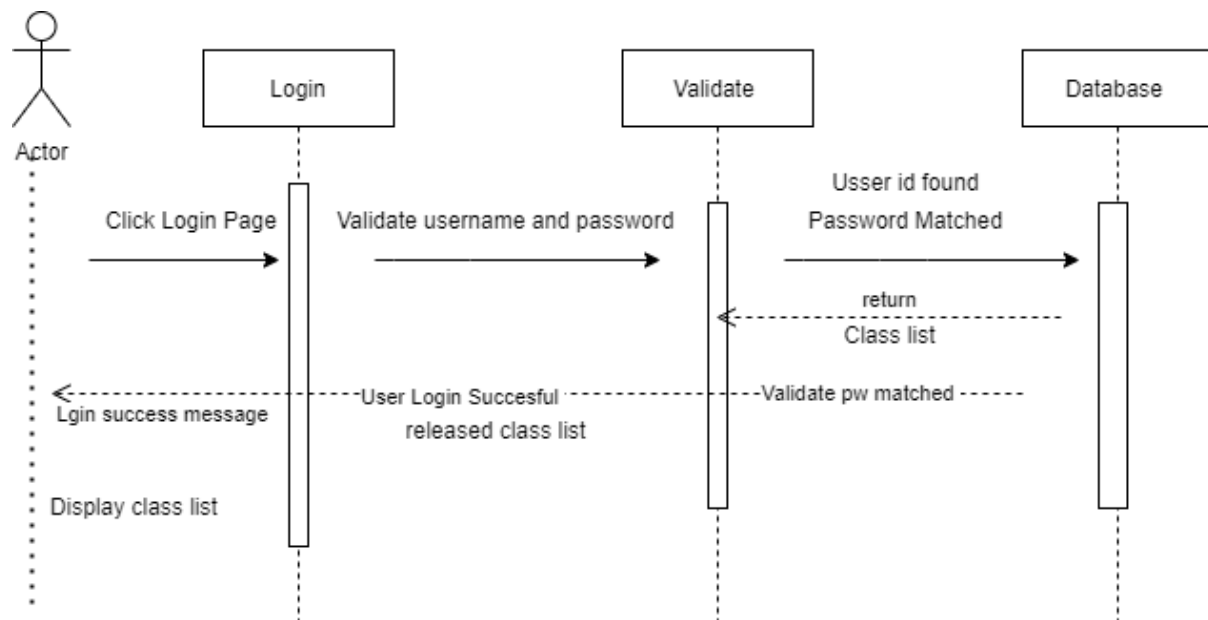
In general, we have divided the web architecture in the given diagram as the website will be multipage,



Source: <https://content.altexsoft.com/media/2019/07/word-image-42.png>

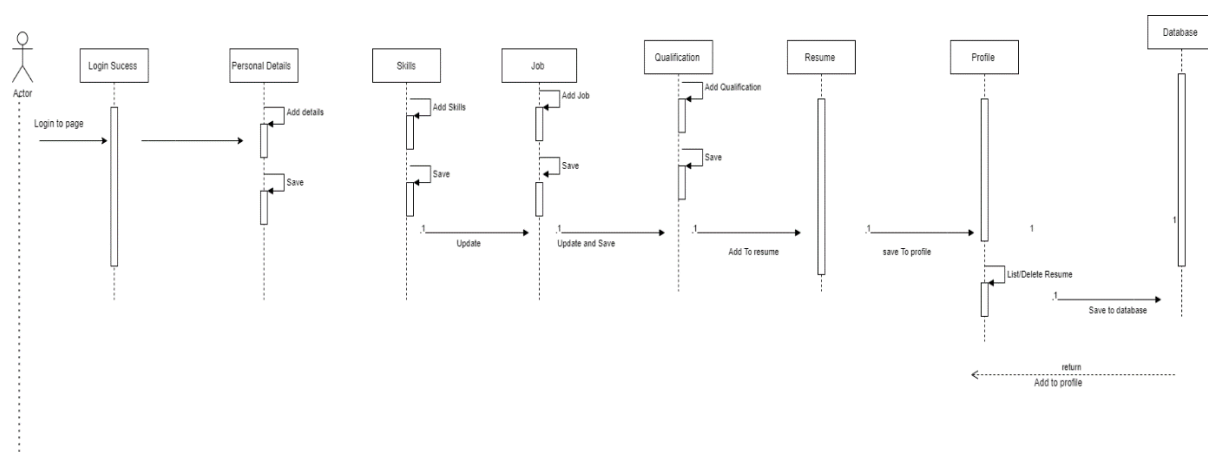
7. X System context

To create the cv on our website user must be registered on our website so when the user inputs the credentials for login validation operation comes into effect by checking the credentials in the database i.e., MySQL for which we will be developing and if the username and password matched the saved data in the database it will prompt login successfully in the screen and directed to profile page of our website where they can build their cv. If they are not registered on the website or input the wrong credentials it shows a login error. And on the other hand, if they are not registered the system will ask them for a signup process. The following sequence diagram shows the login validation of our system.



Sequence diagram for Login Validation

After login success of the user and admins user will be able to add or edit details like personal details, skills, job experience, and qualifications, and then will be saved in the resume template and eventually to the database of the system, whereas the admin can manage or keep a record of this different category which will be saved in the database. The following sequence diagram represents the system of our website.



7. X Data model and software design

To keep the record of different sectors of data about the user the data flow of the user will be represented through a relational database of DBMS. Different Entity and their attributes are as follows;

Username- username_id, First_name, Last_name, Email, Password , Phone_num

Company – Company_id, Company_name, company_type, company_size

Experience- Company_id, Start_date, Job_role, Job_desc,

Skills – Skills_id, Skill_title, company_area, company_id

Qualification- Qualification_id, Qualification_title, Institution_name, Date_earned

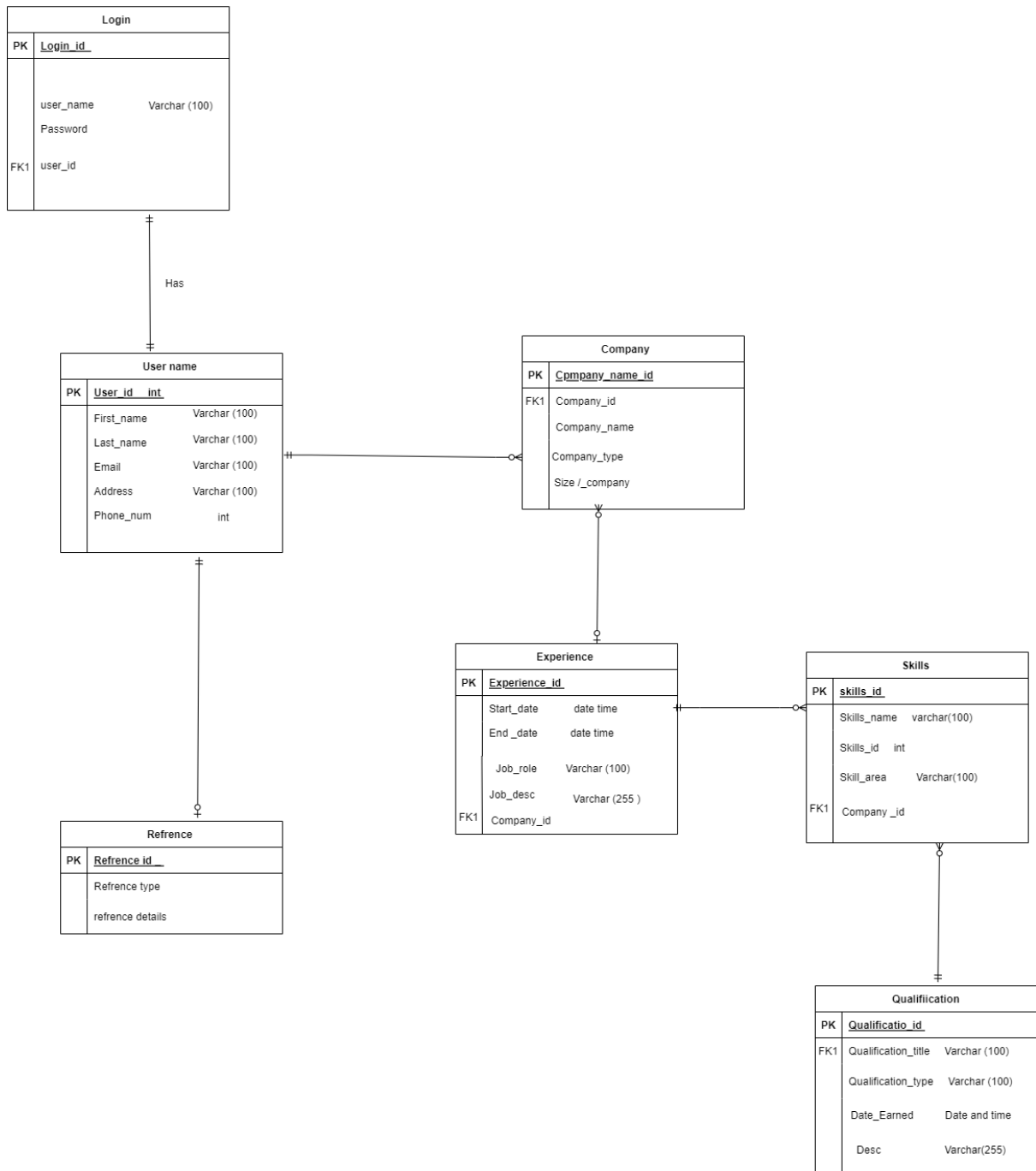
Reference – Reference_id, Reference-type, Reference_details

Description

The details of users and their details will be saved in username tables. Each entity has a primary key and foreign key we can see that the user and company have one to many optional relations i.e., the user might have worked in a different company or not worked in any of the companies. Company and skills have also seen to one to many or optional relations that a company might have a user with multiple skills that are working. We have also kept the data of reference table where we can see if any of the users might have a referral through any of the sources. User qualification details are stored in the qualification table likewise acquired skills in the skills table.

We might see different one to many relations in the upcoming days so for that we will be introducing normalized data to reduce the duplicity of records. So far, we figure out these class tables for our DBMS as we can see in the below diagram.

Data Model of Cv web app



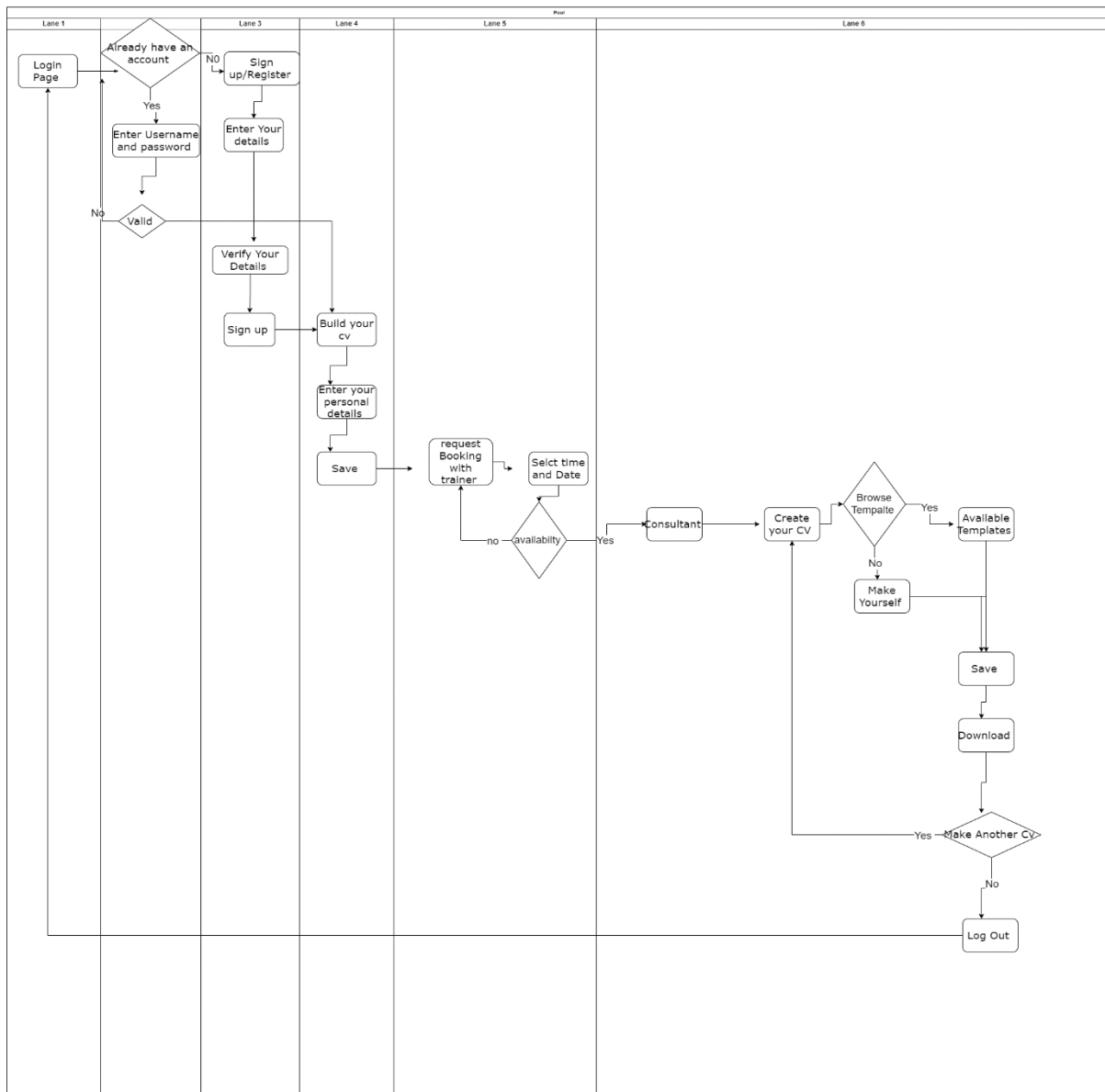
7.X User Interface / Interaction Design

Development of our prototype link:

<https://www.figma.com/proto/6y7bjLNzaXEJKTSccG8Dxq/Untitled?node-id=2%3A4&scaling=min-zoom&page-id=0%3A1&starting-point-node-id=2%3A4>

User login or sign up is necessary to create a cv once login or sign up it will be directed to the profile of the user and from there, they can create their cv by adding the required inputs to add in their cv. Initially, the project was designed in a way that user can build their cv by getting appropriate suggestions from the system but later we designed it in a way that users can book a slot with trainers, and they must build their cv themselves by obtaining proper ideas from the trainers and upload their cv for trainers to get access and mark suggestion. The revised site map of our website is provided below.

Site Map Of Cv App









A mock-up for the initial plan of our website is given below :

Homepage:




Login page



[ABOUT US](#)
[TEMPLATES](#)
[SUPPORT](#)
[REGISTER](#)
[Member login](#)


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[Login now](#)

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Create your profile



First name :

Last name :







Email :

Phone no :


Create password :


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Profile Page




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Welcome on Board



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Sam TAGLLIBUE

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Work Experience

Company : Position :

Date : DD/MM/YY

Skills

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7. X Assumptions

There are certain areas of concern in developing a website is how to attract max no of audience and flowing the market structure of this website we assume the following stats of our website like

Expected user-500-600/months

Software- LMS Moodle, Visual Studio Code, JavaScript, Denno, Excel sheet, Api of different related structures, MySQL, or PostgreSQL for databases,

Performance- The webpage should have a frame rate of 30 frames per second. The input latency of the webpage should be at least 100 milliseconds. Network utilisation of 70% is required for the website. Our websites will have anywhere from 512MB to 1GB of RAM. Our website battery has a capacity of 70 amp-hours, 250 mAH, and a 2-mA average current to a load. Users should not have to wait more than one second for the page to load. When a user inputs the information on the Career Intelligence website's Navigation screen, the route should be generated in a matter of seconds.

7. X External Dependencies

As we are in the developing process of this website, we haven't yet figured out the external dependencies of the project as we start developing the core aspect of our website in the sprint 2, we will be able to identify any of the factors that we will be relying on to be available.

7. X Concept art, storyboards

For game and multimedia projects, including appropriate concept art, character designs, treatments, storyboards, etc.

Additional Components

Include any other components here that you think are necessary, such as training plans, data conversion plans, maintenance plans, etc. Number each new section as above, starting at section 7

Index

An index is optional. If you choose to include one, explore whether your word processor can do so semi-automatically for you.

Appendices

Any supplemental items (such as change request forms, etc.) that do not form part of the handbook proper should be included as appendices.