

GUJARAT TECHNOLOGICAL UNIVERSITY

Chandkheda, Ahmedabad

Affiliated



New L J Institute of Engineering and Technology

A

Project Report

On

“YOUTH EMPLOYMENT OPPORTUNITIES”

Under subject of

DESIGN ENGINEERING-2B

B. E., Semester – VI

Computer Science Engineering (Artificial Intelligence & Machine Learning)

Submitted by:

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CERTIFICATE

This is to certify that the project work embodied in this report entitled “**YOUTH EMPLOYMENT OPPORTUNITIES**” was carried out by below mentioned students at the department of CSE(AIML), New L.J. Institute of Engineering and Technology, Ahmedabad for partial fulfilment of the subject design engineering 2B. This project work has been carried out under my supervision and is to the satisfaction of the department.

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ABSTRACT

Youth Employment Opportunities is a project that discusses the unemployment issue in, covering which covers a large part of India. It discusses the problems faced by the youth in rural areas due a to lack of proper knowledge and guidance.

Although with the increase in school and college enrolment rates, the proportion of youth in the labour force has been declining, their high proportions in the labour force indicate that the problem of youth unemployment and underemployment would remain a serious issue in India for many years to come. From a social point of view, unemployment means the wastage of precious labour resources in the country.

For an individual, unemployment is a painful and demoralizing experience, especially for the youth who possess the skillset but are unable to use it for themselves and for the betterment of their families.

In this context, the project offers recommendations for increasing productive employment and reduction in unemployment for the youth.

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LIST OF ABBREVIATIONS

ps+ss Usual Principal Status(ps) + Usual
Subsidiary Status (ss). Usual Principal Status (ps) measures the activity in which an
individual has spent a relatively long time (atleast 180 days) of the reference year while
Subsidiary Status (ss) measures the the activity of an individual who has spent the
majority of days out of the workforce but has worked for at least 30 days in a reference
year.

ILO International Labour Organization

NICNational Industrial Classification

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1. INTRODUCTION

Phase 1: Reverse Engineering (RE): Selection and disassembling of artifact/component)

Job sites serve as modern tools of many advertisements by compiling them and listing available telecommunications and local facilities. Job sites gather thousands of job openings in one convenient place and can refer a person to positions and companies that one otherwise may not have known about. At their core, job sites act as both search engines and databases for open jobs. Job sites can help educated and experienced candidates find work in any field.

Some of the job search websites are [1]:

1. Indeed
2. Monster
3. LinkedIn
4. Glassdoor
5. FlexJobs
6. Ladders
7. Naukri.com
8. AngelList

Indeed, post listings for job seekers in every industry, every level, and every lifestyle like freelance, part-time, internship or full-time. One needs to create an account in order to apply for some job listings. Some sites also offer salary comparison and research tools and provide premium resume makeups like Monster.

LinkedIn acts as a database for open opportunities, a digital resume platform, and an all-in-one social networking tool. FlexJobs specializes in remote opportunities with no scams and no ads.

Ladders serves as a job site, career newsroom and networking platform. AngelList was founded in 2010 as a way to democratize the way startups get funding and hire talent. Today, it offers an unprecedented level of transparency by providing candidates with upfront salary and equity options upfront, as well as information about key figures in the company.

One can know the culture and salary data of each company, which makes Glassdoor the best place to research and better place for employers.

But more specialized or niche job sites may not be right for every candidate, in every industry, skill level, and zip code.

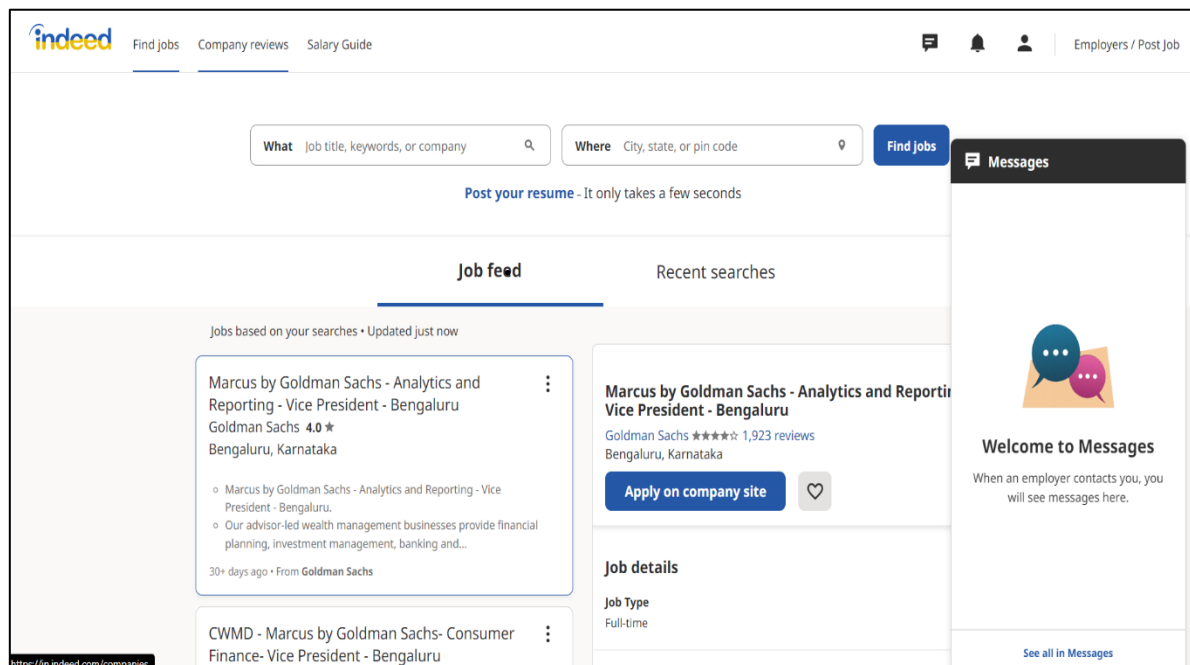


Figure 1 – Indeed interface

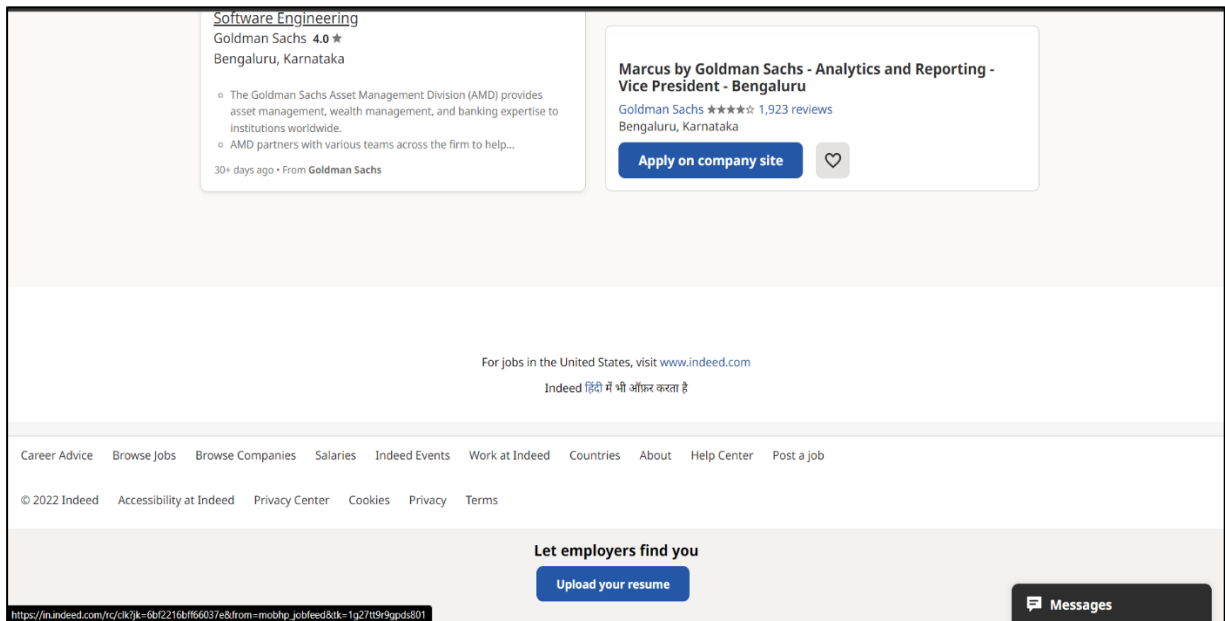


Figure 2 – Indeed Interface

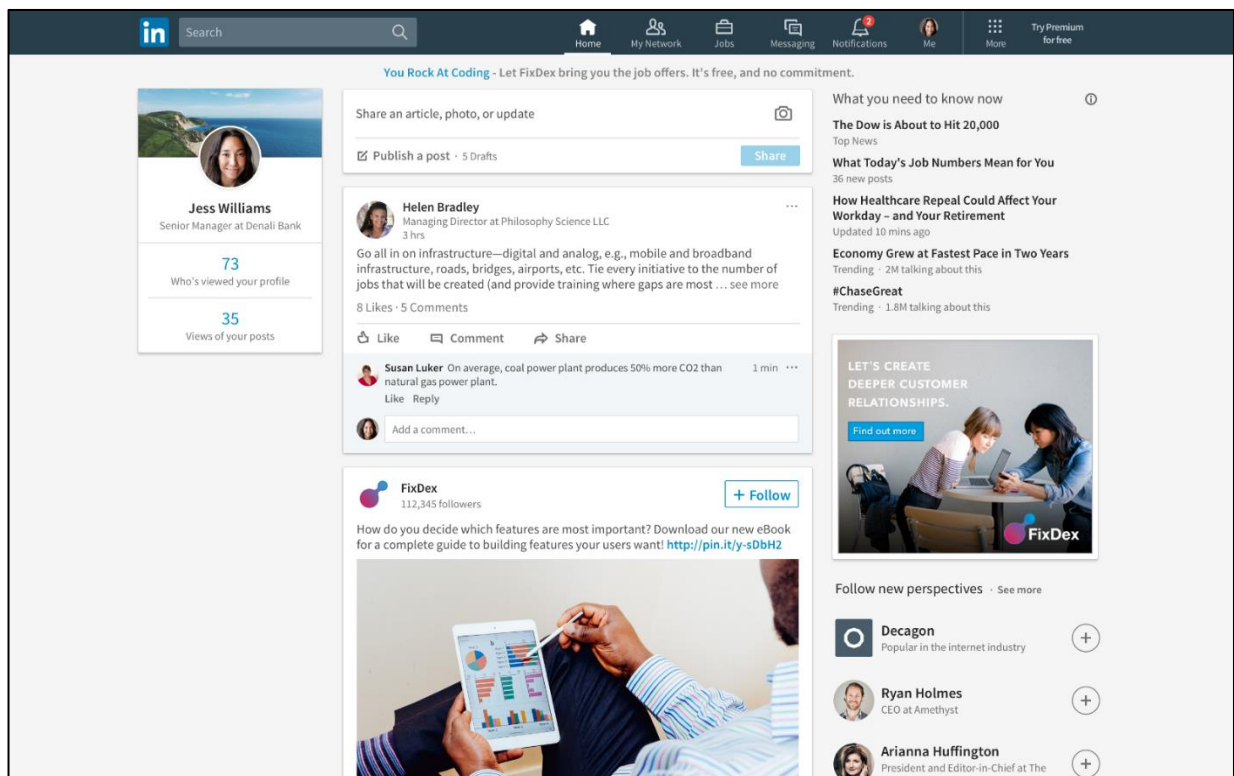


Figure 3 – LinkedIn Interface [2]

Phase 2: Disassembly / Analysis of the component/product/art fact/program and learning about the topic

These websites mainly include features like search bars through various filters like

- Job Titles
- Location
- Salary Range
- Date Posted
- Experience

They also constitute sign-in through free logins or paid subscriptions with premium access. Message sections or chatbots are also available here. Alerts through messages or emails are also made possible through login ids. But the attraction of these websites includes salary information and comparison tools to search for various jobs and cities wise salaries.

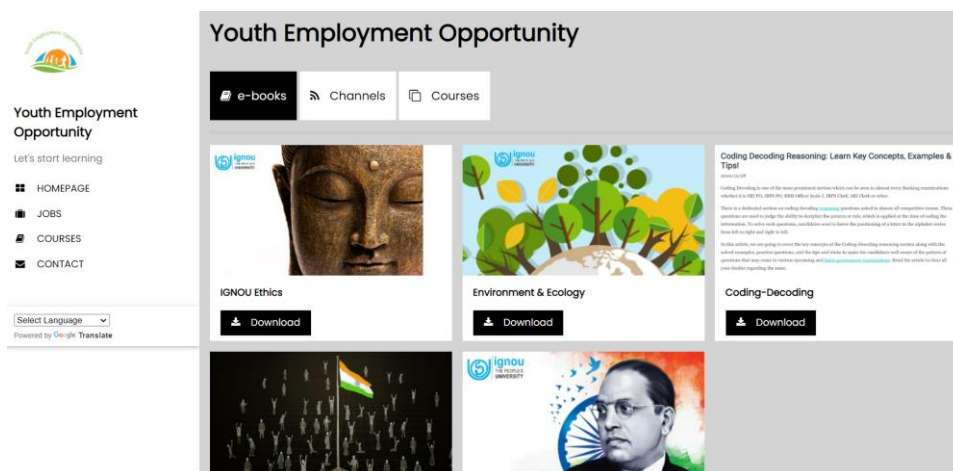


Figure 4.1 – The API obtained from various job sites

Youth Employment Opportunities



Services.

We provide information about the employment schemes that the government has declared for rural and underprivileged people. We put different e-books and online links to youtube courses to meet the requirements of the jobs. If an individual wants to enhance their skills, we love to show the job vacancies related to the skills of the people.

Fig 4.2 - Homepage



Youth Employment Opportunity

Let's start learning

- HOME PAGE
- JOB
- COURSES
- CONTACT

Youth Employment Opportunity

Central Government Jobs

State Government Jobs



Railway jobs

Download



Police Jobs

Download



10th Pass Govt Jobs

Download



BANKING

SSC

RAILWAYS



IBPS - SBI, RBI, BOI, etc.

Fig 4.3 - Jobs section

2. PROJECT SUMMARY

| Sr no. | Paper Title | Paper Author | Published Year | Summary |
|---------------|---|-----------------------------|-----------------------|---|
| 1 | The evidence is in: How should youth employment programs in low-income countries be designed? | Louise Fox and Upaasna Kaul | 2017 | This research examines the barriers to youth transitioning into work in low-income nations. It looks at which employment initiatives and policies appear to help youth make the transition faster, with a focus on establishing new job opportunities for them. [3] |
| 2 | Opinion of youth on issues and challenges related to Employment: A study in Mysore city | Dr Mohan A.K | 2016 | Unemployment rates are normally considered as employment inadequacy for youth. In India, from 2000-to 2010 the share of employment in the industry and service sector continued to grow while agriculture employed fewer workers. Poor quality of educational services is producing a workforce lacking the basic knowledge and skills needed for today's job. [4] |
| 3 | Challenges Of Decent Employment In India | Shamim Ara | 2021 | This article examines employment challenges in India in the ILO'S decent work framework. Remarkably, jobs were created in the organized sector, in the regular salary category, and in the services sector in 2017-18. However, the rate of employment growth in these segments is very low and cannot offset the net loss of employment in the unorganized sector, temporary jobs and agriculture and manufacturing, particularly in rural areas. The article advocates for urgent policy interventions to ensure access to productive and decent work for all in India. [5] |

Table 1 Project Summary

| Difficulties faced | Frequency | Percent |
|---|------------|--------------|
| Not applicable | 164 | 28.1 |
| Lack of experience | 5 | 0.9 |
| Difficult to adjust to work environment | 25 | 4.3 |
| Education credentials | 42 | 7.2 |
| High expectation of soft skills | 5 | 0.9 |
| Lack of computer literacy | 6 | 1.0 |
| Lack of English communication skill | 6 | 1.0 |
| Lack of information about openings | 188 | 32.2 |
| Lack of Interpersonal relationship | 44 | 7.5 |
| Lack of Suitable Jobs | 48 | 8.2 |
| Reference/Influence | 50 | 8.7 |
| Total | 583 | 100.0 |

Table 2: Difficulties faced to get employed [4]

| <p>Table 7 Distribution of workers (ps+ss, all age) by Industry Category (NIC-1 Digit) and Sector in India</p> | | | | | | | | | |
|--|--------------|-------------|-------------|--------------|-------------|-------------|-----------------------|-------------|--------------|
| Industry Category(NIC) | 2011-12 | | | 2017-18 | | | Net Job Creation/Loss | | |
| | (in percent) | | | (in percent) | | | (in millions) | | |
| | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban | Total |
| Agriculture and allied activities | 64.1 | 6.7 | 48.9 | 59.4 | 6.1 | 44.1 | -28.0 | 0.4 | -27.6 |
| Industry | 20.4 | 35.0 | 24.3 | 20.8 | 34.8 | 24.8 | -2.9 | 6.3 | 3.4 |
| Mining and quarrying | 0.5 | 0.7 | 0.5 | 0.4 | 0.5 | 0.4 | -0.3 | -0.3 | -0.6 |
| Manufacturing | 8.6 | 23.6 | 12.6 | 7.8 | 23.0 | 12.1 | -4.5 | 3.5 | -1.0 |
| Electricity, gas and water | 0.2 | 1.3 | 0.5 | 0.4 | 1.2 | 0.6 | 0.4 | 0.0 | 0.4 |
| Construction | 11.1 | 9.3 | 10.6 | 12.3 | 10.2 | 11.7 | 1.6 | 3.1 | 4.7 |
| Services | 15.5 | 58.3 | 26.8 | 19.8 | 59.1 | 31.0 | 10.4 | 12.2 | 22.6 |
| Wholesale/trade | 5.6 | 19.6 | 9.3 | 6.7 | 18.6 | 10.1 | 2.2 | 2.2 | 4.4 |
| IT and transport, communication etc. | 3.9 | 13.7 | 6.5 | 5.2 | 14.3 | 7.8 | 3.4 | 3.5 | 6.9 |
| Financial intermediation | 0.3 | 2.5 | 0.9 | 0.4 | 2.6 | 1.1 | 0.3 | 0.6 | 0.9 |
| Real estate | 0.1 | 0.6 | 0.2 | 0.1 | 0.6 | 0.2 | 0.003 | 0.1 | 0.1 |
| Professional and public administration | 1.2 | 7.6 | 2.9 | 1.9 | 7.8 | 3.6 | 2.2 | 1.8 | 4.0 |
| Education | 2.1 | 5.5 | 3.0 | 2.9 | 5.9 | 3.8 | 2.3 | 1.7 | 4.0 |
| Health and social services | 0.5 | 2.2 | 0.9 | 0.6 | 2.6 | 1.2 | 0.4 | 1.1 | 1.5 |
| Community and personal services | 1.6 | 4.3 | 2.3 | 1.4 | 4.1 | 2.2 | -1.0 | 0.4 | -0.5 |
| Domestic work | 0.3 | 2.3 | 0.8 | 0.5 | 2.6 | 1.1 | 0.5 | 0.9 | 1.4 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | -20.4 | 18.9 | -1.5 |

Table 3 Distribution of workers by Industry Category and Sector in India [5]

3. AEIOU CANVAS

| | | | | |
|---|--|--|--------|-----------|
| AEIOU Summary : | | Group ID: | Date : | Version : |
| Domain Name : | | | | |
| Environment: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <p>Cloudy</p> <p>Fewer People</p> <p>Rainy</p> <p>Living based on agriculture and cottage industry.</p> </div> <div style="width: 50%;"> <p>Lack of proper infrastructure</p> <p>Sunny</p> </div> </div> | Interactions : <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <p>Farmer</p> <p>Watchman</p> <p>Postman</p> </div> <div style="width: 50%;"> <p>Saxpanch</p> <p>Milkman</p> <p>Gracres</p> </div> </div> | Objects : <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <p>Poultry</p> <p>Mobile</p> <p>Windmills</p> <p>Farms</p> </div> <div style="width: 50%;"> <p>Vehicles</p> <p>Primary Health care centres</p> </div> </div> | | |
| Activities : <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <p>Gram Panchayat</p> <p>Animal Husbandry</p> <p>Studying</p> </div> <div style="width: 33%;"> <p>Uninterrupted Power Supply</p> <p>Farming</p> <p>Rain water Harvesting</p> <p>Gram Panchayat Meetings</p> </div> <div style="width: 33%;"> <p>Agricultural Activities</p> <p>Waste Management</p> <p>Primary Education</p> </div> </div> | Users : <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <p>Farmer</p> <p>Potter</p> <p>Milkman</p> <p>Teacher</p> </div> <div style="width: 33%;"> <p>Landowner</p> <p>Grocer</p> <p>Doctors</p> <p>Peons</p> </div> <div style="width: 33%;"> <p>Cowherd</p> <p>Electrician</p> <p>Shepherd</p> <p>Labourer</p> </div> </div> | | | |

Figure 5 AEIOU Canvas

4. MIND MAP CANVAS

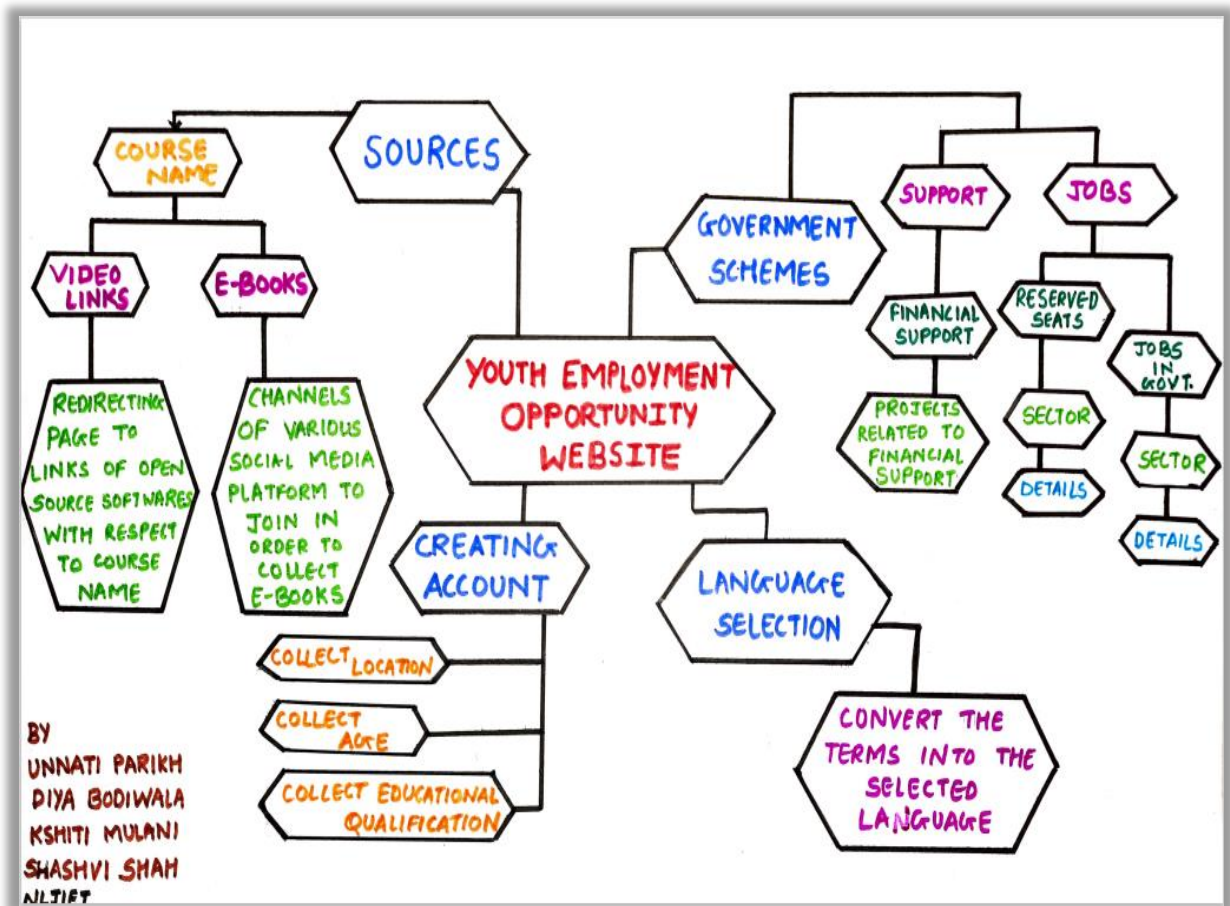


Figure 6 MindMap

5. EMPATHY CANVAS

| | |
|---|--|
| Design For Date | Design By Version |
| USER Rural People Local People Suburbans Job Aspirants | STAKEHOLDERS Web Developer Database Administrator Maintenance Team |
| ACTIVITIES People will get to know about the available projects Checking Age Criteria Provide youtube links for the courses required in the job Checking Eligibility | |
| STORY BOARDING HAPPY | People were happy with the number of job opportunities that were accessible to them through schemes. |
| HAPPY | Rurals facing English as a language barrier were happy with the option of <u>native language</u> being provided to them through which they can easily understand the scheme. |
| SAD | People who needed job were not able to get a job that helped to attain growth in their career. |
| SAD | People were not aware of the benefits/schemes provided to them by the government. language barriers also played a vital role in understanding the schemes. |

Figure 7 Empathy Canvas

6. IDEATION CANVAS

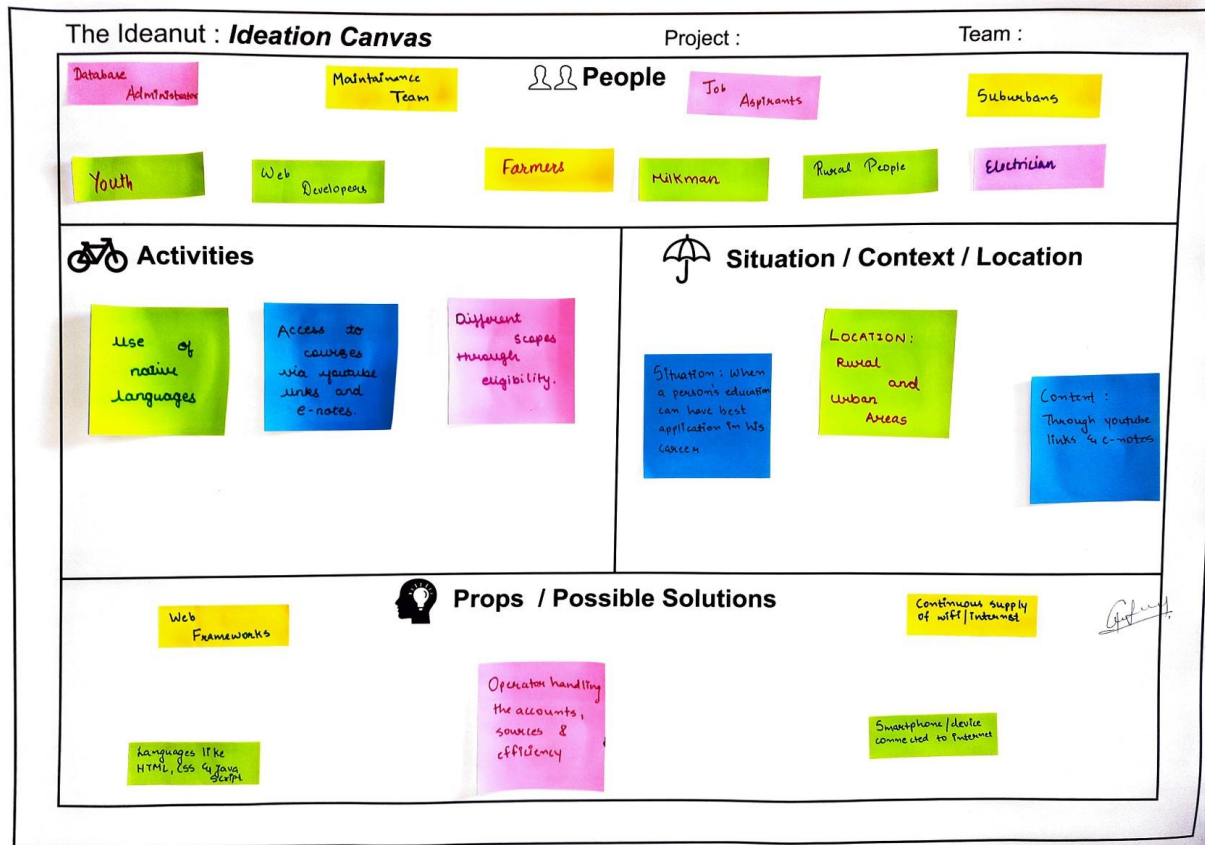


Figure 8 Ideation Canvas

7. ROUGH PROTOTYPE MODEL

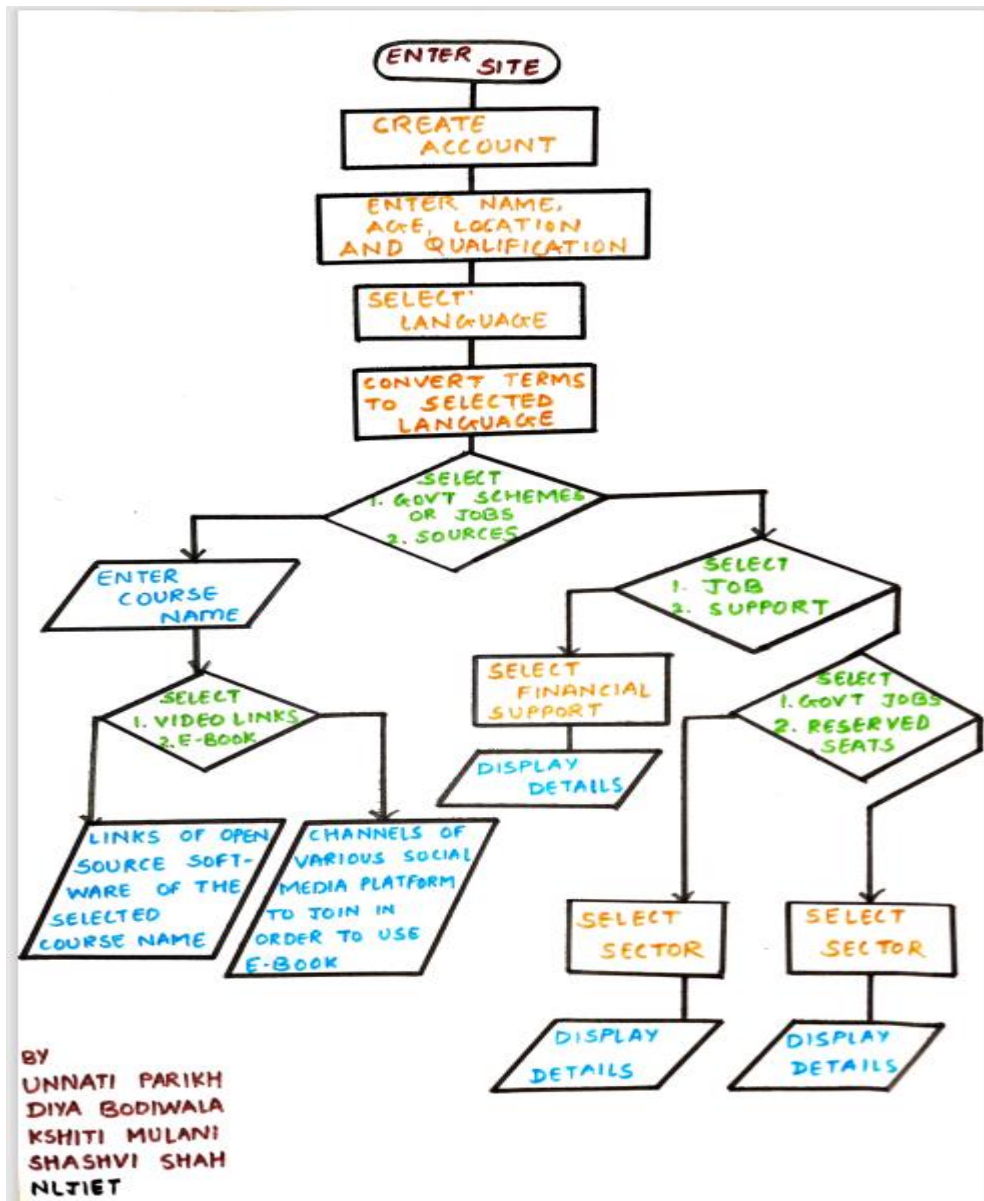


Figure 9 Prototype

8. PRODUCT DEVELOPMENT CANVAS

Product Development Canvas

| | | |
|---|---|---|
| <p>? Purpose</p> <p>What is the purpose of this concept you're developing? Does it solve a problem, or it enhances a certain experiences? Is it serving a need or it is trying to create a new need or tap an untapped need?</p> <p>Uplift the lives of people by a number of job opportunities through required courses via youtube links and notes</p> | <p>⚓ Product Experience</p> <p>Define what your customer should feel like when he uses your product / service ? emotions, feelings would define his experience ? feeling Convenience, or feeling of buying more with less (cost conscious) or feeling of greater security, safety etc.</p> <p>Better accessibility Availability of resources Found it useful</p> | <p>☑ Customer Revalidation</p> <p>Once you're finished with your feature set, test with the customer / user if the features, functions are useful. Speak to the customer / user.</p> <p>Satisfied with information on app</p> <p>Happy to get jobs in their field</p> <p>No salary prospective</p> |
| <p>👤 People</p> <p>Who is the key customer segment who will use this product /service or the end product of the concept you're pursuing? Write here about them, describe them a little.</p> <p>rural people</p> <p>job aspirants</p> <p>Sub-urbans</p> | <p>⊗ Product Functions</p> <p>Functions are a products answer to user problems / need. They do something that user wants. They are often verbs in nature. Every function is powered by many features. Multitasking is a function. Browser tabs is a feature that powers the multitasking feature. A function can have one or more features powering it. Functions are very generic in nature, features are often more specific. Functions can be similar to product experience. Safety (product function) provides a feeling of safety (product experience)</p> <p>Details of job opportunities Direct link to courses E-books</p> | <p>🧪 Reject, Redesign, Retain</p> <p>Post customer validation, reject, those function or feature that the customers didn't find useful, Redesign those that were partially useful and retain those that met the bar, Iterate with this until all functions / features are accepted.</p> <p>MODIFY: Add information about salary</p> <p>Keep updating</p> |
| | <p>⚙️ Product Features</p> <p>Product feature are specific. One of more features will power a function. Antilock Brakes, Airbags are feature that power the safety function. Browser tabs, Apple's home button to multitask between apps are features powering the multitasking function. Each feature will have many components/sub components powering it. Sometimes a very popular component becomes a feature in itself. Like car stereo is a major components and a feature at the same time powering the in car entertainment function powering entertainment as a product experience.</p> <p>Language accessibility Availability of resources Video Based Resources</p> | |
| | <p>⚙️ Components</p> <p>Components build up the features. For a airbag it will comprise a list of component like bags, triggers etc. that go into making it. For a tabbed browser it will comprise of various chunks of code that will make the tabs work. In cases where the feature is a major component, you could list here the auxiliary components that are required to make the major component work. You can also list new adjustments and innovations you're planning here at the component level.</p> <p>Website Web developers</p> <p>Maintenance Team Database Administrator</p> | |

Figure 10 Product Development Canvas

9. LEARNING NEED MATRIX

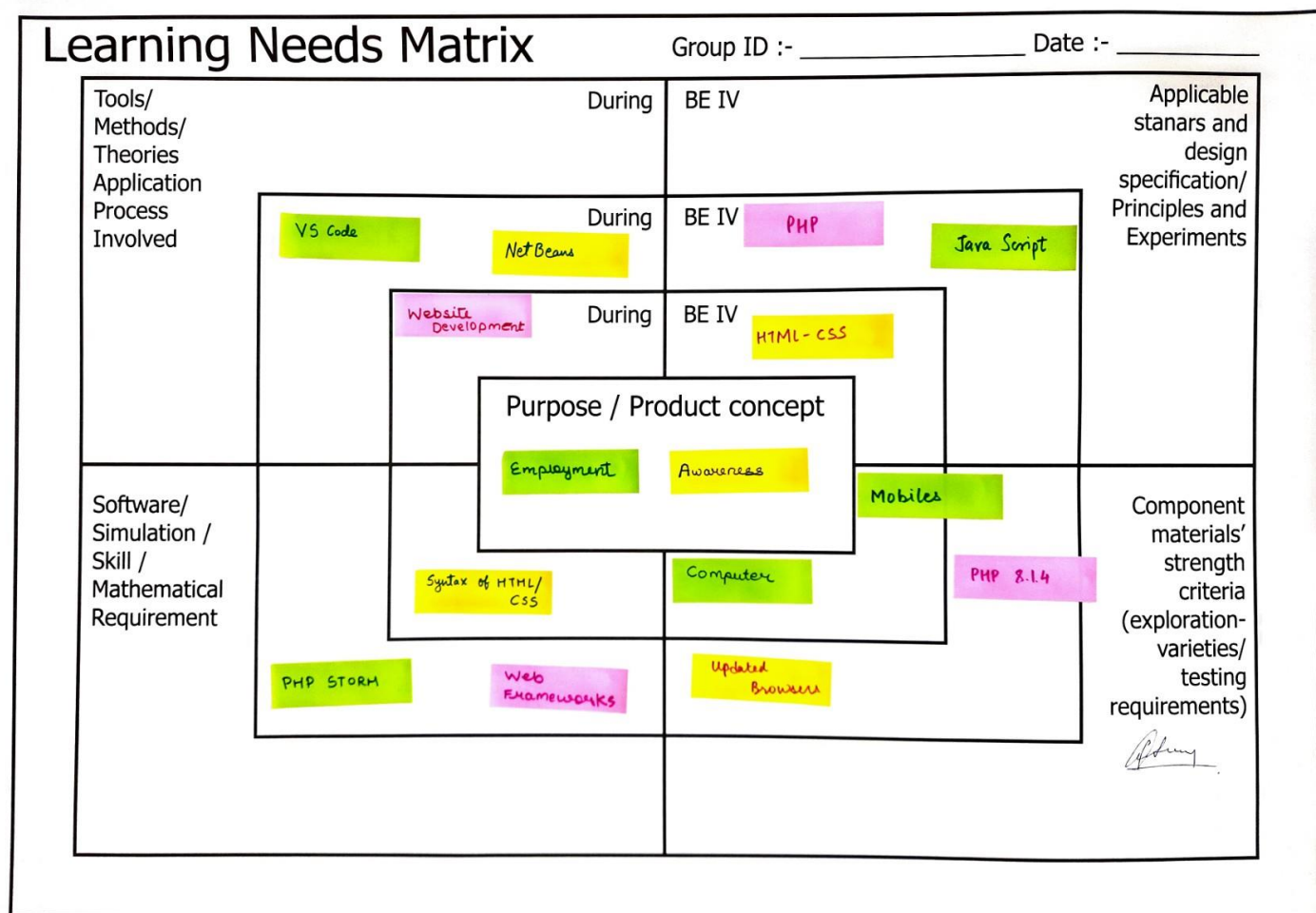


Figure 11 Learning Need Matrix

- **Purpose/ Product Concept**

It includes the main idea behind the design.

- Employment
- Awareness

- **Tools/Method/Theory/Application Process Involved**

- Website Development - It provides the basis for social interaction between the candidate and the party by being a middleman and provides easy access to employment for even ordinary people.

- **Applicable standards and design specifications/ Principles & experiments**

- JavaScript - used by programmers worldwide to create dynamic and interactive web content such as applications and browsers. It allows you to make web pages interactive.
- HTML-CSS - HTML is a language for describing the structure of Web pages and CSS is a language for describing the presentation of Web pages, including colors, layout, and fonts.
- PHP - PHP allows web developers to create dynamic content and interact with the database. PHP is known for its simplicity, speed, and flexibility – features that have made it fundamental in the world of web development.

- **Component materials strength criteria (exploration – varieties/testing requirements)**

- Mobiles
- Computer
- PHP 8.1.4
- Updated browsers

- **Software/Simulation/Skill/Mathematical Requirement**

- Visual Studio - Visual Studio is an integrated development environment used to develop console and graphical user interface applications along with Windows Forms applications, websites, applications and web applications and web services using native and managed code.
- PHPStorm - PHPStorm is a proprietary, cross-platform IDE that provides an editor for PHP, HTML and JavaScript with rapid coding analysis. It also helps with error prevention and automatic refactoring of JavaScript and PHP code.
- WebFrame Works – A web framework is a software framework designed to aid in the development of web applications including web services, web resources, and web APIs. Web frameworks provide a standard way to build and deploy web applications on the World Wide Web.

10. **FEEDBACK ANALYSIS**

We proposed our project to the clients. The idea was appreciated but retained. They helped us to gain more insight into our project with the ideas like

- Adding salary prospects
- Adding comparison tools to compare various openings according to location, experience and salary
- To think of a wider domain to include other lifestyles like freelancing, internships along with part-time and full-time jobs.

This also leads us to search more for the same.

This project can also include

- Message facilities or chatbot
- Reviews about the company or workplace.
- Notifications for updates.

11. CONCLUSION

The project **Youth Employment Opportunities** has the following conclusions:

- The quality of training and education affects young people's job opportunities. We can therefore carry out research studies to find out what factors can affect the employment status of young people.
- Unemployment is mainly caused by the lack of suitable opportunities and training facilities. Other personal and cultural issues also play a role in this. We should make sure that the youth get the proper skills training and all the necessary information easily.
- We can run programs that can help young people easily enter and make money in the household products sector. We can also place more emphasis on policies and projects that increase the number of modern labour-intensive companies by helping them grow and hire more workers [3].
- The analysis in the paper supports the need to create more jobs by integrating employment targets into development strategies and the sector, which has high long-term resilience. Manufacturing in general, micro-enterprises in particular and tourism should be targeted.
- They have the potential to create more jobs by absorbing semi-skilled, skilled and all types of workers.
- Hiring, promotion and working conditions without gender discrimination are commendable steps in this direction. [5]

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