

beckn



# **Submission**

**POWERED BY** 

EkStep | Foundation

National Digital Education Architecture
Digital Infrastructure for the education ecosystem

SUPPORTED BY













#### **Team and Member Details**

- Team: VULCAN\_FORGE
- 2. Contact Details (of POC)
  - a. Email: solemnsquire@gmail.com
  - b. 8421030407
- 3. Member Details (Name, Email ID and Contact Number)
  - a. Nidhish Chauhan
    - Email: solemnsquire@gmail.com
    - Ph. No.: 8421030407
  - b. Pratham Yaday
    - Email: <u>pratham007yadav@gmail.com</u>
    - Ph. No.: 7058492414
  - c. Pratap Shingane
    - Email: sushrutrao465@gmail.com
    - Ph. No.: 7219205988
  - d. Mandar Kamble:
    - Email: Mandarkamble2021@gmail.com
    - Ph. No.: 9930291082
  - e. Ankur Gaikwad
    - Email: ankurdattatrayg@gmail.com
    - Ph. No.: 9420391705





#### **Team and Member Details**

- 4. Challenge Category
  - a. Challenge: Challenge 2 that is developing a provider/supplier-side interface (Beckn Provider Platform) using which a provider/supplier can publish (or list) an opportunity (or item) on the network.
    - i. Challenge Category 1 : **Mentors & Tutors**
    - ii. Challenge Category 2 : Courses & Training
    - iii. Challenge Category 3 : **Scholarship & Grants:**
    - iv. Challenge Category 4 : Jobs & Internships





#### **Problem Statement**

To develop a platform where a provider can publish an opportunity on the network. A user can circulate or publish them as well as their opportunities.

The opportunities will be one of the following four categories:

- 1. Provider as a mentor and tutor: A provider Register themselves and create their profile with all the details like their qualifications, charges, expertise, etc.
- 2. Provider as an employer: A provider is able to list all the job or internship opportunities for prospective applicants. They can shortlist the applicant based on their requirement or criterion when applicant successfully apply for them.
- 3. Provider as a course or training institute: A provider can register themselves as an institute, where they will be able to publish the courses they provide with all its details.
- 4. Scholarship and grant: A institute or NGO can facilitate the scholarship or grant to an applicant and select them on the basis of their criterion.





The platform will help to plethora of people who seeks mentorship, jobs, scholarships, courses, internship, etc. opportunities.





Our solution solves the problem by giving them platform to the providers to provide their services to the applicants like for employers to recruit employee, for mentors to provide session, for institute to provide their courses and for NGO/ institutes to provide the scholarships.

- 1. Mentors and tutors: Mentorship is very essential in many part of life. And it is very hard to get a proper mentor or tutor. This platform provides the solution to this problem. Mentors and tutors will be able to publish their profile with all their expertise, fees, session information. The provider will be able to respond to the applicant requests by provide the fee structure, T&C and session information. If satisfied, the applicant will be able to do payment to the provider.
- **2. Courses and Training**: A course from a reputed institute gives necessary knowledge to succeed in that sector. Here, in this platform, it provides opportunities for both institute to list their course and applicants to enroll in them. Institute will be able to register and list their courses with details like course duration, mode (offline, online or hybrid), curriculum, etc. Most of the searching and booking facilities will be handled by Beckn API's. With the help of both BAP and BPP, the applicant can book and enroll in the course.





- 3. Scholarships and Grants: It happens many times that a students or scholars are unaware of any scholarship or grants opportunities, it becomes worse for students coming from financially weak or unstable background or scholars who want a grant. This platform will provide the opportunities for the student to apply for scholarships and grants from institutes or NGOs. Institute and NGOs will be able to enlist their scholarship will the relevant details like value, duration, type, eligibility criteria, documentation proof, mode, value etc. The BPP publishes and provides the T&C to applicants.
- **4. Jobs and Internship:** Unemployment is a very dire issue in many countries. A skilled and employed person can provide a lot of values to a country economy. Many times it happens that employee is unaware of job or internship prospect floating in the market. This platform provides a way for employer and employee to achieve their goals. For employers, they can enlist their jobs or internships requirements, roles, salary, etc. And for employee to apply for that role. The BPP helps in publishing the job or internship and gives all the T&C to the employee who is applying for that role.





### **Tech Stack:**

- ReactJS and Tailwind CSS for UI
- 2. State management with Redux
- 3. Node.js and Express.js for backend
- 4. MongoDB for database
- 5. Firebase for authentication





#### Tech Stack:

- Choosing ReactJS and Tailwind CSS is because both are popular and are very compatible to easy other to make Ul's
- 2. Since the frequency of changes is very much more on the website, so Redux is suitable for handling advance state management.
- 3. Node.js is a runtime environment and Express.js is the framework used.
  Since both are JavaScript technologies, so it is easier for current and future developers to make any changes and scale the website.
- MongoDB is a NoSQL database. It is known for its ease of use and speed.
   It is used here since it is very compatible with Express.js.
- 5. Firebase will be used for authentication, since it is easier to register and login with Firebase platform on the website.





#### Scalability, Usability and effectiveness:

The solution can be easily implemented by creating frontend with ReactJS, tailwind CSS and Firebase and respective backend with MongoDB, node.js and express.js and with Beckn API's. Effective of solution is correlated with how much people are properly using the services, with the help of proper feedback and survey we can estimate the effectiveness of the platform.

The solution is quite scale since ReactJS and Express.js is used as both frontend and backend. For a much larger and complex app, typescript can replace JavaScript, helping in much stricter control over the codebase of the website. The backend can also be divided into microservices so that if suppose one page like scholarship section fails, then it will not cause the downtime to the whole website. Like this, Next.js can also be used if we want to do server side rendering, etc. The scope for scalability is huge and implementing new ideas in the near future is quite feasible.





### Methodology/ Architecture Diagram

#### What is an architecture diagram?

- An architecture diagram is a graphical representation of a set of concepts, that are part of an architecture, including their principles, elements and components. It includes:
- Flow chart
- Wireframes
- Graphical representation (Bar graph, Histogram, Pie charts, Heat maps)
- Prototype (Screenshot, screencast, image, video, etc.) optional
- [Include concept, principles, elements and components]
- Please note: Upload the documents (eg: .pdf, .docx, .vsd, etc.) directly on the platform. However, the links can be inserted/ attached in this PowerPoint template.

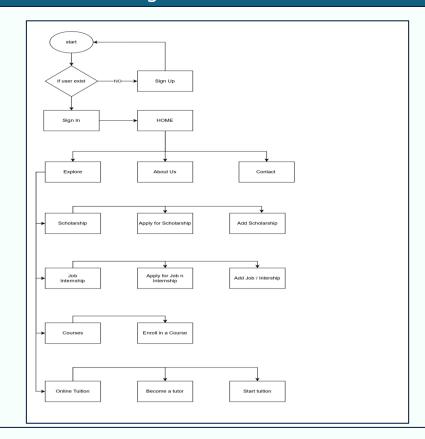




## Methodology/ Architecture Diagram

#### **Architecture Diagram:**

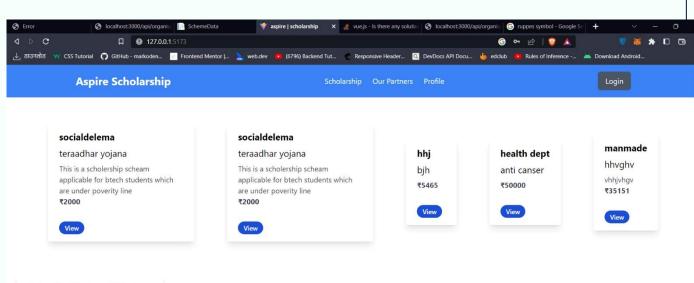
Flowchart:







#### Scholarship:



#### Rajarshi Chhatrapati Shahu Maharaj Shikshan Shulkh Shishyavrutti Yojna.

SWADHAR YOGANA

The objective of the Scheme is to provide financial assistance to the Economic Backward Class who are admitted to Diploma / Degree / Postgraduate Professional courses

### Tribal Development Department

Post Matric Scholarship Scheme (Government Of India ).

Scheme of Post Matric Scholarships to the students belonging to Scheduled

#### Minority Development Department

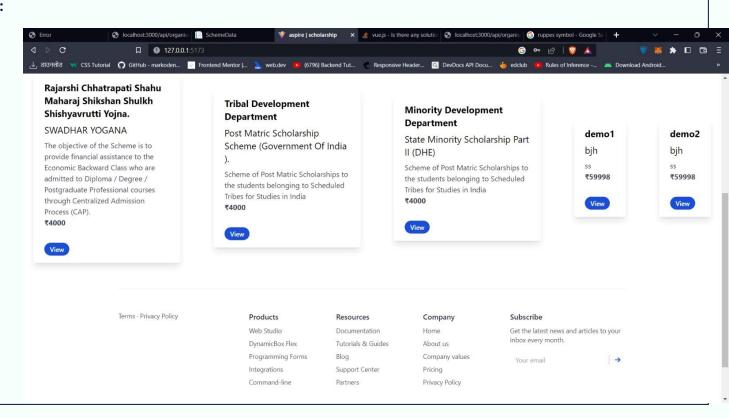
State Minority Scholarship Part II (DHE)

Scheme of Post Matric Scholarships to the students belonging to Scheduled Tribes for Studies in India

demo1	demo2				
bjh	bjh				
SS	ss				
₹59998	₹59998				

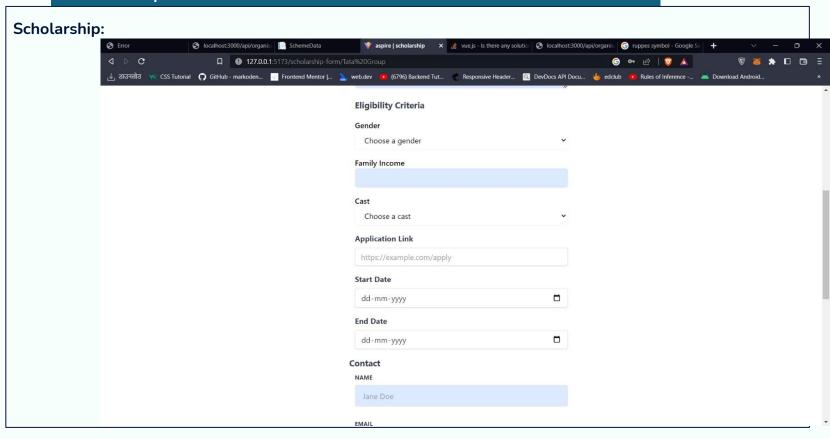






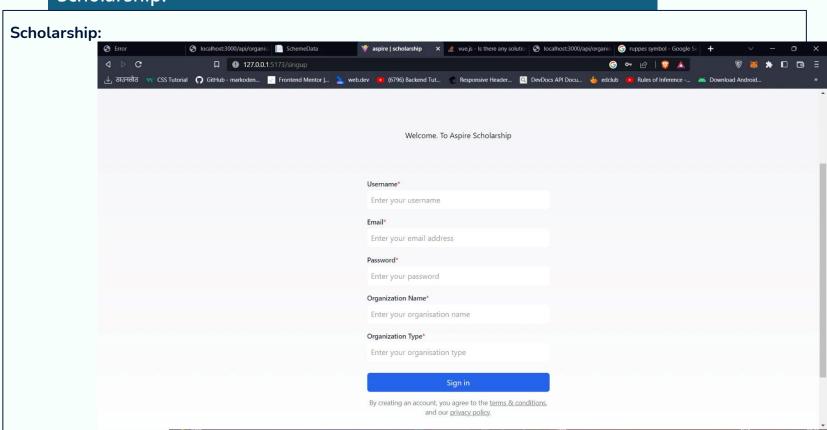






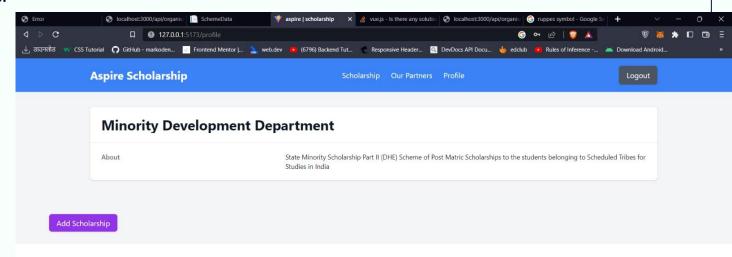






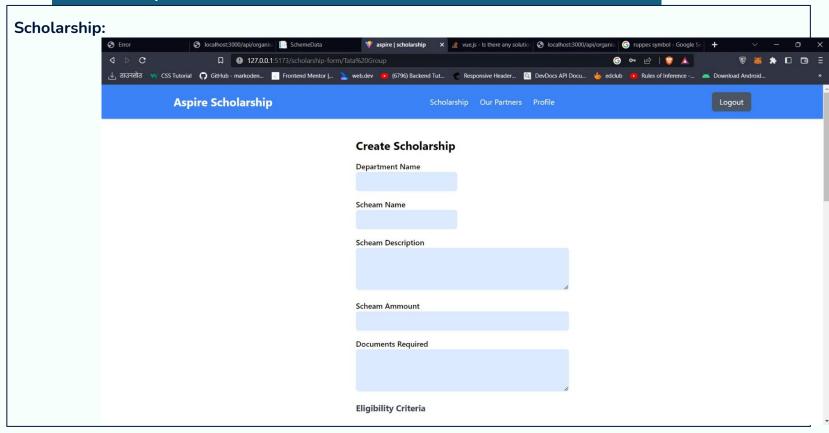






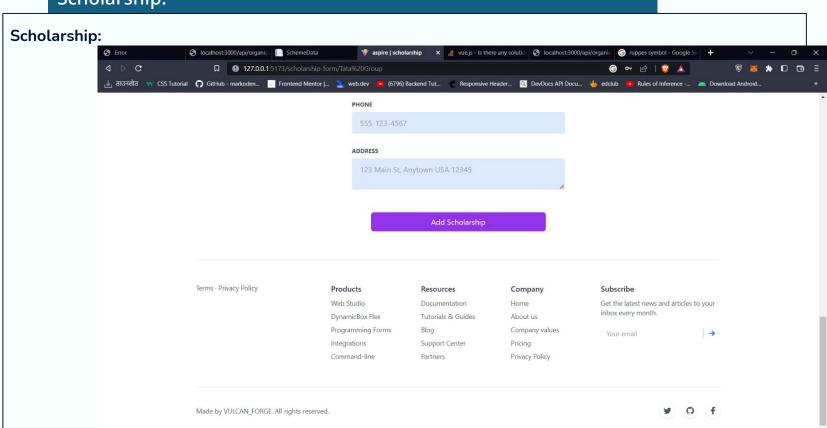










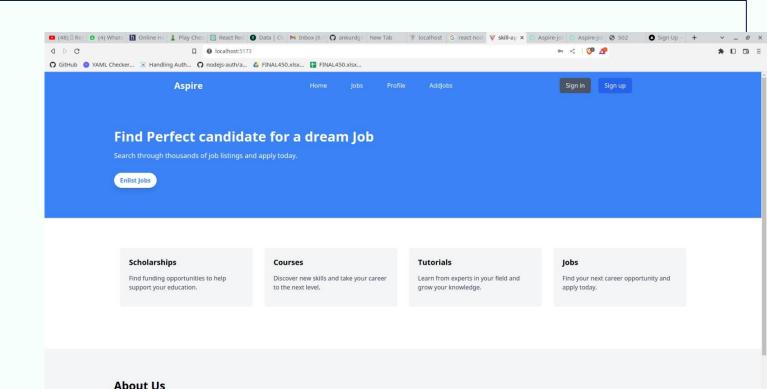






#### Job:





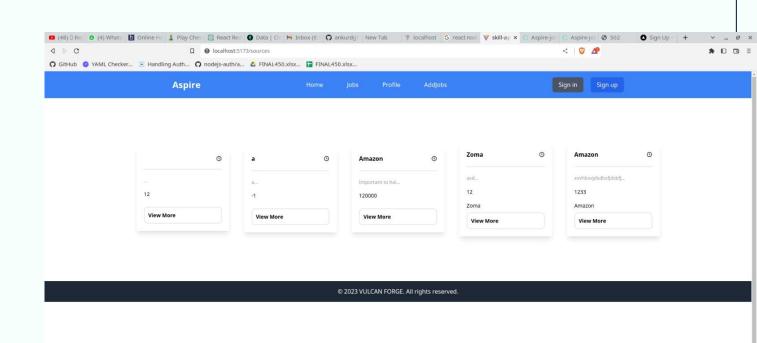
Get the best talent for your business with our job enlisting platform - find the perfect candidate for your team today!"





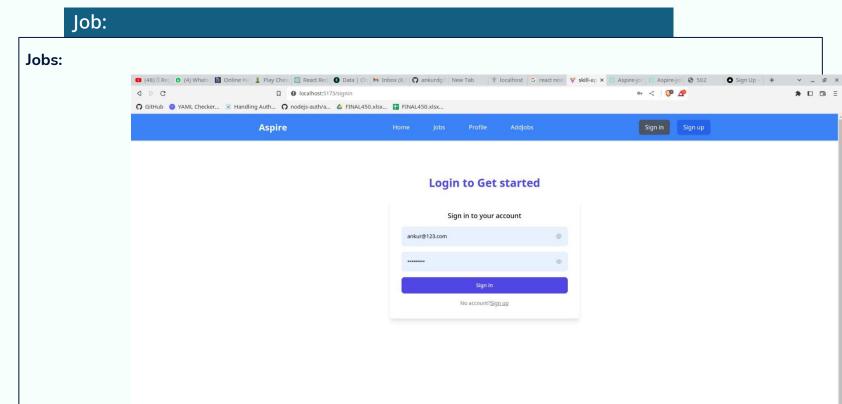
### Job:







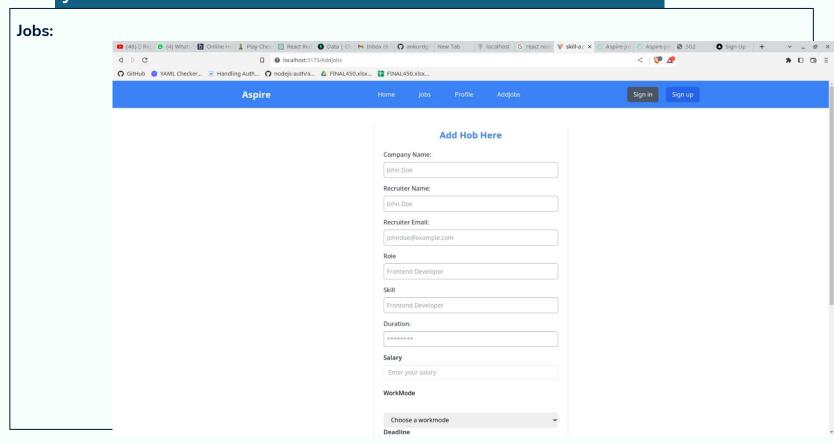






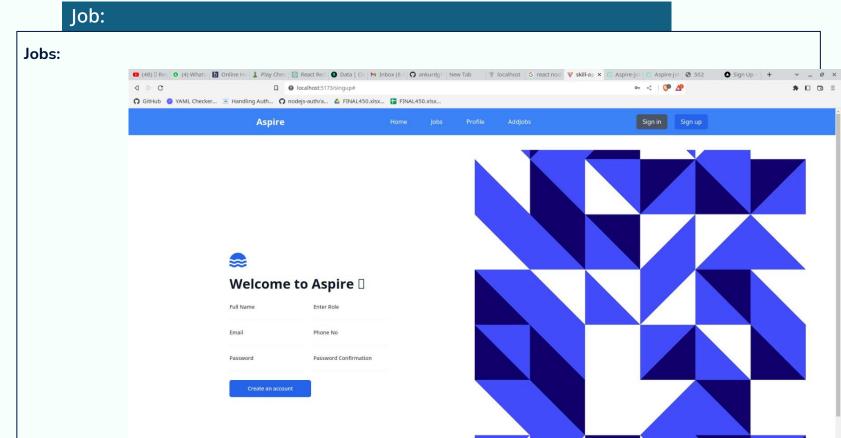


### Job:



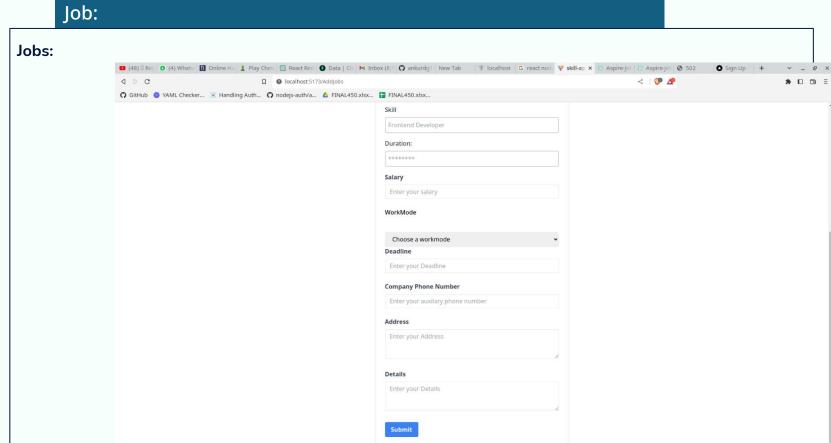






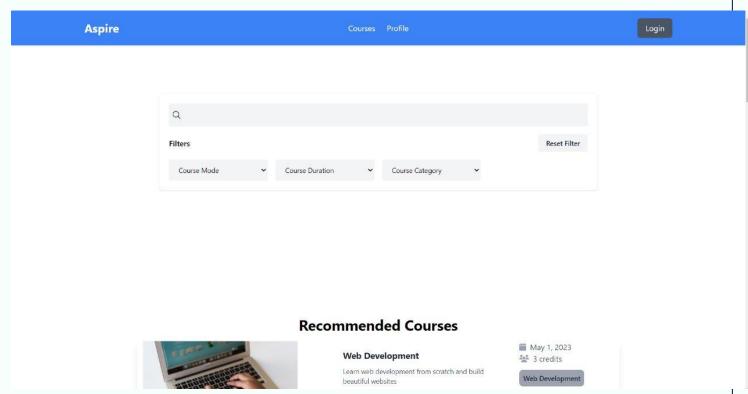
















#### Courses:

#### **Recommended Courses**



#### Web Development

Learn web development from scratch and build beautiful websites

8 weeks

John Doe

May 1, 2023

Web Development

Read More



#### Mobile App Development

Build mobile applications for iOS and Android using React Native

2 weeks

Jane Doe

June 1, 2023

Mobile App Development

Read More



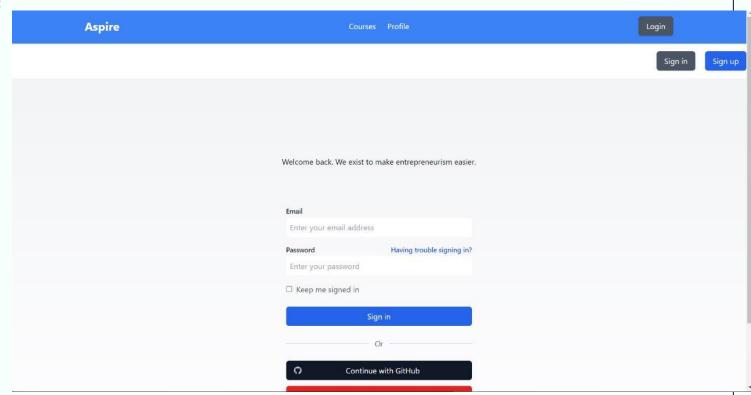
#### **Data Science**

Learn data science from scratch and analyze realworld data sets July 1, 2023

Data Science

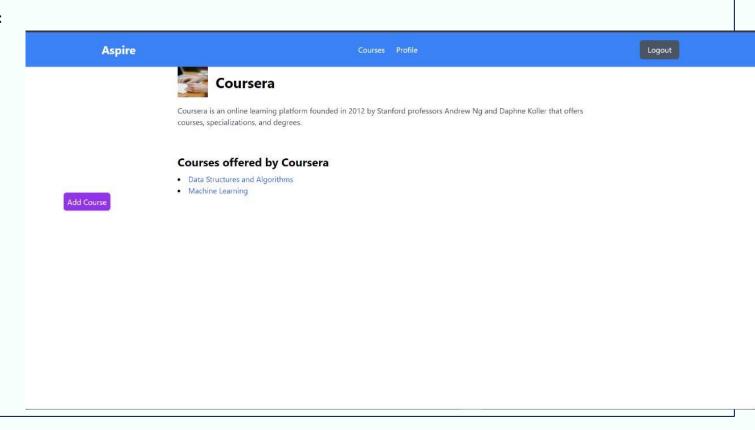






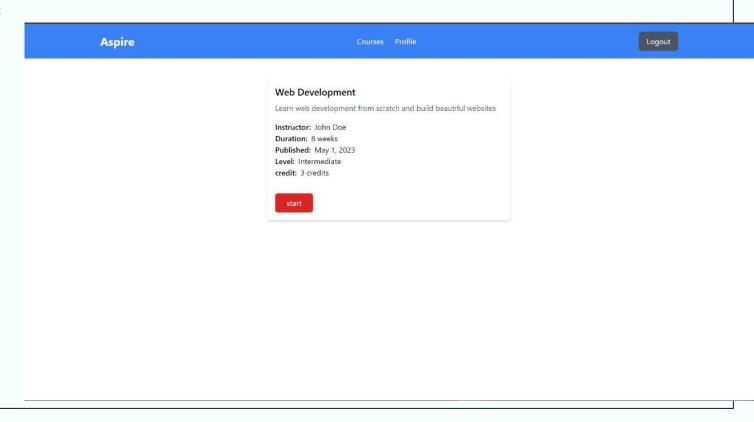
















### Mentors and tutors page

#### Mentors and tutors page:

Aspire Mentors Sessions Add Session Profile Sign up Logout

#### **Online Tutions and mentorship**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Et, egestas tempus tellus etiam sed. Quam a scelerisque amet ullamcorper eu enim et fermentum, augue. Aliquet amet volutpat quisque ut interdum tincidunt duis.

Get Mentorship

Be a Mentor



#### **How does It Work**





## Mentors and tutors page

Mentors and tutors page:	
Aspire	Mentors Sessions Add Session Profile Sign up Logout
	Add Session
	Title  Enter the event title
	Description  Enter the event description
	Start Date
	dd-mm-yyyy   End Date
	dd-mm-yyyy   Categories
	Enter Your categories  Language
	Enter Your language





### Mentors and tutors page

IVIC	intors and tutors page							
Mentors a	nd tutors page:							
	Aspire	Mentors	Sessions	Add Session	Profile	Sign up	Logout	
			Pro	file				
		UserName:						
		John Doe						
		Email:						
		johndoe@exa	ample.com					
		Location						
		Enter Your Lo	cation					
		Expertise						
		Enter your ex	perience					
		Occupation						
		Enter your O	ccupation					
		Experience in	Years					
		Enter experie	ence in Years					
		Language						

