Problem Statement: Making career choices and AI based counselling accessible to every child at secondary level along with aptitude tests and detailed career paths

Organization/Agency name: Department of School Education & Literacy (DoSEL), Ministry of Education.

Team Name: Team **Counsailia**

Members: **Souvik Mukherjee** (Web developer), **Divyam Sharma** (Logo Designer and App developer),

Tushar Sharma (App developer), **Girish Murugan** (AI/ML developer), **Nitish Ramaraj** (Web developer),

Pratyush KKK (UI/UX Designer)

Institute Name: Vellore Institute of Technology, Vellore

TEAM COUNSAILIA

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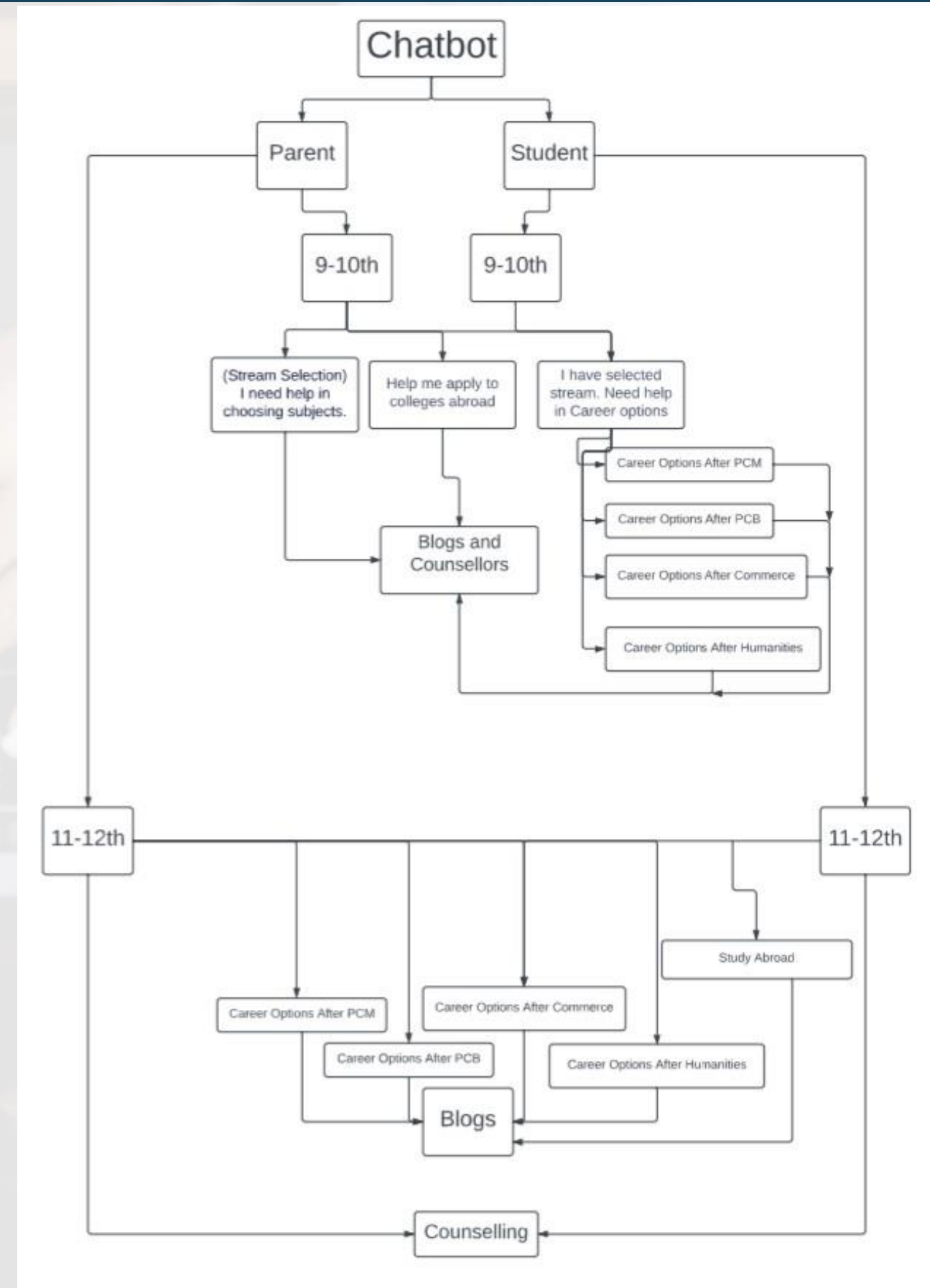
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PROPOSED IDEA

In today's world with so many career options, its common for students to feel overwhelmed by the career options. Which is why **Counsailia** team has made a platform with the following features :-

- Our platforms have integrated **AI chatbot** to ease the circumventing task of career selection.
- **Self-catered test reports** - to fit each individual taking up the test.
- **Career counselling blogs** - for the aspiring young minds.
- **Rasa Framework** is used to understand the intent of Natural Language and proceed according to the options selected by user. Marin our chatbot, sets-up an interactive platform between the user and the website.
- For disabled students we have also implemented narrator in the chatbot to make it accessible to wider range of students.

We the team **Coun-sail-ia** want our counselling to be the **wind** students need to smooth **sail** in their career.
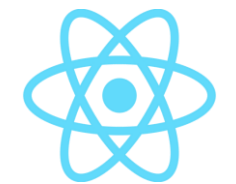

How our chatbot will work

IMPLEMENTATION

- **UI/UX design** is an essential part so we have used Figma, Canva, Photoshop to design the app and website also Adobe Illustrator is used to design the **logo**. We have already made the designs and **added links of prototypes** at the end of the PPT.

- We will make the **front end** part of the **website** using HTML, CSS, SASS, JavaScript and frameworks such as React.js , Next.js along with a **template engine** pug.

- For **app** we will use JAVA, XML. We are implementing **exam platform** using React.js and a chat application to connect with the counsellors.

- Then for the **backend part** of app and website we are going to use Node.js, Express.js and **databases** MySQL, MongoDB and Firebase. **API testing** using Postman. For **payments gateway** we are using Stripe.

- The **AI/ML chatbot** is built using RASA and NLU Frameworks. Chatbot will be integrated in website through **Flask**, a web-based python framework.

- A personalized self-catered report using **fpdf** library from Python. Analysis of the report will be done through ML using a data set we have collected and final analysis by counsellor.

OUTCOME OF THE PROPOSED IDEA

Opportunities:-

- Recently **India today** conducted a survey among **10,000 students** which showed **93% Indian** students **aware of just seven career** options, even though there are **250 career options** that can be pursued in India -- most new and in-demand.
- The globally accepted counsellor to student ratio is **1:250**, while in India, it is **1:3,000**, which denotes a **huge shortfall** (Source: India Today)
- Our **customers will be parents** worried about their child's career and **students confused** by the vast variety of career options available.

Revenue Sources:-

- **3 tiers of membership** options to suit the student's needs
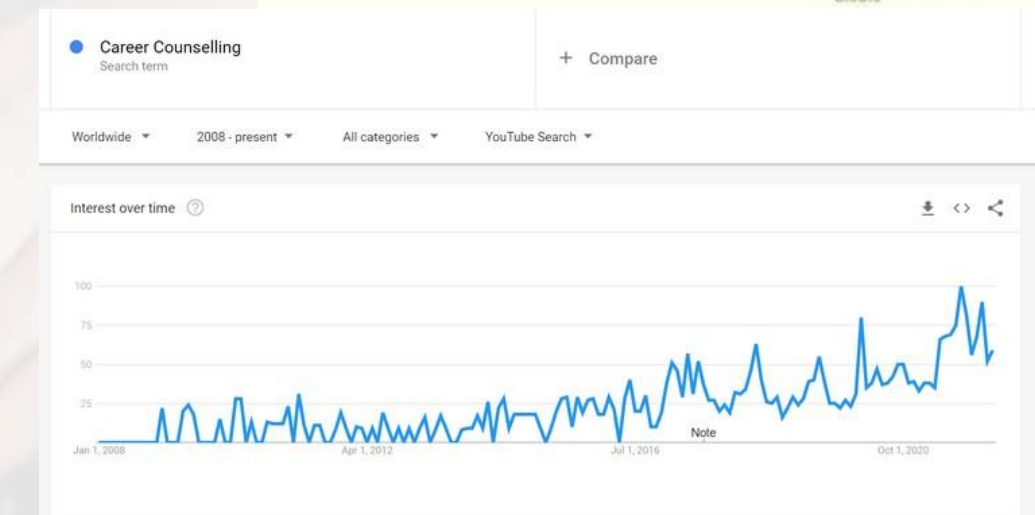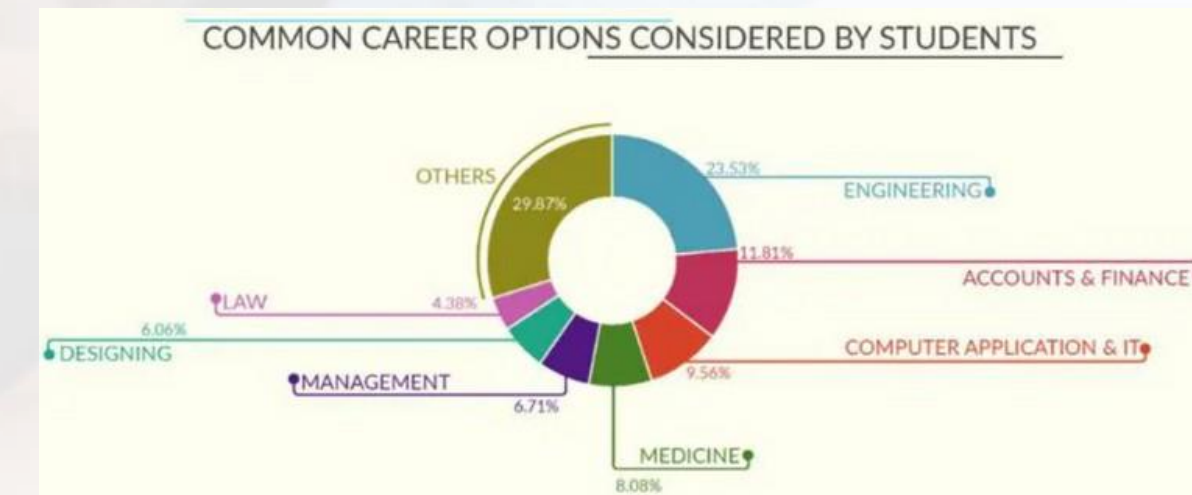- Fraction of profits made by the counsellor

Value Proposition:-

- High quality **AI based test** at a minimal cost
- Easy to access mentorship with **AI based chatbot** along with the personalized report
- We have mentors (volunteer - Degree holders, professors) and certified counsellors

Costs we will need to pay:-

- **Web and App hosting** and **cyber-security** services.
- Membership of various platforms like Adobe Creative Cloud, Canvas Figma, MongoDB, Stripe charges

Links of the prototype designs we made as promised

- **Website Prototype in laptop:- https://bit.ly/3u0eSma**

COMMON CAREER OPTIONS CONSIDERED BY STUDENTS

Career Counselling

A growing market

19% employment rate predicted from 2010-2020 for school and career counsellors (BLS)

500+ Career Counsellors in India against 1.5 lakhs+ schools in India

Increased Competition for College Admissions