# PROJECT: MY COUNSELOR



Fuzzy sets and system I

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#### Goal

This study highlights the use of fuzzy logic technology to guide students to the suitable profession track

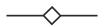
The proposed system is designed to guide high school students to choose a future career which suit their interests.

The system recommends career options to students based on their interest on a range from one to five. We ask questions mainly related to six basic field. The system was finally prototyped as a google

The system was finally prototyped as a google site application.

Extension to recommend academic courses and job aspects related to their fields can be future direction of this prototype.

### **Crisp Solutions**



- Human-centric aspect is rarely considered in academic counselling
- Grades might not match the interest
- The student might be interested in several areas

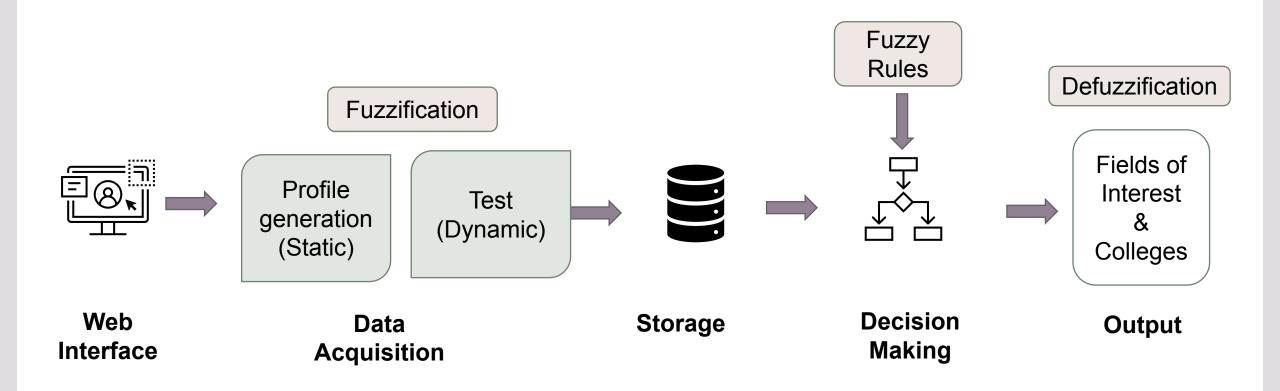
**Example**: A student might like science, and enjoy helping people, so suggesting Medicine is a good idea.

A student enjoys math 80% and at the same time 80% art which creates the possibility of being an architect



### **Fuzzy Solution**

A fuzzy-based conceptual framework is suggested.



## <u>User Profile</u> <u>generation</u>

One time setup

User creates an initial profile

Users answer several interest-related questions on a fuzzy scale

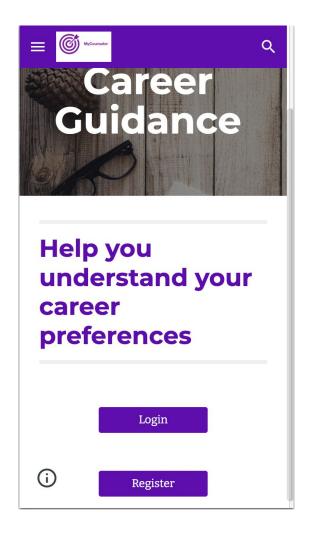
User sets their location requirement

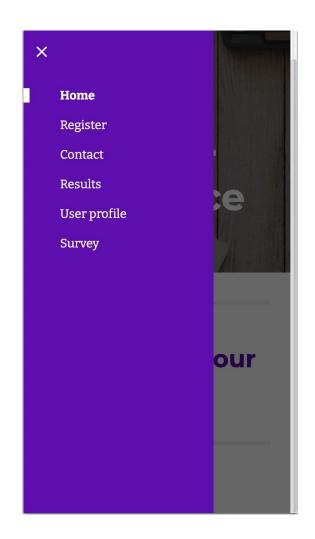
Activities that sound interesting

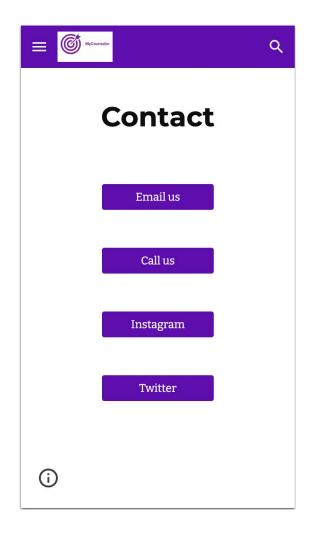
Qualities that describe them

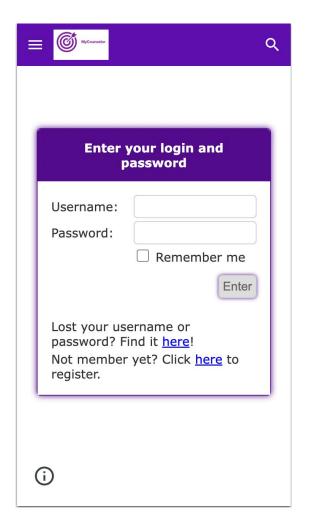
Free time interest areas

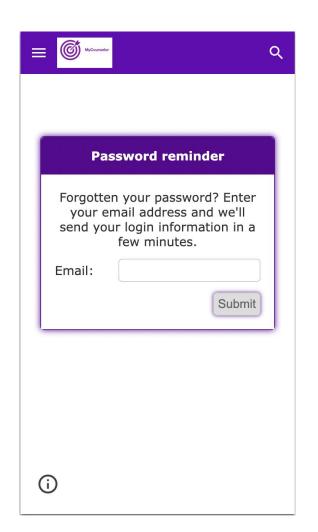
School subject/activities interest



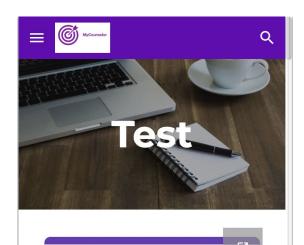












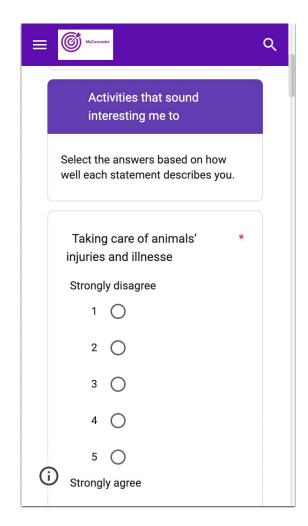
#### myCounselor

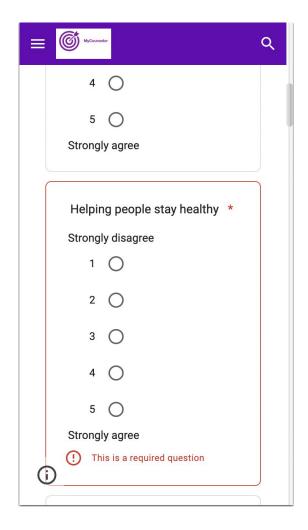
This questionnaire will be used to determine your future career and job interests. It can also be used as a guide to help you make class choices for high school. Please take this test.

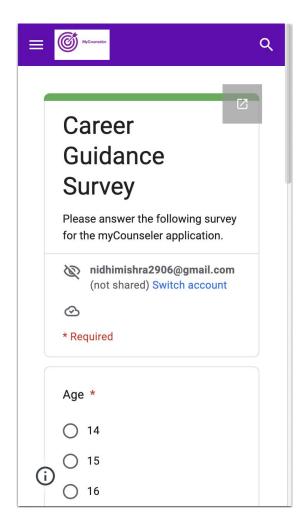
nidhimishra2906@gmail.com (not shared) Switch account

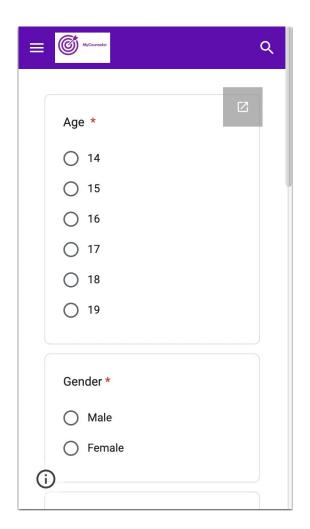


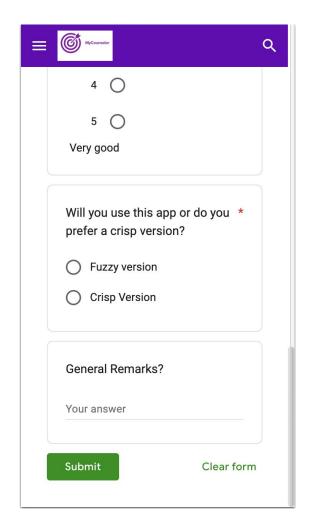




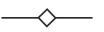








## Result display





Crisp version



Spider web (screenshot)

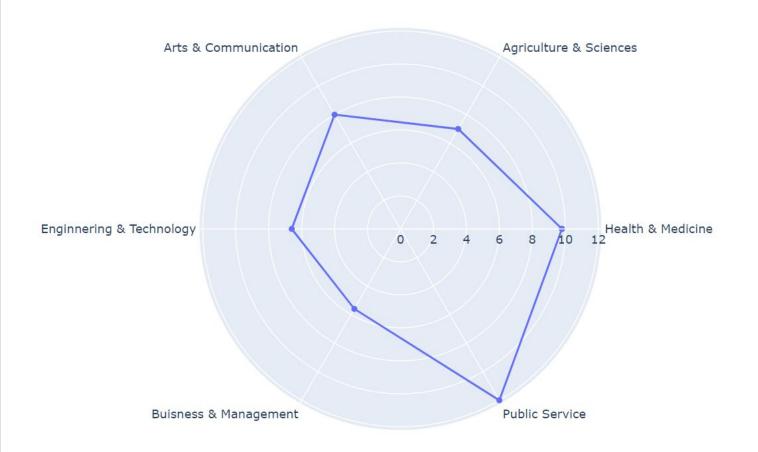


Map of possible universities as per match (screenshot)



- Name: Alexandera
- Lives in La Chaux des fonds
- Speaks French and is able to understand English as well
- ☐ Age: 15 Years
- Always been interested in helping people and studying biology,
- She would like to go to college where they speak French
- ☐ Doesn't mind leaving the country
- ☐ Radius- 200kms
- Outdoorsy, love friends, festivals, cultural events
- ☐ lacks communication skills

### Results



**GERMANY** HERTIE SCHOOL OF GOVERNANCE

**SWITZERLAND** fairs UNIVERSITY OF GENEVA

UNIVERSITY OF LAUSANNE

UNIVERSITY OF ST. GALLEN

UNIVERSITY OF ZURICH and

SWISS FEDERAL INSTITUTE OF TECHNOLOGY ZURICH

Center for Comparative and International Studies

**FRANCE** SCIENCES PO PARIS

GENEVA GRADUATE INSTITUTE

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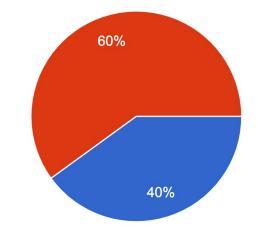
### User Feedback



- 10 Participants
- 4 males and 6 females
- Between the age of 13-19 years

#### Gender

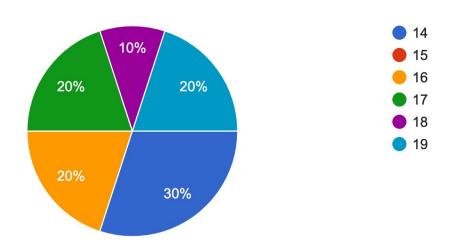
10 responses

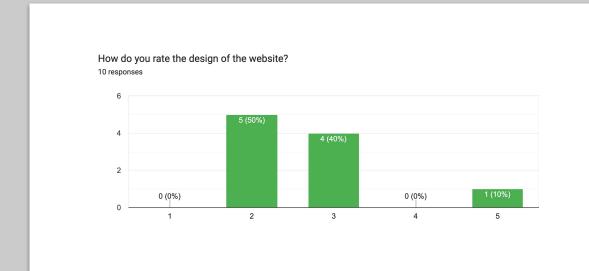


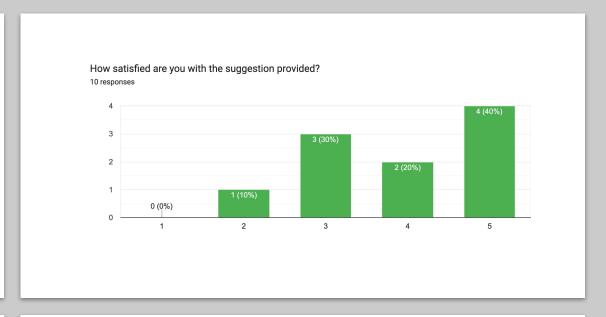


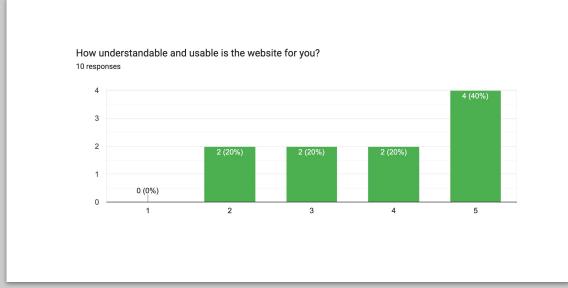
#### Age

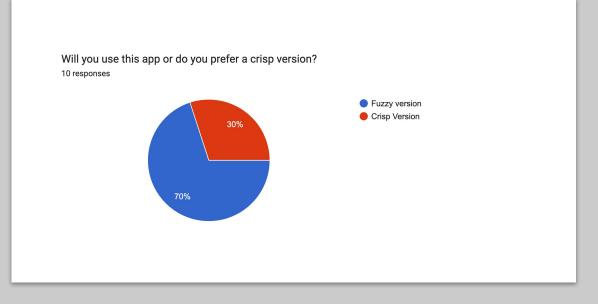
10 responses













Preferred crisp questionnaire, was quicker



Was simple and easy to understand the app.





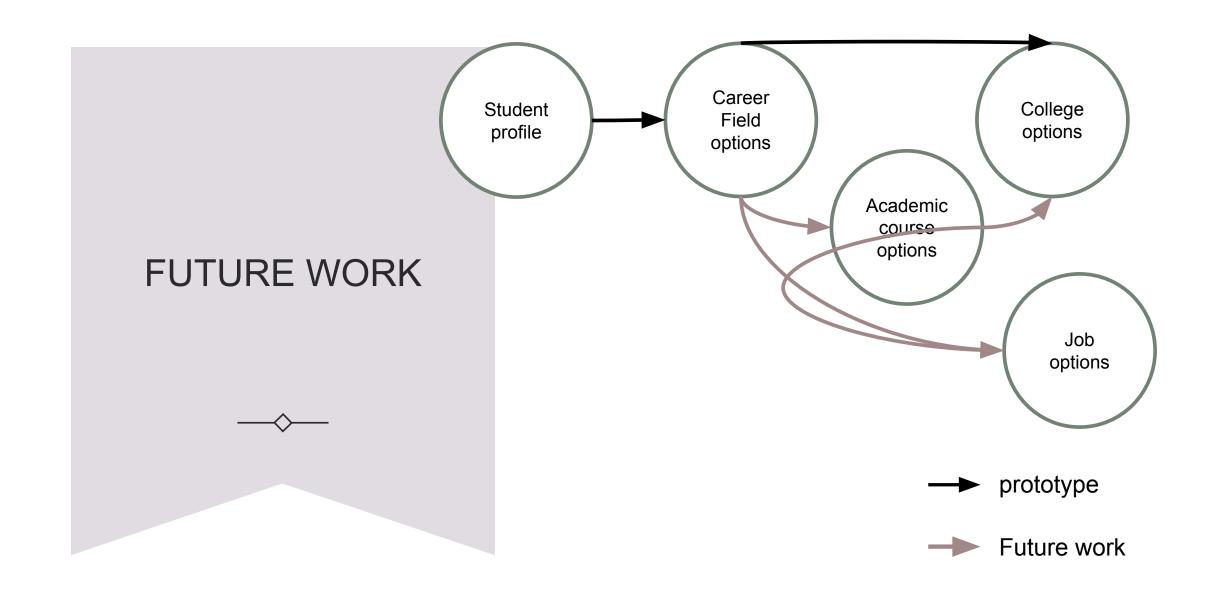
Interesting questions.

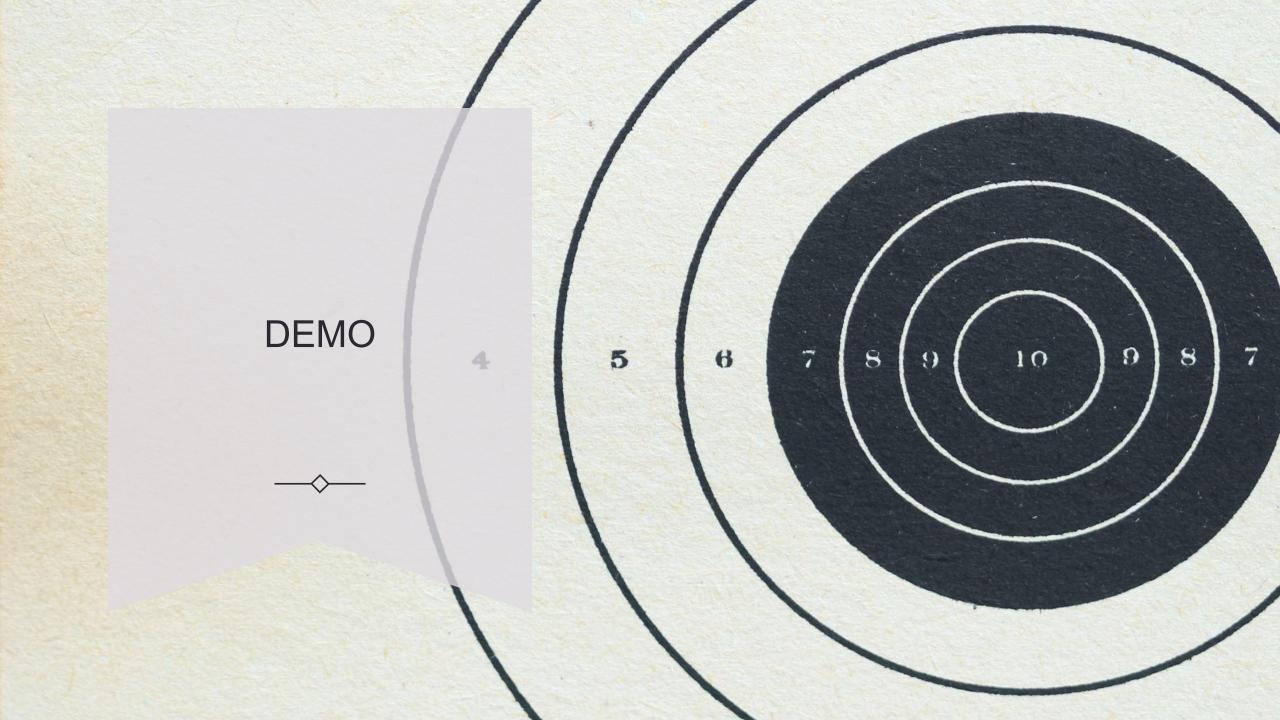


Wanted real answers.



Nothing to say.







### References

- Peker, Musa, et al. "A new fuzzy logic based career guidance system: WEB-CGS." (2017).
- Pronina, Olha, and Olena Piatykop. "The Decision Support System Education Career Choice Using Fuzzy Model." COLINS. 2021.
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- Gupta, Megha V., et al. "FESCCO: Fuzzy expert system for career counselling." Int. J. Recent Innov. Trends Comput. Commun 5.12 (2017): 239-243.