CAREER GUIDANCE SYSTEM

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Overview

Career guidance system that can help students choose the right paths for future emerging technologies through their existing level of knowledge, interests, and available sectors to improvise in the future by the time the students reach career level, based on past people who succeeded in choosing the same path, thereby providing the best suggestion through ML.

Problem Objectives

CHOOSING A CAREER PATH VARIED WITH PERSONAL SKILLS WITH RESPECT TO YEARS_OF_EXPERIENCE

INCREASING THE EFFICIENCY OF THE DATASET

TO DEVELOP A FEASIBLE SYSTEM THAT WILL TAKE INPUT PARAMETERS AND GIVE A RESULT

Novelty

- Overcome existing challenges of the dataset
- Based on the past people review who succeeded in choosing the same path and thereby providing the best suggestion through prediction

Data set

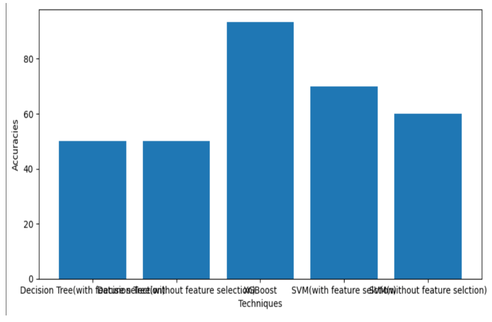
- A real time dataset with respect to skillset, years of experience, and roles
- The data set consists of 12 classes and 22 attributes

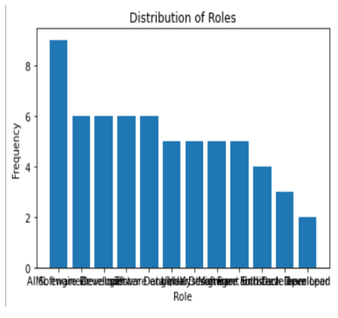
	YOE:ML	YOE:DL	YOE:Image Processing	YOE:python	YOE:Java	YOE:C	YOE:HTML	YOE:CSS	YOE:MYSQL	YOE:NLP	CGPA
YOE:ML	1.000000	0.603928	0.563610	0.179919	-0.202898	-0.365075	0.006120	-0.047468	0.053187	-0.231960	0.056824
YOE:DL	0.603928	1.000000	0.707442	0.323748	-0.067702	0.041862	-0.316143	-0.310157	-0.387180	-0.569328	-0.025680
YOE:Image Processing	0.563610	0.707442	1.000000	0.243120	0.004201	-0.219029	-0.294512	-0.401054	-0.339041	-0.124804	-0.022351
YOE:python	0.179919	0.323748	0.243120	1.000000	0.406369	0.306150	-0.371746	-0.382129	-0.249998	-0.280581	0.030036
YOE:Java	-0.202898	-0.067702	0.004201	0.406369	1.000000	0.512760	-0.266534	-0.306272	-0.308596	-0.186900	0.012831
YOE:C	-0.365075	0.041862	-0.219029	0.306150	0.512760	1.000000	-0.154507	-0.299850	-0.302125	-0.451932	-0.084760
YOE:HTML	0.006120	-0.316143	-0.294512	-0.371746	-0.266534	-0.154507	1.000000	0.730832	-0.206214	0.057990	0.016796
YOE:CSS	-0.047468	-0.310157	-0.401054	-0.382129	-0.306272	-0.299850	0.730832	1.000000	0.028093	0.306834	0.207510
YOE:MYSQL	0.053187	-0.387180	-0.339041	-0.249998	-0.308596	-0.302125	-0.206214	0.028093	1.000000	0.458558	0.159675
YOE:NLP	-0.231960	-0.569328	-0.124804	-0.280581	-0.186900	-0.451932	0.057990	0.306834	0.458558	1.000000	0.122008
CGPA	0.056824	-0.025680	-0.022351	0.030036	0.012831	-0.084760	0.016796	0.207510	0.159675	0.122008	1.000000

correlation

Results

These graphs represents feature selection w.r.t classifiers and data w.r.t each attribute





Output

```
ML
Enter: 0
YOE:ML
Enter: 1
DL
Enter: 2
YOE:DL
Enter: 1
Image Processing
Enter: 0
YOE:Image Processing
Enter: 0
Python
Enter: 1
YOE:python
Enter: 0
```

```
Java
Enter: 2
YOE:Java
Enter: 2
C
Enter: 0
YOE:C
Enter: 1
HTML
...
YOE:NLP
Enter: 0
CGPA
Enter: 2.8
```

```
[77] new_pred  = clf.predict([x_new])
     print("Prediction : {}".format(y1[y1['Associated Number']==new_pred[0]]['ROLE']))

     Prediction : 2    Software Developer
     Name: ROLE, dtype: object
```

Outcomes

- Based on the skillset and years for each skill, what might their career role be assigned as?
- Web Page which can suggest the career path

Reference

- Wulansari, R. E., Sakti, R. H., Ambiyar, A., Giatman, M., Syah, N., & Wakhinuddin, W. (2022). Expert System For Career Early Determination Based On Howard Gardner's Multiple Intelligence. *Journal of Applied Engineering and Technological Science (JAETS)*, *3*(2), 67-76.