

A Survey on Scientific Carrier Counselling Software

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Abstract

A career Guidance System where students can see various career opportunities. Fields available after graduation. It also lists multiple colleges available where students can search colleges by their courses. The system also includes an eBooks page. Here users may click to read career guidance opportunities in the application. Even some students need to go abroad after graduation or do a master's from a well-known college. For them, we can give link of test and provide they further guidance and one to one counselling via chat, voice call or video call. We will also provide career guidance for the people or students facing mental health like depression, etc., for their wellness and positive attitude.

This application will be an open platform for all the students and the counsellor seeking such a platform for their counselling. We also provide a feature of selecting the language manually for better interaction with the counsellor and the student, as people coming from a backward area or different mediums like Hindi, Gujarati, etc., can choose their languages and do the counselling session accordingly. There will also be a blog where students' achievements and experiences will be shown or written (Success Stories).

Keywords:- *Inference Web, Data Compression, Bayesian Network & E-Learning, UTAUT, Firebase Cloud Messaging.*

INTRODUCTION

The most alarming problem today in front of students', who wants to choose their careers, is a lack of awareness about various courses, and colleges can cause problems when trying to choose a career. The most prevalent issue amongst the young ones nowadays is that they are always confused with the countless number of options and career ways that one gets to observe these days; it

is quite confusing for many of our students. But most students don't know about the basic field and career influence. Students studying at the high school level are currently choosing a career basis parental, peer and societal impact. More importantly, many drop out of education post class 10th as they are not provided with any guidance. Also, there is a huge gap in aspiration and awareness of vocational careers among students.

RELATED WORK

In this paper [1] author has proposed a new method called Inference Web. It is a framework that explains the Semantic Web reasoning task. It uses Semantic Web technologies and recommended standards. It also provides a range of tools to support rich explanations. "Proof" represents an IW reasoning task and is encoded in a proof interlingua called Proof Markup Language (PML). The advantages of this paper are (i) Transparency (ii)Explanation interaction. Limitations of this paper are (i)Scalability (ii)Maintainability.

In this paper [2] author described data compression. Data compression means a process that reduces the size of data. It is the process which compressed text, audio and video file. This paper also contains (i) Huffman Coding (ii) Shannon-Fano Coding (iii) Run Length Coding (iv) Arithmetic Coding Advantage of this paper are (i) Reduction in storage (ii). Cost-saving Limitation of this paper are (i) Complicated (ii) Transmission errors

In this paper [3] author has described Bayesian Network & E-Learning. E-Learning is communication between students and teachers on the online platform. Bayesian Network also called as Bayes network. It is used in a wide range of tasks like (i) Diagnostics (ii) Prediction, (iii) Anomaly Detection, (iv) Automated Insight Advantage of this paper are (i) Save time (ii) Exploring Career. Limitations of this paper are:

(i) Lack of Physical Presence

In this paper [4] author has proposed Acceptance and Use of Technology. It is a model which is used for predicting behaviour. It aims to explain intentions to use an information system and

subsequent usage behaviour. The advantage of this paper is its Reliability. The Limitation of this paper is its Complexity.

In this paper [5] author works on Firebase Cloud Messaging. The cloud messaging service is one of the most effective services which most people use. It is supported by Google. It is a cross-platform messaging solution, which lets you send messages at no cost.

The advantage of this paper are

(i) Cloud Messaging. The Limitation of this paper are (i) Limited querying capability

METHODOLOGY

[1] Inference Web:

It is a framework that explains the Semantic Web reasoning task. It uses Semantic Web technologies and recommended standards. It also provides a range of tools to support rich explanations. "Proof" represents the reasoning task in IW. Proof Markup Language (PML) means encoded in a proof interlingua. It also provides a set of tools, which can be used to present explanations and handle follow-up questions effectively.

[2] Data Compression:

It is the process of compressed text, audio, and video files to avoid loss of information. The process is helpful if we want to save storage space. It is used in text documents, database tables and multimedia fields.

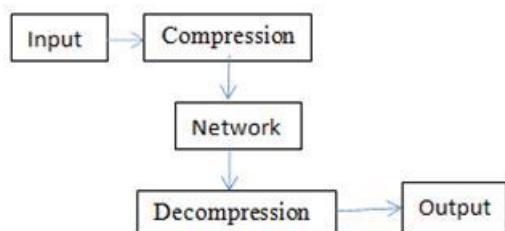


Fig 1: Compression & Decompression

[4] UTAUT :

UTAUT stand for Unified Theory of Acceptance and Use of Technology. It is a model which is used for predicting behaviour. It aims to explain intentions to use an information system and subsequent usage behaviour. It holds four fundamental constructs: (i) PerformanceExpectancy (ii) Effort Expectancy (iii) Social Influence (iv) Facilitating Condition. Performance Expectancy, Effort Expectancy, Social Influence are direct determinants of usage intention and behaviour. The Facilitating Conditions is a direct determinant of user behaviour. Gender, age, experience, and voluntariness

The theory was a construct of eight social cognitive theories, diffusion of innovations theory, motivational model, theory of planned behaviour, model of personal computer use, a combined theory of planned behaviour/technology acceptance model, technology acceptance model, and reasoned action.

COMPARATIVE STUDY

TABLE 1: METHODS USED

Sr. No.	METHOD	PROS	CONS
1.	Inference Web	Explanationinteraction	Scalability, Maintainability
2.	Data Compression	Less disk space, Faster file transfer, Faster writing and reading	Effect of errors in transmission, the Added complication
3.	UTAUT Model	UTAUT has four key constructs, i.e. performance expectancy, effort expectancy, social influence, and facilitating conditions	Estimated models are not in the exact form as the original UTAUT model, and as a result, the explained variance can be affected.

TABLE 2: EXISTING V/S OURS

Sr. No.	EXISTING	OURS
1.	Some websites provide counselling after class 10 or 12 or graduation.	We will provide counselling after class 10 or 12 or graduation. Also, we will provide counselling abroad.
2.	They do not provide health care counselling	We provide health care counselling
3.	Many existing websites ask for payment at the starting	We will take payment once students are satisfied with the results.
4.	Some of the students don't get what the counsellor what to say	We will provide two options for communication, one in English and the other in the student's regional language.

CONCLUSION

In the review paper, we have studied Inference Web, Data Compression and UTAUT. Comparative Study shows that how these methods are different from each other in terms of performance and Complexity. In the future, we can also implement options for job recommendations.

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