VIVEKANAND EDUCATION SOCIETY INSTITUTE OF TECHNOLOGY (MUMBAI UNIVERSITY)

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Content

Introduction to Project

- Students and teachers throughout their professional careers perform a number of activities.Ranging from publishing research papers to doing Internships .
- There has however never been any kind of application that helps act as a storehouse of all this data and generates a compiled report of the same .

Motivation for the Project

In A world of Collecting, Collaborating and Organizing Data.

- However for a student storing and keeping his life achievements , Scores and extra curriculars organized becomes very important.When it comes to proving his worth in the world.
- This Project would ensure that every student graduates VESIT without putting in a lot of effort to build a resume and have it validated by the college.

Literature Survey

- On doing a through research we found that websites like www.portfoliogen.com work towards building student and teacher profiles .However there is no application that ensures the same.
- App script has been used to make a number of applications like Calendar etc.But a project like a student portfolio has never been done .

A Cognitive Model for the Representation and Acquisition of Verb Selectional Preferences

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Abstract

We present a cognitive model of inducing verb selectional preferences from individual verb usages. The selectional preferences for each verb argument are represented as a probability distribution over the set of semantic properties that the argument can possess—a *semantic profile*. The semantic profiles yield verb-specific conceptualizations of the arguments associated with a syntactic position. The proposed model can learn appropriate verb profiles from a small set of noisy training data, and can use them in simulating human plausibility judgments and analyzing implicit object alternation.

1 Introduction

Verbs have preferences for the semantic properties of the arguments filling a particular role. For example, the verb *eat* expects that the object receiving its theme role will have the property of being edible, among others. Learning verb selectional preferences is an important aspect of human language acquisition, and the acquired preferences have been shown to guide children's expectations about missing or upcoming arguments in language comprehension (Nation et al., 2003).

Resnik (1996) introduced a statistical approach to learning and use of verb selectional preferences. In this framework, a semantic class hierarchy for words is used, together with statistical tools, to induce a verb's selectional preferences for a particular argument position in the form of a distribution over all the classes that can occur in that position. Resnik's model was proposed as a model of human learning of selectional preferences that made minimal representational assumptions; it showed how such preferences could be acquired from usage data and an existing conceptual hierarchy. However, his and later computational models (see Section 2) have properties that do not match with certain cognitive plausibility criteria for a child language acquisition model. All these models use the training data in "batch mode", and most of them use information theoretic measures that rely on total counts from a corpus. Therefore, it is not clear how the representation of selectional preferences could be updated incrementally in these models as the person receives more data. Moreover, the assumption that children have access to a full hierarchical representation of semantic classes may be too strict. We propose an alternative view in this paper which is more plausible in the context of child language acquisition.

In previous work (Alishahi and Stevenson, 2005), we have proposed a usage-based computational model of early verb learning that uses Bayesian clustering and prediction to model language acquisition and use. Individual verb usages are incrementally grouped to form emergent classes of linguistic constructions that share semantic and syntactic properties. We have shown that our Bayesian model can incrementally acquire a general conception of the semantic roles of predicates based only on exposure to individual verb usages (Alishahi and Stevenson, 2007). The model forms probabilistic associations between the semantic properties of arguments, their syntactic positions, and the semantic primitives

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Lacuna of the existing systems

- Lack of broad range of database
- Report generation is on small scale
- Acquiring and accessing data could be much easier during accreditation.
- There is no such ERP available in market
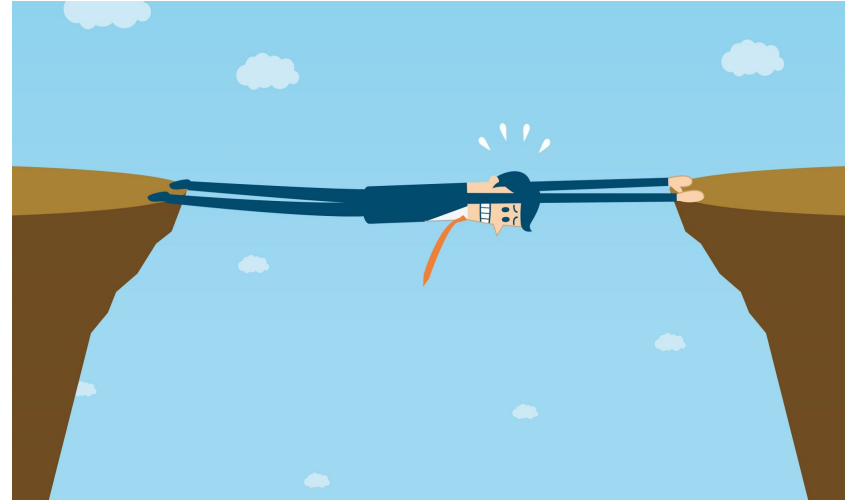
Problem Definition

- There is no such ERP available in the market which is platform independent. Therefore, we have option as to make website/ app or use Google Suite Services. But as of now we do not have an official coding team which can manage the website; also the website handling requires a budget, so we chose to use Google App Scripts.
- Also the Google app scripts are convenient to use as they have drag and drop managing options and once coded they require only a few changes for updation.
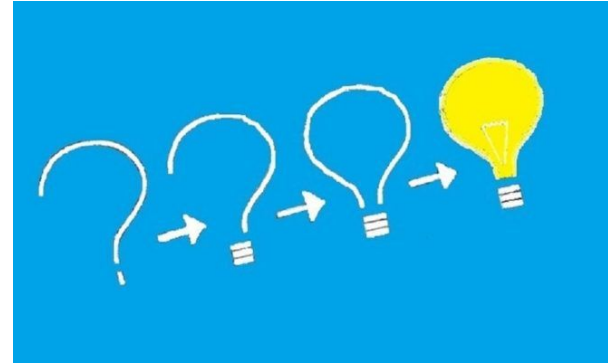
Objectives of the project

- Creating a broader database
- Getting acquainted with google suite services.
- Detailed report generation
- Better analysis of the report
- Systematic representation of data
- Efficiency in gaining Accreditation
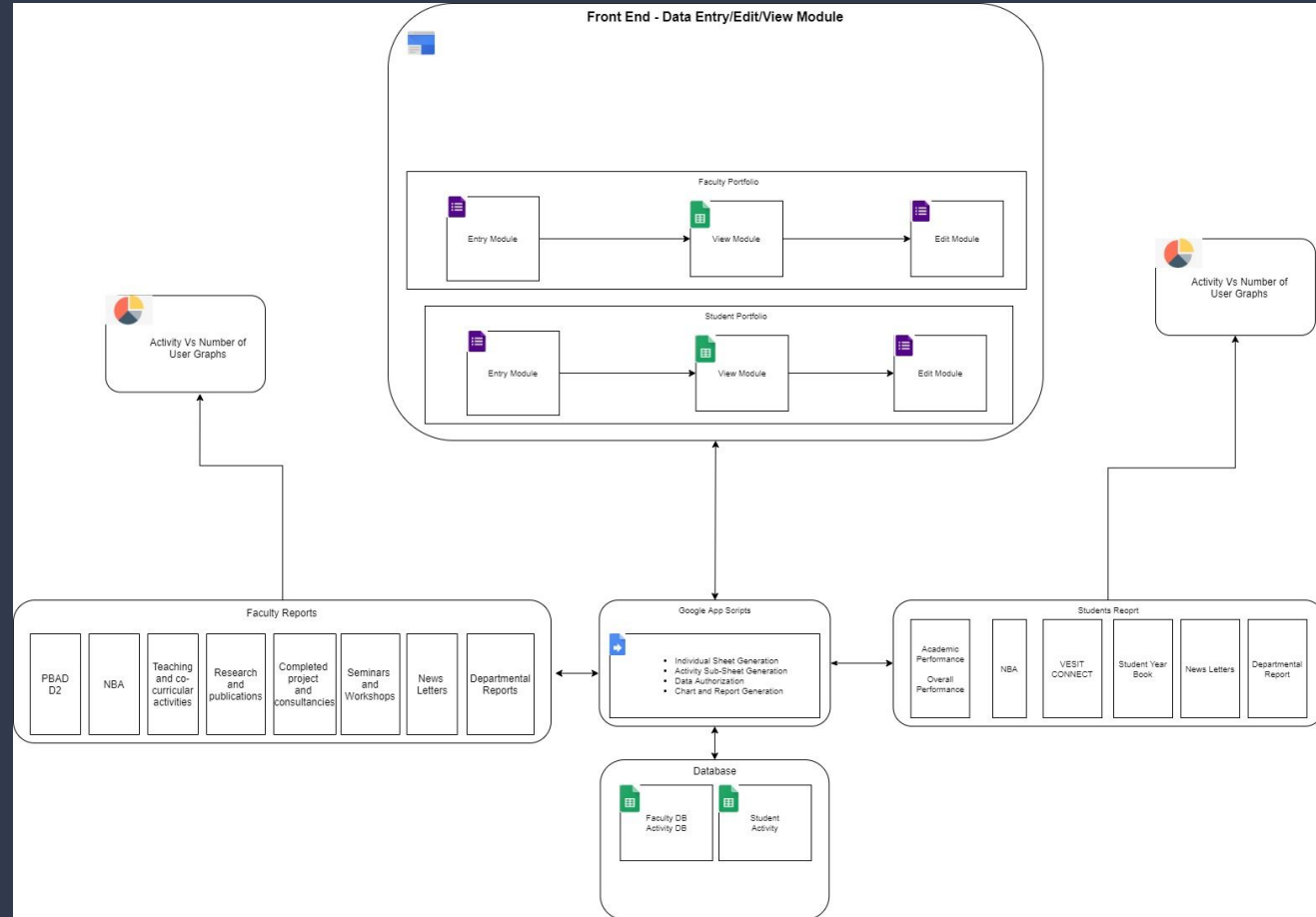
SOFTWARE AND HARDWARE REQUIREMENTS

Software Requirements

❖ Google App Scripts

❖ Google Sites

❖ Google Forms

❖ Google Sheets

❖ Google Drive

❖ Google Charts

❖ Google Docs

MODULAR DIAGRAM

Methodology employed

- **<u>Data collection:</u>**
  - The data required to create the student and faculty portfolio is taken from respective google forms embedded in google sites and stored in google sheets.
- **<u>Creating and updating database:</u>**
  - Using triggers in google apps script,any changes or new data entered in the database is updated.
- **<u>Data representation:</u>**
  - The data in databases is being represented for each faculty and student in the form of standardised reports and analysis of certain data like activities are represented as charts.

Expected Outcome

- At the end of the project we expect to create a system that can:-
  - Store data regarding details of both faculty and students which can be edited on demand.
  - Display detailed analysis of achievements of the user in a given academic year in the form of charts and reports.

Conclusion

From this project we got to explore different features of google app scripts and google suite services.We also learned to embed charts and creating standardised reports.We also got to know how app scripts interacts with different google services to create different applications.

References

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