

INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

UNIVERSITY OF WESTMINSTER

Questions Validation System for Ordinary level & Advanced Level Accounting Syllabus Using Natural Language Processing & Machine learning

Project Specifications Design & Prototype by

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Abstract

This project combination of NLP and machine learning techniques to calculate and create Ledger accounts from given questions and create a balance statement using those ledger accounts. And generating accounting questions using generated balance statements and ledger accounts. This research consists of determining the transaction type, determining the accounts that are affected by said transaction and determining how the account is affected. This would involve the use of classification to find the transaction and the creation of a model to identify the accounts that are affected. Sri Lankan O/L and Advanced Level accounting subject, main question is balance statement, cash account and ledger accounts. The commerce stream for higher education has one of the highest pick rates in Sri Lanka. It also requires a lot of practice. This can be archived by practicing using mainly past papers. But those past papers are limited in number. Since the main exam is a race against time and requires the examinee to create a large number of financial statements in a small time frame, practice is required to finish the exam, therefore more papers are required to validate answers and have a better chance of passing the subject.

Keywords: Machine Learning, Natural language processing, Transaction Type Prediction

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