

CAMT Exam Dashboard with Tesseract

Executive Summary

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THIS REPORT HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE SOFTWARE ENGINEERING PROGRAM: COLLEGE OF ARTS MEDIA AND TECHNOLOGY

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Chapter One | Introduction

1.1 Identification

The Executive Summary is the document for summarizing the work that we have done in each progress. It provides completeness of the CAMT Exam Dashboard with Tesseract..

1.2 Project Overview

The CAMT exam dashboard with Tesseract is a web-based application designed to help lecturers effectively access exam information and assist staff in managing exam information. The system is built using Vue.js, SpingMVC and Mybaties, and is integrated with CMU API to facilitate lecturers to log in to the system. In addition, use SpirePDF, OPENCV and TencentOCR engines to parse the PDF exam schedule which uploaded by the lecturer or admin into an Excel table for the lecturer or admin to download, and store the data in the database at the same time. We also use the Echarts dashboard framework to generate exam overviews, professional classifications, and exam time distribution for lecturers and admin. Finally, we also use the Java Mail API to send modify and delete the exam schedule notification to the lecturers via CMU mail box.

1.2.1 Project Scope

The CAMT exam dashboard with Tesseract has four features, which are including these scopes:

● Feature#1: Authentication System

The administrator uses the administrator account to log in to the system

The lecturer uses the CMU account to log in to the system.

● Feature#2: Table and cell detection and text extraction and parsing system

The system detects and parses the manual input PDF to generates EXCEL and data frame.

● Feature#3: Dashboard System

The system generates a dashboard based on the data frame that generated by the detection and analysis.

● Feature#4: Notification System

The administrator can modify the information in the database and send exam notifications for the protector.

Chapter Two | Executive Report

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Plan | | Progress | Status | %Complete |
| Progress 1 | Feature # 1 | Requirement | Done | 100% |
| Designing | Done | 100% |
| Development | Done | 100% |
| Testing | Done | 100% |
| Feature # 2 | Requirement | Done | 100% |
| Designing | Done | 100% |
| Development | Done | 100% |
| Testing | Done | 100% |
| Plan | | Progress | Status | %Complete |
| Progress 2 | Feature # 3 | Requirement | Done | 100% |
| Designing | Done | 100% |
| Development | Done | 100% |
| Testing | Done | 100% |
| Feature # 4 | Requirement | Done | 100% |
| Designing | Done | 100% |
| Development | Done | 100% |
| Testing | Done | 100% |

Chapter Three | Summary Report

According to the quality of the document, the recognition result will be different, and the recognition result of a very clear document is very good.