**CS5551 - Advanced Software Engineering**

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Question paper generator system

**Team 2**

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Project Goal and Objectives

Motivation

Nowadays a lot of people are using question papers to collect info they want. But not all of them are good at using software to design their question papers. To help them with generating question papers in an easy way, we are designing an online question paper generator system.

Significance/Uniqueness

For different people we provide different ways to generate question papers. For those who do not familiar with operations about software, they can use their hand-written paper to generate.

For those who knows more about how to use online apps we provide a lot of features for them to choose, which helps them to finish their question paper efficiently.

Objectives

A system can store a large number of questions and generate question papers automatically according to the selected options that admin chooses. These options include the number of questions, difficulty level, etc.

The system can also accept pictures from the users and extract the text in the picture to generate question papers. The picture can be hand writing, which means the user can create a paper just by pencil and his own hand.

This system is easy to use and has an intuitive user interface.

Scope of the Project

The users will be those who want to create question papers to collect information. They can be at any knowledge level of software.

The product will be a web app which provides different functions to help users to generate their question papers.

System Features

**Login:** User can register an account. After logging in, he can use functions like question insertion, question paper generator, etc.

**Question Insertion:** User can insert questions with their features: difficulty, subject, chapter, type. This system allows user importing questions from files (.json, .xml, etc).

**Random Paper Generator:** This system automatically chooses random questions to create paper according to the selected difficulty level.

**Upload Picture:** User can input his own hand-written question paper’ s picture into the system and ask for the generated paper.

**Image Extraction:** The system generates question paper by extracting text information from the picture of user.

**File Creation:** The system exports the question paper in a pdf file.

**Emailing:** The file can be emailed to users.

Related Work

Google OCR API

HTML/CSS Typescript

AngularJS  NodeJS

MySql, Google Firebase

Project Plan

Schedule

**Phase 1:** designing the system**;** implementing register, login pages; setup the database.

**Phase 2:** implementing question insertion pages; collecting and storing questions to the database; the calling of OCR API and the function of generating paper with users’ pictures.

**Phase 3:** implementing paper generator, file creation functions and emailing function.

**Phase 4:** redesigning the UI and testing.

Zenhub Screenshots



