**Requirements Analysis Document**

**Preface:**

This document addresses the requirements of the Exam Questions Database System. The intended audience for this document are the developers, mentor and client of the project.

**Target Audience:**

Client, Developers, Mentor

**Developer Team:**

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**Instructions:**

Construct a secure online database of these questions. Each question needs:

* The text, images and correct answer.
* Preview image.
* Link to video solution (if one exists).
* A record of the previous tests and exams in which it was used, and the student performance on that question in that assessment.
* The topic and subtopic (e.g. Electricity, Gauss's Law).
* Keywords.
* Question comments.

The system would allow staff to search/browse and select desired questions for inclusion in a new test/exam. Once all questions for an assessment are chosen, the necessary text and image files are exported to Overleaf, where new questions can be added, and final editing done.

**Milestones:**

Be able to compile .tex files on the interface

Create a secure online database that can store zip

Create a functioning interface

**General Goals**

Have a functioning secure database that can store all the currently known practice physics questions(as zip files?).

Access the database from an interface, for browsing and selection of questions.

Use the interface to zip the selected questions to be sent to overleaf, where it can also select or deselect more questions to be made into “print” format.

**Current System**

Questions are fed into a latex tool (like Overleaf) which converts text and images into a typeset question ready for printing.

**Proposed System**

**Overview**

Since many PHYS1001 questions are reused time is wasted having to re-enter them into the latex tool. A database will be created to store each question with all its relevant information. The questions can then be browsed, selected and zipped before sending to the latex tool via an interface. This proposed system removes the re-entering of questions and provides a more efficient, organized platform for exam creation.