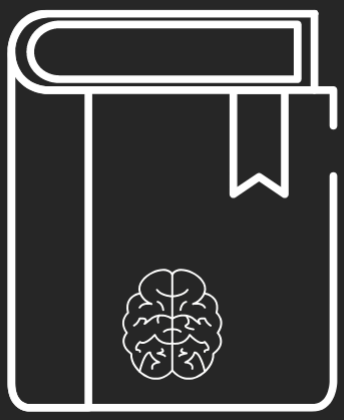

OpenMind - Online Software

Designed for Croxley School

Project Proposal Document

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Group Members

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Background Information

Croxley High School is a prestigious high school that spans over 3 different campuses. All of them opened back in the year 2018. The schools are private institutions with 120 learners each. Each senior phase has 72 learners in grades 10-12. Senior students have weekly tests, homework, assignments, projects and announcements to follow. Teachers mark and give students their work, feedback and results.

Problem Statement

Due to Covid-19 and concerns from parents, the school has decided to use a fully blended learning approach, even though the president has placed the country on level 1 lockdown with very little restrictions.

- With the rise of world globalization, the school is aiming to introduce new technologies and software in order to fully equip the senior students with the necessary skills to function independently in a university environment.
- The school also conducted a survey on past students and found that a lack of an automated system makes it hard for them to learn independence and operate online as soon as they get to university.
- The following processes are not automated:
    - Student progress analysis (done on paper, however there are no graphs to
    - properly depict any changes)
    - Test and assignment marking (manually done on papers, sometimes incorrectly done)
    - Releasing marks weekly (rarely ever done)
    - Sending out announcements (done by word of mouth)
    - Storing recent and past papers (done manually in a large file room)
- Therefore:
    - Students and teachers hardly see any form of progress or setbacks
    - Marking is often slow
    - Announcements are often misinterpreted or forgotten
    - Information recording is often lost or inadequate

Constraints

The system must be implemented by November 2022. The project could take longer than expected, which might cause it to be finished later than the scheduled date. Such time-consuming issues could be caused by a server update or launch activity that the team should complete before the users can access the system.

Exposure of the school's data to high risk will make it vulnerable to security threats. The risk might be caused by no budget allocated for the protection of the school's data.

The system is completely online. There might be connectivity issues. Also, students and teachers might find it difficult to navigate through the system as it will be completely new to them.

Scope Definition

The System is a Learning Management System (LMS) hosted online over the internet. The following will be provided:

- Store, maintain & process learners' and teachers' data
- Offer a variety of functions depending on who is the user (teacher or learner)
- Help facilitate limited everyday functions in the school
- A simple interface for users to be able to navigate easily around the system

The system must include functionality for the following:

- Maintenance of learners
- Maintenance of teachers
- Maintenance of tests & assignments
- Maintenance of announcements
- Providing tests & assignments feedback
- Providing announcements
- Extensive reporting, this includes average test & assignments marks text report, top 5 performing & underperforming learners text report, student weekly user report (sceptical about this one) and subject term average text report.
- Extensive help functionality

Project Goals

Our project aims to provide the following:

- Improved feedback.
- Effective communication.
- Secure online working environment.
- Workflow optimization.
- Better online learning.

Improved feedback

Learners should be able to receive timely feedback on their academic performance. When there are any misunderstandings, they will be able to ask questions. The feedback will also serve as a reminder of the pupils' knowledge and skills.

Effective communication

Provide a secure learning environment in which teachers may communicate important school information to pupils, such as forthcoming tests and assignment deadlines.

Secure online working environment

The system should ensure that the platform is secure for teachers and that their work is adequately organized so that they may split it appropriately. In general, mixing learners' data or log-in information should be avoided.

Workflow optimization

Teachers will be able to automate activities such as distributing work and scheduling assignments with the help of the system.

Better online learning

Since the goal is to create a system where learners may finish their schoolwork while at home, the system should be mobile and allow individuals to submit their work regardless of where they are.

Improvement Opportunities

- ✓ Provide functionality for writing test and quizzes on the system and provide immediate feedback
- ✓ Provide full lessons tabs, providing reading material, teacher's notes, lessons videos and outcome testing activities

Resources

Internal Resources

The suggested internal resources for the project are:

- System owner (Sponsor): Mr Henkel Staedtler – external HOD and owner of the Croxley private schools

Proposed System users

- School teachers
- Students (grade 10-12) from the three different Croxley schools

Budget

Man-Hour cost

Internal Cost = 20% of 2 people working 8 hours a day for 6 months @ R270/hour

= 20% (2 * 8 * 22.5 * 6 * 270)

= R116 640

Consultant Cost = 5 people working 3 hours a day for 6 months @ R543/hour

= 5 * 2 * 22.5 * 6 * 543

= 1 099 575

Total man-hour cost = R1 216 215

Hardware

Solid State Drive = R2 900

Software

Visual Studio Enterprise Subscription = R109 134

Web hosting = R139 p/m (R139 * 10 months) (= R1 390) (DA Business Web Hosting Packages)

Domain registering = R100

Software total = R110 624

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Total = Man-Hour Cost + Hardware + Software

= R1 216 215 + R2 900 + R110 624

= R1 329 739

Schedule

Project Steps	Steps Implemented	Start Date
Scope Definition	The scope definition will be included in the project proposal.	8 March 2022
Problem Analysis	The project proposal includes current problems including the proposed solutions, business opportunities, budget, and timetable for the events.	12 March 2022
Requirement analysis	Business prerequisite explanation	4 April 2022
Logical Design	Specification & logical system models • Arranging data into logical relationships	16 April 2022
Design Analysis	• Developing designs • Design Planning • Design Exploration • Design Optimisation	21 May 2022
Physical Design and Integration	• Physical design models • Detailed specification	28 August 2022
Construction and Testing	• Database • User interface • Test plan	13 September 2022
Installation	• Process of installing the project • Documented review • Updated logical system models • Updated physical models	23 September 2022

-End-