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The Learning Control Management System_Nordian

Background

The **Nordian** is one of the leading content providers in Aviation training, specifically for CPL and ATPL pilot training. The company plans to move into PPL training as well as AME training. The company has a large client list and provides a huge database of training material to ATOs and students.

The main activities of Nordian include development of modern training material and training systems, distance learning management and consultancy services within all fields of aviation training.

Nordian wanted to upgrade and completely revamp their existing LCMS (Learning Control Management System) which was based on dated technology and was long due for a complete revamp. The company wanted to provide enhanced features to existing and new students both online and offline.

Solution

The GCT Team reviewed the specs and a Customized Solution was proposed and approved for the LCMS. The system includes various sections such as:

1. Instructors
2. Students
3. Nordian user/Super admin
4. ATO Organization
5. ATO Administrator

Each of the above users has separate access and role based controls which allow them to add/Edit course and assign to other users.

Students can also practice exams and can monitor their progress reports. There are number of practice exams and a question bank which can be managed through the system in a same format.

The backend control system is divided into separate modules based on the security privileges. Each task on the system be monitored and notified to every user based on their roles. If some training materials/eBooks /M-books/ CBT/Distance Learning Material that include -Study Plans, Self-Assessment tests /Question Bank is updated on the system the notification is received by every user and can be traced by super admin.



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On the **technical front**, the extensive web based system is developed utilizing: PHP 5.6/ c#.net/ LAMP/Yii 1.1/Flash/MySQL with SQLite server.

The Nordian system can be experienced at: <http://www.nordian.net/>

The screenshot displays a web browser window with the following content:

- Navigation: Select Subject, Back, 1.1.1 Introduction
- Text: Principles of Flight > Basics > Introduction to the Theory of Flight > ability and stability are created in a rather primitive way.
- Text: Everything can fly if equipped with an engine powerful enough, e.g. a rocket. But by using the air that surrounds us, we, like the birds, can use wings to fly with a **minimum** requirement of power. However, the following aspects have to be fulfilled:
- List of requirements:
 - The craft must have lowest possible mass in order to minimise the required creation of lift force which consumes energy
 - An efficient way to create lift force, i.e. to create lift without a simultaneous creation of unnecessary high drag
 - A thrust generator to compensate for the inevitable drag when moving through the air
 - Stability of the craft, i.e. it should be able to maintain flight conditions, e.g. heading and altitude, without constant inputs from the pilot
 - Ability to manoeuvre in three dimensions Fig. PF 1.1.
- Diagram: Fig. PF 1.1 Requirements for controlled flight. The diagram shows a top-down view of an aircraft with arrows representing forces: Thrust (forward), Weight (downward), Aerodynamic force (upward and backward), and Stability and control (around the wings).
- Text: In this book, we will deal with these basic requirements and the factors, conditions and limitations associated to them. We start with the most fundamental condition for being able to fly by use of wings; our surrounding atmosphere and the necessary...
- Navigation: <Prev, Next

The screenshot displays a web browser window with the following content:

- Subject: Principles of Flight
- Course Name: Asle ATPLA Course
- Study Unit No: PF 1.1
- Topic: Basics
- Total Time: 04:00
- Reading Assignment: Chapter 1 to 1.3.3
- CBT: A row of six small thumbnail images representing different content items.
- Animation: A row of four small thumbnail images representing different animation items.
- Links: None
- Self Assessment Test: SPF01-ATPL-A-11

Results

1. The new system has been instrumental in increasing the client list for Nordian and enhanced revenue.



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2. With the system, students can remotely access the learning materials and participate in exams which was lacking in the previous version.
3. The new system reduces the need to purchase expensive hardware / software at the clients ends as the system has everything at one place.



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