

E-SCHOOL

PROPOSED SOLUTION FOR SCHOOL OF DIGITILISATION

Background

Normally the normal form of education is the physical meeting of teacher and student. But however the world in 2020 was hit with the COVID-19 pandemic Which brought to the world in a state of hold, affecting many activities including studies making it difficult for physical studies to hold this brought the usefulness of some platform like; Zoom, Whatsapp, Google meet which their rise increased to aid studying.

Problem

In addition to the pandemic issues, In Cameroon The study also revealed that there were many challenges which PE teachers faced in their teaching of PE and these included an overcrowded National and PE curricula, lack of PE resources, lack or bad state of facilities and equipment, large classes, and negative attitude by parents, head teachers and non PE teachers. Also for students , Fitness and engagement

The first issue you may find is that some of your pupils aren't physically able to take part in lessons due to low fitness or ability levels. Some pupils may also be reluctant to take part in PE lessons due to concerns over their fitness levels, feelings of embarrassment or a lack of confidence.

Solution

- **Simplified Learning Platforms:** Platform through Which student and teachers can henceforth teach and learn. with teachers able to schedule classes to be via video text , teachers being able to collect attendance share resources. Student having access to study resources and able to take quiz and exam ...in addition to many others
- **Fully accessible platform:** the platform shall be easily accessible via mobile and web platform for those connected to internet having access to life classes.
- **Real time statistics:** Stake holders involved should be able to be interactive with each other, seeing any activity which been carried except otherwise restricted. Also teachers able to collect attendance and note participating students.
- Teachers be able to set quiz and exams and control. with an automatic grading system
- Teachers can be able to record Their class for later use
- Teachers be able to record lectures
- **Reporting accounting.:** All level deferent account shall be made to the required stake holders depending on zones like Country, Region, course Trade

FUNCTIONAL REQUIREMENT

The E-School must be available on web and Mobile application

FR1	The E-School must be available in both web and mobile application
FR02	All features online must be available on Mobile app
FR03	<p>The E-School must have the following profiles as specified below</p> <ul style="list-style-type: none">• Student: create personal account and manage the profile• Teacher: create personal account and manage the profile• Administrator: to administer the full platform• School: to enable each school to updates its inventory. <p>Under school you have</p> <ul style="list-style-type: none">○ Department: containing deferent faculties<ul style="list-style-type: none">▪ Program: e.g phd , Bachelor▪ Class▪ courses
FR04	The mobile application must be available for the Customer(Teachers and Students) only.
FR05	The customer and administrator must have a Login and Password online platform, with standard basic requirement
FR06	Customer can browse without registration ,but registration is mandatory for complete service
FR07	During registration, the customer must provide his/her email and other information
FR08	
FR09	

A customer's account must be locked when they they enter their password incorrectly a configured number of times

FRO	If the customer enters their password incorrectly a certain number of times (note that this value should be configurable), the customer's E-School account should be locked
	To unlock their account, the customer must contact an E-School agent for account unlock
	The function will unlock the customer's account, reset their password, and send an email to the customer with the new password details
A customer must be able to change their E-School portal password	
	It must be possible for the customer to change their password on the E-School portal.
	The customer must be logged into the portal to change their password
	The customer must be required to enter their current password as part of the password change validation
	When a customer has successfully changed their password, a confirmation email message must be sent to them
Administrators must have access to upload items one at a time or by bulk on the online store	
	<p>All the items offered in the centers must be publishable on the E-School portal by the administrator and or the require specific customers like;</p> <ul style="list-style-type: none"> • assignment • lectures • CA MARKS • Exam marks • Book in virtual library • attendance
	The administrator must be able to add or remove items one at a time or in bulk using feeds to upload and manage large item catalogs
	<p>The administrator shall be able to edit items attribute using a feed. The following attributes shall be defined for any item created in the Online</p> <ul style="list-style-type: none"> ● Name ● Description ● Type

	<ul style="list-style-type: none"> ● Pictures(if applicable) ● course ● Operating system (if applicable) ● Included applications (if applicable) ● Camera resolution(if applicable) ● Screen resolution and size(if applicable) ● Network (if applicable) ● depatment ● Memory(if applicable) ● Design and keyboard(if applicable) ● Colors ● school ● Instructor ● time frame (If applicable) ● Reference
	The attribute “reference” shall be defined to classify the items. All the items with the same descriptions and features shall have the same reference
Items in the eschool inventory must be displayed on the catalogue	
	The online store must display new items(E.g Courses, lectures) on the home page
	The online school must display the most offered items(e.g Courses, best tutors , programs etc) on the home page based on customer reviews
	The online school application must display the promotional courses or free inventory in addition to others on the home page.
	Items must be displayed on the application with the following attributes: <ul style="list-style-type: none"> • Picture (If applicable). • Short description (If applicable). • Characteristics (If applicable). • Price (If applicable). • Number of reviews (If applicable).
	Accessories relationships must be implemented on Online School to allow Customers to easily increase cart size by available complementary

	service i.e. if a Customer has searched for or is viewing a particular service, related items should be suggested to the Customer
	The online school must implement recommendation widgets which suggest items to Customers based on the historical behaviors on the platform. As example, the widget can show the items which are regularly offered with the item selected by the Customer
	The online School must have a quick view of giving the customer more information. It lets them take a closer look at an item without losing their place on the page.
	The Online School must allow recognizing the Customers and creating a personalized experience. The platform must determine which related items to recommend to Customers.
	The online school must have a tool to compare the attributes of up to 3 selected items of the same category (example: smartphones)
	The online school must have built-in color to display child variations of items and let Customers see all the options giving them

It must be possible for Customers to search and retrieve items on the online school

	The online school must implement the Smart search with spelling correction, auto-complete and results refinement using an assortment of custom filters and sort option available
	The online school must have quick search feature based on the item brand.
	The filters must be displayed only when they are applicable.

The Customer must be able to add items to their online cart in preparation for application

	It must be possible to select one item and click on the purchase button to pay
	It must be possible to select many items, add them to a cart and pay once

	The online school must have the persistent cart feature. Products added to the Customer's cart, will stay in the cart and make it easy for them to purchase at a later time.
	The online school must be able to send notification to customer account incase of any important info or discount , fees
A Customer must be able to pay for their items via the MTNC approved online payment modes	
	<p>Customer must be able to pay via:</p> <ul style="list-style-type: none"> ● Airtime for bundles/recharge ● Mobile Money ● Paypal ● Bank card: VISA, Mastercard, etc. ● All other available means
	For airtime payment, the customer must enter the MTN MSISDN to be charged
	An OTP is sent to the MSISDN which the customer must enter on the airtime payment page, before the payment is requested
	It must be possible to cancel the airtime payment if the Customer has not yet approved the transaction by confirming the OTP
	For mobile money payment, the customer must enter the MSISDN for the mobile money wallet to be charged
	The customer's mobile money PIN is requested by USSD push, after successful PIN validation, the mobile money deduction is effected
	It must be possible to cancel the mobile money payment if the Customer has not yet approved the transaction. Since Mobile Money payment is approved on mobile via SMS or MyMTN, the web store or mobile app cannot complete payment until that approval is done.
	<p>To perform a bank card payment, the application must integrate with the standard payment gateway application to request the following information:</p> <ul style="list-style-type: none"> ● Card number ● Expiry date ● Security code

	● Name of the card holder
	The Customer cannot cancel the payment if it has been done using bank card
	At the end of the payment, the application must display an information dialog with the status of the payment
	The Customer must receive SMS and email notifications after a successful purchase
	The reference of the payment done on the online payment platform must be unique
	<p>The following messages must be provided to the Customers during the payment</p> <ul style="list-style-type: none"> • Insufficient funds • Transaction cancelled • Successful transaction
	All payment is to be sent to one location account before been dispatched to the owner to prevent scams
Notifications must be sent to the e-school manager when an item payment has been done	
	It must be possible to define some MSISDNs and email addresses (i.e. administrator or the store manager MSISDN and email) which will receive a notification when an item has been purchased
	For purchases o particular courses or programed formed by an individual notification should be sent to them
	it should be possible for the eschool manger to confirmed to customer as paid
	Special ID is to be given in reference for each transaction
The Customer must be able to view the history on the e-Shool	
	The eschool must allow Customers to view the history of activities
	Customer must be able to track the order status on the website or the mobile application using the transaction reference issued after the payment.
	The following purchase status must be available:

	<ul style="list-style-type: none"> • Still in ongoing – where the Customer selected course or program is open • Discount – where the program is given a discount rate. • Closed - where the course program is completely full in number. • Free registration – if the course or program is completely filled. • Incase Scholarship

Customer's must be able to rate and leave a review on items they purchased on the eShool

	The online school must have rating and review features to let Customers inform others on their decisions
	A customer must be able to select an things in their order history to add a review
	An administrator must be able to manually delete offensive or inaccurate review posts, and automatically filter for known offensive language
	Refunds must be possible incase any inconvenience

Technical website features

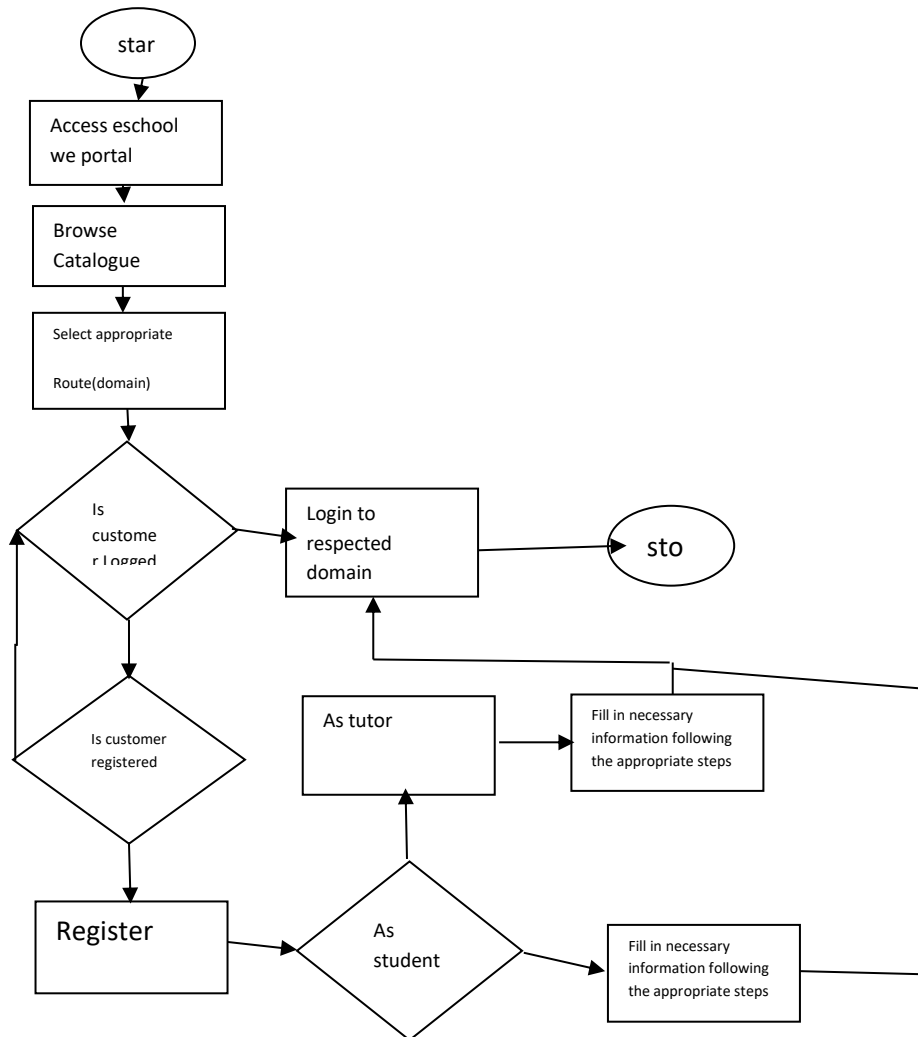
	All the landing pages of the Online School website shall be optimized, so search engines will correctly index the site.
	The metadata (title, description, keywords) shall be customizable by the administrator
	The administrator shall be able to edit Meta tags
	The XML sitemap of the website shall be automatically submitted to Google and Bing to improve search indexing of the pages.
	The online school website shall have natural language URLs for item, browse, and image pages, in addition to canonical link tags.
	The online school website shall have integration with Google Webmaster tools for easily obtaining an analysis of keyword rankings on the web site.
	The Website shall keep images and other assets in the cache, to increase the site's responsiveness to search engine robots.
	It shall be possible to use breadcrumbs to improve discoverability.

	Traffic driving tools - The Online School website shall have social media widget which will allow Customers to share the items by Email or on Facebook, Twitter, and Google+.
	It must be possible to integrate the website with email educating pro.
	Website must be custom to host interactive quizzes for students to take and get instant results.
	Ability for users to signup and pay for access to the quiz platform(via attributed payment method)
	Administrator should be able to build quiz question in different format(That is MCQ , structural, essays) that be added to question banks for users.
	An interactive UI where user can complete quiz and question of deferent format
	Ability or users to take many practice test with many question at any time
	Ability or users to choose number of questions they want to practice, random, by topic
	Ability or users to toggle whether they want to answer each quiz timed or untimed
	Ability for users to ask question or give feedback to any quiz
	Ability for student to submit their own that can be added to the question bank
	Should be able to access history of test they have taken
	Customized Dashboard of users to see how they have performed on the test they have taken in the past and which concept they can use to improve
Some features Admin will have	
	Ability to create quiz question in deferent formats(i.e MCQ , ESSAY e.t.c) which will be sorted in a backend database
	Ability to tag quiz question with deferent information that is stored in a backend database

	Dashboard to see information on registered users, activities, performance we need this platform to be
	Web and Mobile friendly

Process

Register in school



. Detailed presentation seen in the project review Slides.