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Online Payment Module

Revanth Reddy Gujja
Governors State University

Vamshidhar Reddy Lega
Governors State University

Manish Kumar Rankawat
Governors State University

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ABSTRACT

The aim of this project is to deploy the online payment service in Moodle. All the major debit, credit and international card (transactions) can be accepted for payment. Online payment module prepares a web server that takes all types of transactions. This module can be enabled by the site administrator. If it is enabled, students can pay for their classes through online transactions. Administrator can set an individual price for a course if needed. It allows the user to create their own account and add optional account links. This project is important to resolve the issues for students and administrators to have an easy glance at the course registration like selection of their courses, Fee details. This project makes it easy for students to look for the courses and register, one can check the site as a guest and can create his/her own account and can enroll for subjects. One can see the fee details for each course.
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1 Project Description

This project deploys the online payment service in Moodle. All the major debit, credit and international card (transactions) can be accepted for payment. Other websites usually ask for the payment of the total course before enrolling into course but our website allow them to go through the course read the description of that course and if they are interested in the course they can proceed to registration and can enroll into the desired course. Allowing accessibility to user and providing self-registration option as per user contineence.

1.1 Competitive Information

GOINGON is competitive to Moodle, there are so many other sites which are similar to Moodle but Moodle is a friendly interface than others.

1.2 Relationship to Other Applications/Projects

Our payment module is mostly related to a university student payment modules, through which students pay their due fee. This is more like a payment module with courses in it so one can enroll and make payment on this site.

1.3 Assumptions and Dependencies

Basically Moodle is an open source platform, anyone can make changes and make it better to use.

1.4 Future Enhancements

In order to make it available easy we can create an app on a mobile which helps students to check in quickly and can use the site easily. Moodle an also offer complete blackboard.
2 Project Technical Description

2.1 Application Architecture

We will have to install WAMP server and Moodle Server in the system in order to work with Moodle. The diagram below depicts the architecture of Moodle.

![Diagram of Moodle architecture]

2.2 Application Information flows

User can visit the site as a guest, if he like the courses then he can create his own login account then he can login and can enrolling courses of his interest, every subject has price on its description and the last step will be paying the total due amount one can pay it through debit, credit, PayPal.. etc.

2.3 Interactions with other Projects (if Any)

This project does not interact with other projects.

2.4 Interactions with other Applications

This project does not interact with other applications.

2.5 Capabilities

All the plugins must function properly, even if a single plugin doesn’t work properly then the whole system gets into trouble and shows errors. Students should be able to enroll in all the courses that they are willing to study.
2.6 Risk Assessment and Management
This section is used to identify as early as possible some of the risks that are associated with the introduction of this project. It should also contain recommendations to eliminate or minimize these risks.

3 Project Requirements

3.1 Identification of Requirements
This project requires following installation of software’s.

Moodle Installation
We need three things to install Moodle

- WAMP server
- Moodle software
- Visual C ++

Downloading WAMP server

Select the download according to your computers bit size it can be 32 bit or 62 bit, if you have a 32 bit size download 32 bit WAMP Server else download 62 bit.

Installing WAMP Server
The process for the installation is, open the folder where you have saved your file and double click on the setup file. Click run to start the installation process. Then you will see the following image:

![Installation Wizard](image1.png)

The next page will show you the terms and conditions of the WampServer you need to accept the terms that are shown and continue to next step. After that you will see select destination location screen, unless you want to install WAMP on other other drive you don’t need to change anything in this page. Just click continue.

![Destination Location](image2.png)
The next screen is Select Additional Task. You will find two options here create a Quick launch and create a Desktop Icon you can choose either of them then click continue.

The next screen is Ready to Install, you will be able to review your setup and if you want to make any changes you can do it by clicking back to appropriate screens. Once if you are done with reviewing your choices you can Click Install to continue.
WAMP Server begins execution of files to the location you have selected, when the files are executed you will be asked to select your default browser. WAMP Server defaults to internet explorer upon coming to the local file browser window.

You will see a windows security alert showing windows firewall has blocked some features of the program. Check whether you want to allow HTTP server to communicate on a private or a public network then click allow access. Next the PHP parameters screen shows up leave SMPT server unchanged and change the email address to your choosing. Click next to continue.
Now you can see a screen showing your installation is complete. Check Launch WAMPServer 2 now then click finish.

**Downloading and Installing Microsoft Visual C++**

Click on download then it will redirect you into next page where you are allowed to select the bit size then select appropriate bit size which suits your PC and download. Double click on the setup you downloaded then you will see this screen.

I already have this software in my PC so I will click on Repair, if you did this for first time you will see Install on the screen click on it. When you do that it will take a while to install then you will see.

The installation will ask you to restart your PC just click on Restart then your computer will restart.
Installation of Moodle
First download Moodle from https://download.moodle.org/.

Extract file and click start Moodle.
Enter localhost/Moodle in browser and follow the instructions to install Moodle.
Next step will be confirming the installation path for Moodle installation. The Web address and the Moodle directory should be set by the install script by default. Data Directory will also be set up. Leave the default path and click next.

Database stings is the next step, use the database settings that where set in step 3. Create the database for the installation. Enter the database name, user name and password, leave the prefix and Unix sockets unchecked and click on next.
Next page you see is a copyright notice, in this page you will have to accept the general public license select continue to move to the next step.

Next step is to install server, click continue then you will see server check screen the install script will show a list of tables that are setup for database. When finished click continue. The Administration setup screen will load for setting up the main administration account. When you complete setting the administrator click update profile.
Finishing installation

This is the last page you will see in this installation process.

3.2 Operations, Administration, Maintenance and Provisioning (OAM&P)

Regular backup and maintenance is performed at regular intervals to ensure that the site is working properly in the desired mechanism.

3.3 Security and Fraud Prevention

To ensure the security every user must change the password in regular basses, this will help securing your account from being hacked.

3.4 Release and Transition Plan

4 Project Design Description

WAMP server acts as a localhost to your PC, in WAMP server you will have to add your Moodle project by copying the Moodle folder to www folder of the WAMP server file folder.

5 Internal/external Interface Impacts and Specification

We have installed seven plugins in order to create this site according to our needs, BigBlueButtonBN is one of them this is an important plugin, and we have Log storage plugin these are two important plugins which does the job foe us.
6 Design Units Impacts

6.1 Functional Area A/Design Unit A

6.1.1 Functional Overview
WAMP server acts as a platform for Moodle, WAMP server is like a source machine to Moodle.

6.1.2 Impacts
WAMP has the main impact on the Moodle. We need to start WAMP server before we open Moodle.

6.1.3 Requirements
System must have 500 MB RAM and 50 GB hard disk, it requires internet, and should have a sufficient space for installation of WAMP.

6.2 Functional Area B/Design Unit B

6.2.1 Functional Overview
Moodle provides platform for online learning management system used in universities and educational institutes

6.2.2 Impacts

6.2.3 Requirements
We need to install WAMP and C++ redistributable file to work on Moodle

7 Open Issues

8 Acknowledgements
Moodle is a open source software, lot of developers modified and developed it and made it simple.

9 References
Using Moodle in Organizations [iBook]
By Stuart R Mealor.

Moodle 3.x Teaching Techniques
By Susan Smith Nash

<Project Overview, Setting up>(February 05 2016)
https://moodle.org/
10 Appendices

List all appendixes here.