

I. Overview:

You are writing a PHP page to handle Instant Payment Notification (IPN) from PayPal. The page will:

- (a) Accept/Process IPN
- (b) Add a record to a database
- (c) Generate a random password for the user and Email the user a “Thank you for purchase” email.

II. Detailed Specifications:

The page will accept IPN from Paypal. For any successful IPN that are marked as COMPLETED, the page will: (a) generate a new password for the user, (b) insert the password and additional information about the user into the database, and (c) email the user a “Welcome” message with their password. These steps should only be completed if the IPN is (a) successful, (b) marked as COMPLETED, and (c) the transaction ID does not exist in the database. In other words, we only want to send out credentials to user who have successfully paid and we want to also guard against sending more than one set of credentials if PayPal sends us multiple IPNs in connection with their transactions. We also only want to send emails for COMPLETED new purchases rather COMPLETED refunds.

1. Authenticate the IPNs and perform the appropriate handshaking with PayPal
2. If the handshake is successful
 - a. Check if the status of the IPN is VERIFIED and the payment_status is COMPLETED
 - i. Check if this transaction ID (txn_id) exists in the database. If it DOES NOT exist
 1. Create a record as indicated in section IV
 2. Send an email to the buyer with the message in section V.

Additional Tasks:

1. Check the lastname, and firstname fields for any name that has an apostrophe or single quote ‘ and replace it with back accent ` . The purpose is to enable names like O’Malley to be insertable into database without causing errors with the SQL statement.
2. Check all of the form fields for common SQL injection keywords (DROP, ALTER, etc.). If found, do not process the IPN.

III. Deliverable & Testing:

You are to install/upload the finished php page to our test PHP server.

Credentials will be provided after you have accepted the bid.

IV. Database Structure

Database Credentials:

Server: **Will be provided after the job is accepted**
Database name: **Will be provided after the job is accepted**
Username: **Will be provided after the job is accepted**
Password: **Will be provided after the job is accepted**
phpMyAdmin: **Will be provided after the job is accepted**

If the IPN validates successfully and no records with the given transaction ID exist in the database then you should insert with the information below:

Table Name: **customers**

Database Field	Content	Source
customerid	Primary key – Auto incremented by MySQL	MySQL AutoIncrement
firstname	Buyer's first name.	PayPal IPN (first_name)
lastname	Buyer's last name	PayPal IPN (last_name)
email	Buyer's email address	PayPal IPN (payer_email)
productid	Product ID	PayPal IPN (item_number)
productname	Product name	PayPal IPN (item_name)
serial	A random password that you generate. Make then length between 5 and 15 characters. Can include letters and numbers.	You code this
kind	Always set this to "student"	Hard code this to always be the string "student"
txnid	Paypal transaction ID	PayPal IPN (txn_id)
fecha	Today's date	Your code Format: yy-mm-dd 2016-01-24 00:00:00

Note: The database has some additional fields that will be left blank by your IPN page.

V. Email

An email should be sent to the buyer with the following text:

Email Template:

[First Name] [Last Name],

Thank you for your purchase. Below are the details for your purchase:

Product: [Product Name]

Serial Number: [Serial --- random number you generated and stored]

Email: [purchaser's email]

Thank you for your purchase