**Section A:**

All my works was done on Macbook and Macbook’s XAMPP version, that is why I send you a screen of my XAMPP and where are my directories.

**A screenshot of a cell phone

Description automatically generated**

I set all my files in /opt/lamp:**A screenshot of a cell phone

Description automatically generated**

There are all XAMPP files. It looks like that:

**A screen shot of a computer

Description automatically generated**

My directories are saved in htdocs folder:

**A screenshot of a computer

Description automatically generated**

**A screenshot of a cell phone

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**A screenshot of a computer screen

Description automatically generated**

**Section B:**

Correct inputs:

**A screenshot of a cell phone

Description automatically generated**

There is a screen, which is displayed, if all inputs are correct. It is a secondpage.php:

**A screenshot of a cell phone

Description automatically generated**

There is an alert, which is displayed if user enter an incorrect card number:

**A screenshot of a social media post

Description automatically generated**

There is an alert, which is displayed if user enter an incorrect date(date in the past):**A screenshot of a social media post

Description automatically generated**

There are alerts, which display if user enter an incorrect security code(wrong length):

**A screenshot of a cell phone

Description automatically generated**

**A screenshot of a cell phone

Description automatically generated**

There is an alert, which is displayed, if user enter an incorrect security code format(for example letters):

**A screenshot of a cell phone

Description automatically generated**

**Section C:**

**A screenshot of a social media post

Description automatically generated**

There are credit card inputs. Card number is encrypted. First 12 numbers is encrypted in php file, only 4 last number are correct. I saved it like this, because card should not be hold in raw form, that is why I know and see only 4 last card numbers.

**Section D:**

**Appendix 1; index.php**

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| <!DOCTYPE html>  <html lang = "en">  <html>  <head>  <meta charset="utf-8">  <link rel="stylesheet" href="mystyle.css">  <! use mystyle.css>  </head>  <body onload='document.paymentForm.cardNumber.focus()'>  <header>  <h1>Payment options  </h1>  </header>  <h3>Debit/Credit Card  </h4>  <img src = "img/mastercard.svg" class="myImage">  <br>  <form action="/secondpage.php" name='paymentForm' class='form' method="post" >  <label>Card number  </label>  <input type='text' name='cardNumber' size="20" placeholder ="5100000000000000">  <br>  <label>Expiration date  </label>  <input type="date" name='date' id= 'date' placeholder="yyyy/mm/dd">  <br>  <label>Security code  </label>  <input type="text" min="000" maxLength="9999" size = "8" name='code' id='code'>  <p>(3-4 digit code normaly on the back of your card)  </p>  <input type="submit" name="submit" value="Continue" class="submit" onclick="return cardnumber(document.paymentForm.cardNumber)">  <! if cardnumber function returns true, then form is submitted>  <! but if cardnumber() returns false, then user stay on the same page,becasue form is not submitted>  </form>  <script src="js/numberCheck.js">  </script>  <! use to numberCheck.js >  </body>  </html>  <?php  $servername = "localhost"; //database details  $username = "root";  $password = "";  $dbname = "creditcard";    $conn = new mysqli($servername, $username, $password, $dbname); //create connection  mysqli\_select\_db($conn, 'creditcard'); //select database  // Check connection  if ($conn->connect\_error) { //if connecting fail, display error message  die("Connection failed: " . $conn->connect\_error);  exit();  }  $conn->close(); //close connection  ?> |

**Appendix 2; secondpage.php**

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| <?php  $servername = "localhost";  $username = "root";  $password = "";  $dbname = "creditcard";  $conn = new mysqli($servername, $username, $password, $dbname); //make a connection  mysqli\_select\_db($conn, 'creditcard');  // Check connection  if ($conn->connect\_error) {  die("Connection failed: " . $conn->connect\_error);  exit();  }  $query = "SELECT \* FROM `card` ORDER BY `#` ASC"; // a query to select a table  $result = mysqli\_query($conn, $query);  $row = mysqli\_fetch\_array($result); //fetch a result row as an associative array  $total = mysqli\_num\_rows($result); //count how many rows there are  $x = $total + 1; //$x = number of rows + 1  if ($\_SERVER["REQUEST\_METHOD"] == "POST") {  // collect value of input field  $cardNum = $\_POST['cardNumber']; //take input from first field, called 'cardNumber'  $date = $\_POST['date']; //take input fro second field, called 'date'  $secCode = $\_POST['code']; //take input from third field, called 'code'  strval($cardNum); //make $cardNum string  $twelveNum = substr($cardNum, 0, -4); // set in $twelveNum first 12 numbers from $cardNum  $fourNum = substr($cardNum, -4, 4); //set in $fourNum last 4 numbers from $cardNum  strval($fourNum);  $cardNum = crypt($twelveNum, '\_J9..rasm'); //encrypt $twelveNum and set it in $cardNum  $cardNum .= $fourNum; //add to $cardNum last 4 numbers  if (empty($cardNum)|| empty($date) || empty($secCode) ) { //if any field is empty  echo "Card number is empty"; //display message  } else { //if not  $sql = "INSERT INTO `card` (`#`, `ccnum`, `expdate`, `seccode`) VALUES ('$x', '$cardNum', '$date', '$secCode')"; //add to database values from fields  if ($conn->query($sql) === TRUE) { //if adding is successful  unset($cardNum); //delete value form $cardNum  unset($date); //delete value form $date  unset($secCode); //delete value form $secCode  } else {  echo "Error: " . $sql . "<br>" . $conn->error; //display error  }  }  }  $query1 = "SELECT \* FROM `card` ORDER BY `#` DESC LIMIT 1"; //take the last added row  $result1 = mysqli\_query($conn, $query1);  $row1 = $result1->fetch\_array(); //set it in $row1  $card = $row1['ccnum']; //set in $card a card number from last row  $displayedCard ='';  for($i = 0; $i <= 12; $i++){ // 12 times  $displayedCard .= '\*'; //set in $displayedCard 12 '\*'  }  $displayedCard .= substr($card, -4, 4); //add to $displayedCard the last 4 numbers from card number  $conn->close();  ?>  <!DOCTYPE html>  <html lang = "en">  <html>  <head>  <meta charset="utf-8">  <link rel="stylesheet" href="mystyle.css">  </head>  <body>  <header>  <h1>You have successfully entred your credit card details  </h1>  </header>  <h3>Debit/Credit Card  </h3>  <img src = "img/mastercard.svg" class='myImage'>  <br>  <h4>Your credit card number ends in  <?php echo " ".$displayedCard ?>  </h4>  <script src="js/numberCheck.js">  </script>  </body>  </html> |

**Appendix 3; numberCheck.js**

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| function cardnumber(inputtxt) {  var date = new Date(document.getElementById('date').value); //create a new date, which is equal to entered date  var cardno = /^(?:5[1-5][0-9]{14})$/;  var secCode = document.getElementById('code'); //get a security code input  var today = new Date(); //create today's date  var size = secCode.value.length; //create a size, which is equal to security code length  if (isNaN(secCode.value)) { //if secCode is not a number, then return fals and alert  alert("Wrong security code!");  return false;  }  if (date < today) { //if entered date is in the past, then return false and alert  alert("Incorrect date!");  return false;  }  if (!inputtxt.value.match(cardno)) { //if entered card number match to cardno(it checks if it is a mastercard card)  alert("Not a valid Mastercard number!");  return false;  }  if (size == 3 || size == 4) { //if size(secCode length) is equal 3 or 4, then return true  return true;  } else { //if not, display alert and return false  alert("Wrong security code length");  return false  }  } |

**Appendix 4; mystyle.css**

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| .form {  width: 50%;  height: 40%;  padding: 10px;  padding-bottom: 30px;  margin: 0px 0px 0px 10px;  background-color: #DCDCDC;  border: 1px solid #C0C0C0;  }  h1 {  border-bottom: 1px solid #000000;  }  h3 {  margin-left: 30px;  margin-right: 25px;  float: left;  }  .myImage {  max-height: 60px;  max-width: 90px;  }  label {  margin: 20px;  }  input {  margin: 0px 10px 10px 10px;  }  .submit {  margin: 10px 40px 40px 100px;  background-color: red;  border: 1px solid black;  color: white;  }  p {  margin-left: 100px;  }  label {  margin-left: 10px;  } |