Title:

Write a program for Web feed using PHP and HTML.

Theory:

Web Application and Cloud Computing

The services are accessible anywhere in the world, with the cloud appearing as a single point of access for all the computing needs of consumers. New advances in processors, virtualization technology, disk storage, broadband internet access and fast, inexpensive servers have all combined to make cloud computing a compelling paradigm. Cloud computing allows users and companies to pay for and use the software and storage that they need, when they need then and as wireless broadband connection options grow, where they need them. This type of software deployment is called Software as a Service (SaaS).

Many of the underlying technologies such as grid computing, peer-to-peer computing have a direct contribution to cloud computing. In order to understand what type of components exist in a cloud, we first need to enumerate the typical components of an application

development. The components excluding human resources are:

- i) infrastructure resources
- ii)software resources,
- iii) application resources and
- iv) business processes.

In the cloud computing paradigm, all of the above components are treated as services and are in the "cloud"; users do not have to invest or pay huge licensing fees to won any of the above resources. Infrastructure resources are storage, computing power and so forth, which can take advantage of already existing technologies such as grid computing.

The software resources include application servers, database servers, IDE and so on. The application resources include applications deployed as SaaS for example Google docs. The business process resources can be standard set of common business utilities given as services to clients. Example is ERP software such as SAP and Oracle providing standard business workflows in the cloud. Some of the major players in cloud computing are Amazon, Google, IBM, Joint, Microsoft and Sales Force.

Current cloud computing services are storage services, spam filtering, performing applications in high level programming languages such as Java or the use of some kind of database. In 2008, Google has released Google App Engine, a cloud-based platform used for running applications both individuals and businesses. Microsoft has released Windows Azure, a cloud-based operating system, for the Community technology Preview.

What is Web feed?

A web feed (or news feed) is a data format used for providing users with frequently updated content. Content distributors syndicate a web feed, thereby allowing users to subscribe to it. Making a collection of web feeds accessible in one spot is known as aggregation, which is performed by an aggregator. A web feed is also sometimes referred to as a syndicated feed.

A typical scenario of web feed use is: a content provider publishes a feed link on their site which end users can register with an aggregator program (also called a feed reader or a news reader) running on their own machines; doing this is usually as simple as dragging the link from the web browser to the aggregator.

When instructed, the aggregator asks all the servers in its feed list if they have new content; if so, the aggregator either makes a note of the new content or downloads it. Aggregators can be scheduled to check for new content periodically. Web feeds are an example of pull technology, although they may appear to push content to the user.

The kinds of content delivered by a web feed are typically HTML (webpage content) or links to webpages and other kinds of digital media. Often when websites provide web feeds to notify users of content updates, they only include summaries in the web feed rather than the fullcontent itself.

Web feeds are operated by many news websites, weblogs, schools, and podcasters.

Benefits

- 1. Users do not disclose their email address when subscribing to a feed and so are not increasing their exposure to threats associated with email: spam, viruses, phishing, and identity theft.
- 2. Users do not have to send an unsubscribe request to stop receiving news. They simply remove the feed from their aggregator.
- 3. The feed items are automatically sorted in that each feed URL has its own sets of entries (unlike an email box where messages must be sorted by user-defined rules and pattern matching).

Conclusion:

Hence we have studied webfeed and application in cloud computing.

The HTML Program:

```
<html>
<head>
<script>
function showRSS(str) {
 if (str.length==0) {
  document.getElementById("rssOutput").innerHTML="";
  return;
 if (window.XMLHttpRequest) {
  / code for IE7+, Firefox, Chrome, Opera,
  Safari xmlhttp=new XMLHttpRequest();
 } else { // code for IE6, IE5
  xmlhttp=new ActiveXObject("Microsoft.XMLHTTP");
 xmlhttp.onreadystatechange=function() {
  if (this.readyState==4 && this.status==200) {
   document.getElementById("rssOutput").innerHTML=this.responseText;
  }
 xmlhttp.open("GET","getrss.php?q="+str,true);
 xmlhttp.send();
</script>
</head>
<body>
<form>
<select onchange="showRSS(this.value)">
<option value="">Select an RSS-feed:</option>
<option value="Google">Google News</option>
<option value="ZDN">ZDNet News
</select>
</form>
<br>
```

```
<div id="rssOutput">RSS-feed will be listed here...</div>
</body>
</html>
```

The PHP Program:

```
<?php
//get the q parameter from URL
$q=$ GET["q"];
//find out which feed was selected
if($q=="Google") {
 $xml=("http://news.google.com/news?ned=us&topic=h&output=rss");
} elseif($q=="ZDN") {
 $xml=("https://www.zdnet.com/news/rss.xml");
}
$xmlDoc = new DOMDocument();
$xmlDoc->load($xml);
//get elements from "<channel>"
$channel=$xmlDoc->getElementsByTagName('channel')->item(0);
\frac{1}{2} $\text{channel title} = \text{$channel->getElementsByTagName('title')->item(0)->childNodes->item(0)-
>nodeValue;
$channel link = $channel->getElementsByTagName('link')->item(0)->childNodes->item(0)-
>nodeValue;
$channel desc = $channel->getElementsByTagName('description')->item(0)->childNodes-
>item(0)->nodeValue;
//output elements from "<channel>"
echo("<a href="" . $channel link"
. "'>" . $channel title . "</a>");
echo("<br>");
echo($channel desc . "");
//get and output "<item>" elements
$x=$xmlDoc->getElementsByTagName('item');
for ($i=0; $i<=2; $i++) {
 $item title=$x->item($i)->getElementsByTagName('title')->item(0)->childNodes->item(0)-
```

```
>nodeValue;
$item_link=$x->item($i)->getElementsByTagName('link')->item(0)->childNodes->item(0)-
>nodeValue;
$item_desc=$x->item($i)->getElementsByTagName('description')->item(0)->childNodes-
>item(0)->nodeValue;
echo ("<a href="" . $item_link . "">" . $item_title . "</a>");
echo ("<br/>''>");
echo ($item_desc . "");
}
```

OUTPUT:

The following example will demonstrate an RSS reader, where the RSS-feed is loaded into a webpage without reloading:



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