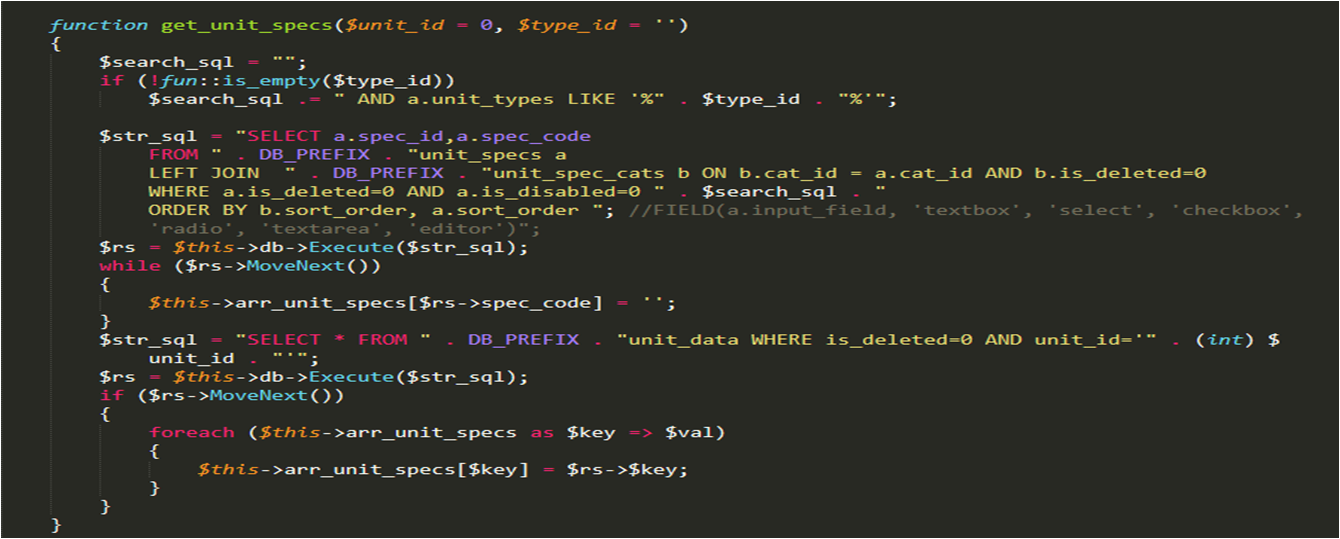
**Code Optimization**

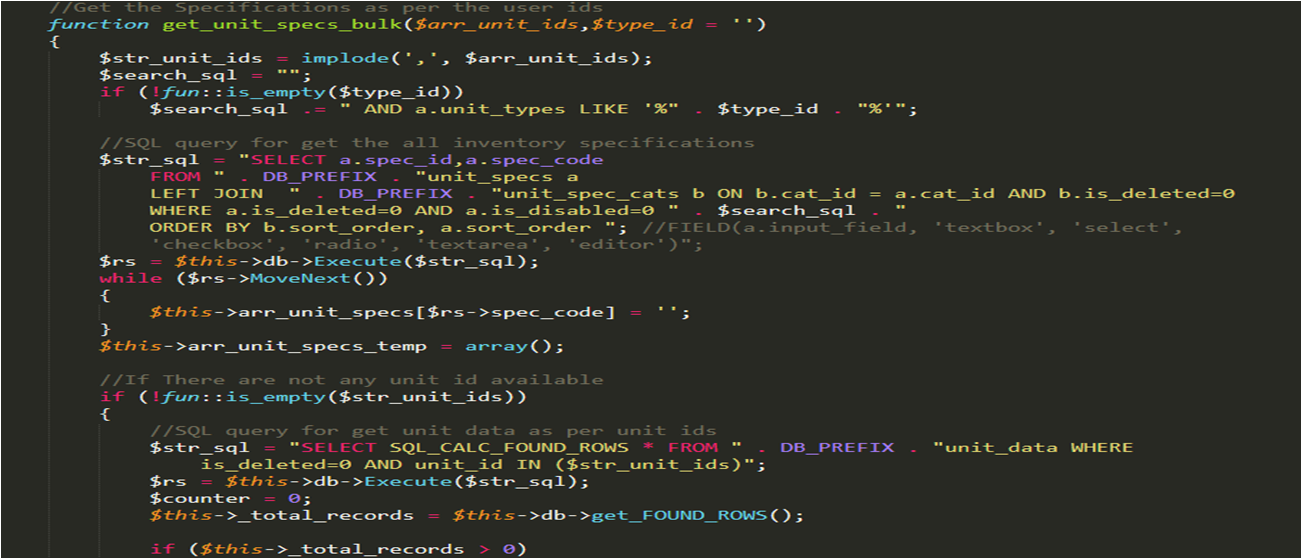
* The code optimization in the synthesis phase is a program transformation technique, which tries to improve the intermediate code by making it consume fewer resources (i.e. CPU, Memory) so that faster-running machine code will result.

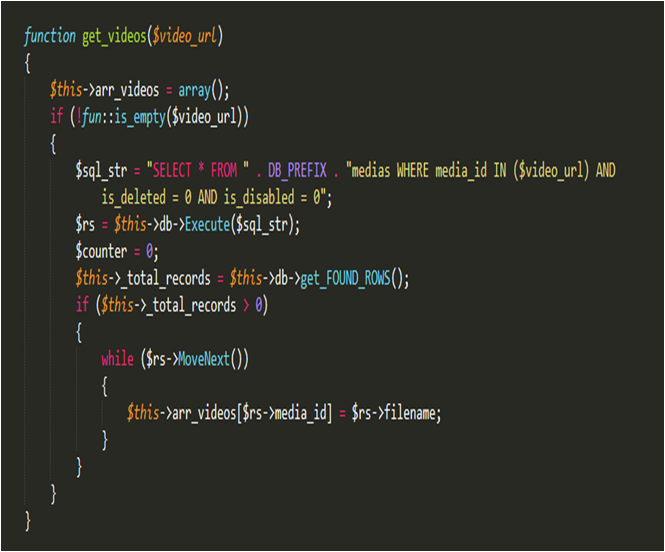
**Before Code Optimization**

The purpose of this optimization for decrease the load to the server.

****

**After Code Optimization**

****

**Another Example**

**Optimization for image:**

//Get the Bulk of images as per unit ids

function get\_unit\_images\_bulk\_backup($arr\_unit\_ids)

{

$str\_unit\_ids = implode(',', $arr\_unit\_ids);

if (!fun::is\_empty($str\_unit\_ids))

{

//SQL query for get images

$str\_sql = "SELECT \* FROM " . DB\_PREFIX . "unit\_images WHERE is\_deleted=0 AND unit\_id IN ($str\_unit\_ids) ORDER BY sort\_order,filename ASC";

$rs = $this->db->Execute($str\_sql);

$counter = 0;

$this->\_total\_records = $this->db->get\_FOUND\_ROWS();

$this->arr\_images = array();

while ($rs->MoveNext())

{

$url = $rs->file\_location . $rs->filename;

$thumbnail = $rs->file\_location . 'thumbnail/' . $rs->filename;

if (\_PROJECT\_MODE == 'LOCAL' && !file\_exists(UPLOADS\_FS\_DIR . $url))

{

$url = LOCAL\_DEV\_IMAGE\_UPLOAD . $url;

$thumbnail = LOCAL\_DEV\_IMAGE\_UPLOAD . $thumbnail;

}

else

{

$url = WS\_RIDE\_DIGITAL . $url;

$thumbnail = WS\_RIDE\_DIGITAL . $thumbnail;

}

$this->arr\_images[$rs->unit\_id][]= array(

'image\_id' => $rs->image\_id,

'unit\_id' => $rs->unit\_id,

'sort\_order' => $rs->sort\_order,

'image\_title' => $rs->image\_title,

'url' => $url,

'thumbnail' => $thumbnail

);

}

}

}