```
var fcPlayer = {}; //namespace
 fcPlayer.mediaLocation: use this to define the URL of the media folders.
..audio and ..images specify a folder. ..url defines the xml file location
for a particular product. Depending on the entire structure, this might
need to be moved to the settings
 fcPlayer.mediaLocation = {};
fcPlayer.mediaLocation.audio = settings.mediaLocation.audio;
 fcPlayer.mediaLocation.images = settings.mediaLocation.images;
 fcPlayer.mediaLocation.url = settings.mediaLocation.xmlURL;
fcPlayer.curentCardOnDisplay: this object is used as the main means of selection and navigation.
Each thubmnail is assigned an internal id, constructed as unit lesson item. This internal pointer
does NOT correspond to the physical unit/lesson numbering, but only as an internal index.
 fcPlayer.curentCardOnDisplay = {};
 fcPlayer.curentCardOnDisplay.Unit = "1";
 fcPlayer.curentCardOnDisplay.Lesson = "1";
The SubsetIndex is the index of the currently selected object with reference to the
current active subset. The active subset is defined by the cards that are currently
visible, as this is set from the selected filters and the card order. The total number
of cards in the current subset is kept in the the SubsetTotals property.
The current side of the active card and the global setting
 fcPlayer.curentCardOnDisplay.currentFace = 0;
The structure of the Units and Lessons internally is sequential. In order to reflect
the real world scenario, these properties hold the actual number of Units, Lessons
as defined in the "no" attribute of the XML file
 fcPlayer.translateLessons = [];
fcPlayer.translateUnits = [""];
```

```
objects to hold the settings and the object that represents the XML structure
 fcPlayer.globalSettings = {};
fcPlayer.allCards = {};
theLocation : id of element (X X X)
breaks down the id and returns an object with the unit, lesson, card of the id
   var GPSposition = {};
   GPSposition.Unit = "";
   GPSposition.Lesson = "";
   GPSposition.Card = theLocation.substring(theLocation.lastIndexOf(" ") + 1, theLocation.length);
elems : element tag name
shuffles ALL elements of the same type and re-inserts into DOM
function shuffle(elems) {
   allElems = (function() {
   var shuffled = (function() {
           var l = allElems.length,
               var random = Math.floor(Math.random() * allElems.length),
                    randEl = allElems[random].cloneNode(true);
               allElems.splice(random, 1);
       elems[1].parentNode.removeChild(elems[1]);
   document.getElementById("shuffle").value = fcPlayer.globalSettings.buttonLabels.unshuffle;
```

```
document.getElementById("shuffle").firstChild.firstChild.nodeValue = fcPlayer.globalSettings.buttonLabels.unshuffle;
takes theInput and returns in the XX (OtheInput) form
 function numberOfZeroes(theInput) {
   if (Number(theInput) < 10) {</pre>
This is a helper function for the Unshuffling. Unshuffling works by sorting the Id's, using the sort() function.
However, for sort to work properly, you need to have the same number of digits in all the elements. If not so,
30 will appear before 3. Therefore, 3 needs to appear as 03.
function addLeadingZeroes(theInput) {
   var leadedWithZeroes = numberOfZeroes(leadedZero.Unit) + " " + numberOfZeroes(leadedZero.Lesson) + " " + numberOfZeroes(leadedZero.Card);
Restore the original order of elements and change the button label
 function unshuffle() {
   var mylist = $('#left > ul');
        var compA = addLeadingZeroes($(a).attr("id"));
        var compB = addLeadingZeroes($(b).attr("id"));
    document.getElementById("shuffle").value = fcPlayer.globalSettings.buttonLabels.shuffle;
    document.getElementById("shuffle").name = "shuffle";
    document.getElementById("shuffle").firstChild.firstChild.nodeValue = fcPlayer.globalSettings.buttonLabels.shuffle;
/**
Set the counter of cards
function updateVisuals() {
```

```
var current = fcPlayer.curentCardOnDisplay.SubsetIndex + 1;
       document.getElementsByClassName("isOn likelastchild")[0].className = "isOn";
   if (document.getElementsByClassName("isOn")[document.getElementsByClassName("isOn").length - 1].nextSibling) {
       document.getElementsByClassName("isOn")[document.getElementsByClassName("isOn").length - 1].className = "isOn likelastchild";
theCurrentCardIndex : The subset's index of the card that will be displayd
Display the "theCurrentCardIndex" card in the centre screen
function setCurrentCard(theCurrentCardIndex) {
    fcPlayer.curentCardOnDisplay.SubsetIndex = theCurrentCardIndex;
   removeClass(document.getElementsByClassName("isActive")[0], "isActive");
   var ls = $("#left > ul > li.isOn")[theCurrentCardIndex];
       document.getElementById("center").children[1].innerHTML = "";
 unction selectTheUnits(that, evt) {
   if (document.getElementById("shuffle").value == settings.buttonLabels.unshuffle) {
       toggleShuffle("unshuffle");
    fcPlayer.curentCardOnDisplay.currentFace = fcPlayer.curentCardOnDisplay.setFace;
   $("#lessons").html(createLessonDropDowns(that.selectedIndex));
    fcPlayer.curentCardOnDisplay.Unit = that.selectedIndex;
    fcPlayer.curentCardOnDisplay.Card = "0";
   hideItems(that.selectedIndex);
   setLastCardMargin();
   setCurrentCard(0);
   determineCurrentCardLocation(0);
   determineTheMediaType(fcPlayer.curentCardOnDisplay.Unit + " " + fcPlayer.curentCardOnDisplay.Lesson + " " + fcPlayer.curentCardOnDisplay.Card);
```

```
checkButtonsState(0);
   updateVisuals();
   addAudioElement();
function selectTheLessons(that, evt) {
   hideLessonItems(that.selectedIndex);
    fcPlayer.curentCardOnDisplay.Lesson = that.selectedIndex;
    fcPlayer.curentCardOnDisplay.Card = "0";
   setLastCardMargin();
   checkButtonsState(0);
   updateVisuals();
   addAudioElement();
function calculateTextSize(test obj, my str, maxWidth, maxHeight, step) {
   var myResults = new Array(2);
   document.getElementById(test obj).innerHTML = ""
   document.getElementById(test obj).innerHTML = my str;
       myResults = calculateTextSize(test obj, my str, maxWidth, maxHeight, step)
       myResults[0] = document.getElementById(test obj).scrollHeight
function callback(myObj, myH) {
function flipSides() {
   var tempScrollLoc = document.getElementById("left").scrollTop;
   fcPlayer.curentCardOnDisplay.setFace = Math.abs( fcPlayer.curentCardOnDisplay.setFace - 1);
   var localIterationCards = {};
       var theOtherType = fcPlayer.allCards["Unit" + localIterationCards.Unit]["Lesson" + localIterationCards.Lesson][localIterationCards.Card][2][ fcPlayer.curentCardOnDisplay.setFace];
       var locImgRef = ls[i].children[0];
```

```
var locSpanRef = ls[i].children[1];
       if (theOtherType == "i") { //TARGET!!!!!!!
           ls[i].children[0].src = fcPlayer.mediaLocation.images + fcPlayer.allCards["Unit" + localIterationCards.Unit]["Lesson" +
ocalIterationCards.Lesson][localIterationCards.Card][0][ fcPlayer.curentCardOnDisplay.setFace];
           ls[i].children[1].innerHTML = "";
           ls[i].children[0].className = "empty";
           ls[i].children[1].innerHTML = fcPlayer.allCards["Unit" + localIterationCards.Unit]["Lesson" +
localIterationCards.Lesson][localIterationCards.Card][0][ fcPlayer.curentCardOnDisplay.setFace];
           ls[i].children[1].className = "textThumb";
localIterationCards.Lesson][localIterationCards.Card][0][ fcPlayer.curentCardOnDisplay.setFace], 175, 136, 0.1)
               $(ls[i].children[1]).css("text-align", "left");
   if ( fcPlayer.curentCardOnDisplay.setFace != fcPlayer.curentCardOnDisplay.currentFace) {
   var ua = navigator.userAgent.toLowerCase();
   if (ua.indexOf('safari') != -1) {
           var objDiv = document.getElementById("left");
           objDivTargScroll = tempScrollLoc;
           window.setTimeout(function() {
               objDiv.scrollTop = objDivTargScroll;
```

```
theDirection : shuffle or unshuffle
Handles the shuffle button click for both occasions.
function toggleShuffle(theDirection) {
    fcPlayer.curentCardOnDisplay.currentFace = fcPlayer.curentCardOnDisplay.setFace;
       shuffle(document.getElementsByTagName('li'));
       unshuffle();
       dualAppearance("shuffle");
   setCurrentCard(0);
   determineCurrentCardLocation(0);
   determineTheMediaType(fcPlayer.curentCardOnDisplay.Unit + " " + fcPlayer.curentCardOnDisplay.Lesson + " " + fcPlayer.curentCardOnDisplay.Card);
   checkButtonsState(0);
   updateVisuals();
   addAudioElement();
theDirection : show or hide
Handles the hide button click for both occasions.
   if (clickedHideThumbs) {
```

```
resizeImqs()
unction dualAppearance(state) {
  var localProps = [];
      if ((fcPlayer.globalSettings.appearanceStyles[state].normal.image) && (fcPlayer.globalSettings.appearanceStyles[state].normal.image != "")) {
      if ((fcPlayer.globalSettings.appearanceStyles[state].hover.image) && (fcPlayer.globalSettings.appearanceStyles[state].hover.image!= "")) {
          imagesArray[1] = fcPlayer.globalSettings.appearanceStyles[state].hover.image;
      if ((fcPlayer.globalSettings.appearanceStyles[state].active.image) && (fcPlayer.globalSettings.appearanceStyles[state].active.image != "")) {
          imagesArray[3] = fcPlayer.globalSettings.appearanceStyles[state].disabled.image;
  if (theDirection == "hide") {
      document.getElementById("hide").value = fcPlayer.globalSettings.buttonLabels.show;
      document.getElementById("hide").firstChild.firstChild.nodeValue = fcPlayer.globalSettings.buttonLabels.show;
      document.getElementById("left").style.visibility = "hidden";
```

```
document.getElementById("shuffle").className += " shuffleThumbsHidden";
document.getElementsByClassName ("designFill")[0].className += " dFillThumbsHidden";
var myPerc = 583.5 / 490;
$(document.getElementById("centerfoldt")).css("width", "583.5px")
$(document.getElementById("centerfoldt")).css("height", parseFloat(document.getElementById("centerfoldt").style.height) * myPerc + "px")
dualAppearance("show");
document.getElementById("hide").className = document.getElementById("hide").className.replace(/(?:^|\s)hideThumbsHidden(?!\S)/g, '')
document.getElementById("audiop").className = document.getElementById("audiop").className.replace(/(?:^|\s)audiopThumbsHidden(?!\S)/g, '')
document.getElementById("face").className = document.getElementById("face").className.replace(/(?:^|\s) faceThumbsHidden(?!\S)/q, '')
document.getElementById("shuffle").className = document.getElementById("shuffle").className.replace(/(?:^|\s)shuffleThumbsHidden(?!\S)/g, '')
document.getElementById("flip").className = document.getElementById("flip").className.replace(/(?:^|\s)flipThumbsHidden(?!\S)/g, '')
document.getElementById("previous").className = document.getElementById("previous").className.replace(/(?:^|\s)previousThumbsHidden(?!\S)/g, '')
document.getElementById("counter").className = document.getElementById("counter").className.replace(/(?:^|\s)counterThumbsHidden(?!\S)/g, '')
document.getElementById("next").className = document.getElementById("next").className.replace(/(?:^|\s)nextThumbsHidden(?!\S)/g, '')
document.getElementById("center").className = document.getElementById("center").className.replace(/(?:^|\s)sectionThumbsHidden(?!\S)/g, '')
document.getElementsByClassName("designFill")[0].className = document.getElementsByClassName("designFill")[0].className.replace(/(?:^|\s)dFillThumbsHidden(?!\S)/g, '')
document.getElementById("filterby").className = document.getElementById("filterby").className.replace(/(?:^|\s)filterbyThumbsHidden(?!\S)/g, '')
document.getElementById("units").className = document.getElementById("units").className.replace(/(?:^|\s)unitsThumbsHidden(?!\S)/g, '')
document.getElementById("lessons").className = document.getElementById("lessons").className.replace(/(?:^|\s)lessonsThumbsHidden(?!\S)/g, '')
```

```
var myPerc = 490 / 583.5;
      $(document.getElementById("centerfoldt")).css("width", "490px")
           myHiddenThumbsImg.className = myHiddenThumbsImg.className.replace(/(?:^|\s)imgThumbsHidden-width(?!\S)/g, '')
          myHiddenThumbsImg.className = myHiddenThumbsImg.className.replace(/(?:^|\s)imgThumbsHidden-height(?!\S)/g, '')
function selectorExists(selector) {
  var selectors = getAllSelectors();
function disableMe(elem, disabled) {
```

```
the Position: The subset's index of the current card.
This checks the index against the subset and activates/deactivates the
previous/next buttons
function checkButtonsState(thePosition) {
       disableMe(document.getElementById("previous"), true);
       disableMe(document.getElementById("next"), false);
       disableMe(document.getElementById("previous"), false);
       disableMe(document.getElementById("next"), true);
       disableMe(document.getElementById("previous"), false);
       disableMe(document.getElementById("next"), false);
theIdToSearch : element id
This sets the card's subset index
function locateTheIndex(theIdToSearch) {
   var thePosition = 0;
   tempObj = extractLocation($("#left > ul > li.isOn")[theIndex].id);
    fcPlayer.curentCardOnDisplay.Unit = tempObj.Unit;
    fcPlayer.curentCardOnDisplay.Card = tempObj.Card;
function toggleSequence(theDirection) {
    fcPlayer.curentCardOnDisplay.currentFace = fcPlayer.curentCardOnDisplay.setFace;
   if (theDirection == "next") {
         fcPlayer.curentCardOnDisplay.SubsetIndex = fcPlayer.curentCardOnDisplay.SubsetIndex + 1;
       setCurrentCard( fcPlayer.curentCardOnDisplay.SubsetIndex);
        fcPlayer.curentCardOnDisplay.SubsetIndex = fcPlayer.curentCardOnDisplay.SubsetIndex - 1;
       setCurrentCard( fcPlayer.curentCardOnDisplay.SubsetIndex);
```

```
checkButtonsState( fcPlayer.curentCardOnDisplay.SubsetIndex);
  determineCurrentCardLocation( fcPlayer.curentCardOnDisplay.SubsetIndex);
  determineTheMediaType(fcPlayer.curentCardOnDisplay.Unit + " " + fcPlayer.curentCardOnDisplay.Lesson + " " + fcPlayer.curentCardOnDisplay.Card);
  updateVisuals();
  addAudioElement();
  resizeImgs()
unction crossBrowserSourceElement(evnt, theNodeType) {
          fResult.theTargetType = evnt.srcElement;
          fResult.theTargetType = evnt.originalTarget; //firefox
      if (fResult.theTargetType.nodeName.toLowerCase() == theNodeType) {
          locTest = findUpTag(fResult.theTargetType, theNodeType);
   fcPlayer.curentCardOnDisplay.currentFace = Math.abs( fcPlayer.curentCardOnDisplay.currentFace - 1);
  if (theOtherType == "i") {
```

```
document.getElementById("centerfold").src = fcPlayer.mediaLocation.images + fcPlayer.allCards["Unit" + fcPlayer.curentCardOnDisplay.Unit]["Lesson" +
fcPlayer.curentCardOnDisplay.Lesson][ fcPlayer.curentCardOnDisplay.Card][0][ fcPlayer.curentCardOnDisplay.currentFace];
       var myResults = calculateTextSize("txt2 test", fcPlayer.allCards["Unit" + fcPlayer.curentCardOnDisplay.Unit]["Lesson" +
 fcPlayer.curentCardOnDisplay.Lesson] [ fcPlayer.curentCardOnDisplay.Card] [0] [ fcPlayer.curentCardOnDisplay.currentFace], 490, 381, 0.1 * (67.2 / 24))
        $(document.getElementById("centerfoldt")).css("text-align", "center");
            $(document.getElementById("centerfoldt")).css("font-size", parseFloat(document.getElementById("centerfoldt").style.fontSize) * myPerc + "px")
            $(document.getElementById("centerfoldt")).css("width", "583.5px")
           $(document.getElementById("centerfoldt")).css("height", parseFloat(document.getElementById("centerfoldt").style.height) * myPerc + "px")
the function that runs when a button is selecetd. Depending on the button that
was clicked, appropriate action is taken
function delegateButtonClicks(evt, that, theSenderName) {
           flipSides();
```

```
toggleShuffle(theSenderName);
           toggleHide(theSenderName);
           flipCenterCard();
function determineTheMediaType(theItem) {
       var locSpanRef = document.getElementById(theItem).children[1];
           $ (document.getElementById("centerfoldt")).css("text-align", "center");
               $ (document.getElementById("centerfoldt")).css("text-align", "left");
           $(document.getElementById("centerfoldt")).css("height", myResults[0] + "px");
```

```
if (document.getElementById("hide").name == "show") {
               var myPerc = 583.5 / 490
               $ (document.getElementById("centerfoldt")).css("width", "583.5px")
function findUpTag(el, tag) {
Do when the page has loaded and the DOM is ready.
(document).ready(function() {
    fcPlayer.globalSettings = buildGui(settings);
   document.getElementById("buttons").addEventListener("click", function(e) {
       if (locObj.condtn) {
   document.getElementById("left").addEventListener("click", function(e) {
```

```
if ((target.nodeName.toLowerCase() != "nav") && (target.nodeName.toLowerCase() != "div") && (target.nodeName.toLowerCase() != "ul")) {
       if (target.nodeName.toLowerCase() == "li") {
       } else if (target.parentNode.nodeName.toLowerCase() == "li") {
           target = findUpTag(target, "span");
            removeClass(document.getElementById(fcPlayer.curentCardOnDisplay.Unit + " " + fcPlayer.curentCardOnDisplay.Lesson + " " + fcPlayer.curentCardOnDisplay.Card), "isActive");
        tempObj = extractLocation(target.parentNode.id);
        fcPlayer.curentCardOnDisplay.Unit = tempObj.Unit;
        fcPlayer.curentCardOnDisplay.Lesson = tempObj.Lesson;
        fcPlayer.curentCardOnDisplay.Card = tempObj.Card;
       document.getElementById( fcPlayer.curentCardOnDisplay.Unit + " " + fcPlayer.curentCardOnDisplay.Lesson + " " + fcPlayer.curentCardOnDisplay.Card).className += " isActive";
        updateVisuals();
       addAudioElement();
document.getElementById("units").addEventListener("change", function(e) {
   selectTheUnits(this, e);
   resizeImgs();
document.getElementById("lessons").addEventListener("change", function(e) {
   selectTheLessons(this, e)
   resizeImgs();
```

```
updateVisuals();
disableMe(document.getElementById("previous"), true);
determineTheMediaType(document.querySelector(".isOn").id); //#ISSUE:535507000004790031 - document.quertElementById("left").children[0].children[0].id);
    toggleSequence("next");
    if (ua.indexOf('chrome') > -1) {
        $('#left > ul').waitForImages(function() {
            window.setTimeout(function() {
```