# LAMPIRAN

## 1. Module Guru

```
//CSI Android Developer 2018
//Hafalan Qur'an

// InitModule
function InitModule()
{
}

// ShutdownModule
function ShutdownModule()
{
}

var moduleID = 'MQ0782019';
var text_assign = ";
var audio_level = ";
var record_proc = false;
var meter = null;
var upload = false;

function url_update(){
  var url_updt = "http://gflm.umy.ac.id/_insert_text.php";
  return url_updt;
}

function url_validation(){
 var uurl = "http://gflm.umy.ac.id/_check_mhs.php";
 return uurl;
}

function url_send(){
 var uuurl="http://gflm.umy.ac.id/_send_onlinetext.php";
 return uuurl;
}

function url_password(){
        var passCheck = "http://gflm.umy.ac.id/_pass_verify.php";
        return passCheck;
}

function codeLoad(code){
```

```
      return code;
}

function callModuleID(){
  return moduleID;
}

function code(){
   return codeID;
}

function codeh(){
  return codeIDH;
}

//01
function check_memory(id){
      if (id!=moduleID){localStorage.clear();}
}

function read_file()
{
   try {
      return localStorage.getItem(moduleID);
   }
   catch (err) {
      return 'Course ID is not found';
   }
}

function create_newFile(moduleID, studentId, studentName, status){
   var string = generate_array(100);
   array = string.split(',');

array[0]=moduleID;array[1]=studentId;array[2]=studentName;array[3]=status;
   var Text = array_toText(array,100);
   try {
               localStorage.setItem(moduleID,Text);
      return "OK";
   }
   catch (err) {
      alert(err);
   }
}
```

```
function s_encode(str,code) {
   var encoded = "";
   for (i=0; i<str.length;i++) {
      var a = str.charCodeAt(i);
      var b = a ^ code;
      encoded = encoded+String.fromCharCode(b);
   }
   return encoded;
}

function g_encode(grade) {
   return (grade+174)*100;
}

function g_decode(higrade) {
   return ((higrade)/100 -174);
}

var myArray = new Array();

function generate_array(number){
        var text = "*";
        for (i=1;i<number;i++){
                if (i==number){break;}
    text = text + ',';
                myArray[i] ='*';
                text = text + myArray[i];
        }
        return text;
}

function array_toText(myArray,length){
  var string = myArray[0];
  for (i=1;i<length;i++){
                string = string + "," + myArray[i];
  }
  return string;
}

function passValidation(url,json,object){
        CLO['Loading'].Show({ bMaster: true });
        $(document).ready(function(){
                $.ajax({
                        crossDomain: true,
                        url: url,
                        method: 'POST',
```

```
                         dataType: 'text',
                         data: json,
                         success: function (response) {
                                 if (response == "VALID"){
            updateFile();
            CL.Navigation.GoTo({ sTargetType: "slide", sTargetDir:
"next" });
                                     CLO['Loading'].Hide({ bMaster:
true });
           }
          if (response == "INVALID"){
            alert("Username atau Password tidak sah");
                                     CLO['Loading'].Hide({ bMaster:
true });
          }
                        },
     error: function (error) {
                                CLO['Loading'].Hide({ bMaster: true });
                          alert("Jaringan error, code: " + error.status);
                          }
     });
   });
}

function updateFile(){
   var text = read_file();
   var array = text.split(',');
   array[3]="VALID";
   var Text = array_toText(array,array.length);
   try {
              localStorage.setItem(moduleID,Text);
      return "Validation is done";
   }
   catch (err) {
      alert(err);
   }
}

function store_data(chapter, score){
   var textfile = read_file();
   array = textfile.split(',');
   var counter = 0;
   for(i=4;i<99;i++){
     if ((array[i] == '*' ) | (array[i] == chapter)){
        counter = i;
        break;
```

```
        }
    }
    var Textfilebaru = '';
    array[counter] = chapter;
        var currentScore = array[counter + 1];
        if (currentScore=='*'){
                array[counter + 1] = score;
        }
        else {
                var num_currentScore = Number(currentScore);
                num_currentScore += score;
                array[counter + 1] = num_currentScore;
        }
    for(i=0;i<array.length;i++){
        Textfilebaru += array[i] + ',';
    }
    try {
        localStorage.setItem(moduleID,Textfilebaru);
        return "OK";
    }
    catch (err) {
        alert(err.message);
    }
}

function sendDataPost(){
        var url = url_update();
    var json = read_file();
    var passvar = "onlinetext="+json;
        $(document).ready(function(){
                $.ajax({
                        crossDomain: true,
                        url: url,
                        method: 'POST',
                        dataType: 'text',
                        data: passvar,
                        success: function() {
                        },
                        error: function() {
                        }
        });
    });
}

function getStudentReport(NIM){
        var Course = moduleID;
```

```
    var url = url_send();
    var passvar= "user_id=" + NIM + "&" + "course_code=" + Course;
        $(document).ready(function(){
                $.ajax({
                        crossDomain: true,
                        url: url,
                        method: 'POST',
                        dataType: 'text',
                        data: passvar,
                        success: function (response) {
                        },
                                error: function (error) {
                        }
        });
    });
}

function showAssignment(){
        var data = read_file();
        var array = data.split(",");
        var text = "";
        var number = 0;
        for (i=4;i<array.length;i+=2){
                number++;
                if ((array[i]=="*")|(array[i+1]=='*')){break;}
                text += "<tr></tr>";
                text += "<td>"+number+"</td>";
                text += "<td>"+array[i].substring(3,6)+"</td>";
                var status = "";
                if (array[i+1]=='1'){status = "selesai";}
                text += "<td>"+status+"</td>";
                text += "</tr>";
        }
        return text;
}

function imageLoad(surahImagef,surahSoundf,code){
        var canvas1 = document.getElementById('myCanvas1');
        var context1 = canvas1.getContext('2d');
        var image1 = new Image();
        image1.src = surahImagef;
        image1.onload = function() {
                context1.drawImage(image1, 0, 0);
        }
        soundLoad(surahSoundf);
```

```
        document.getElementById("button1").innerHTML =
"MENGHAFAL";
}

function soundLoad(surahSoundf){
   source=document.getElementById("sound");
        source.src=surahSoundf;
}

function nextSlide(){
        document.getElementById("button-next").style.display='block';
        document.getElementById("button-result").style.display='none';
        document.getElementById("button-reload").style.display='none';
        parent.sendDataPost();
        parent.CL.Navigation.GoTo({ sTargetType: "slide", sTargetDir:
"next" });
}

function saveNext(){
        try {
      localStorage.setItem("varnext", "true");
   }
   catch (e) {}
};

function clearNext(){
        try {
      localStorage.setItem("varnext", "false");
   }
   catch (e) {alert(e.message)}
};

function imageSave(){
        var canvas1 = document.getElementById('myCanvas1');
        var thisCode = localStorage.getItem("code");
        try {
      localStorage.setItem(thisCode, canvas1.toDataURL());
   }
   catch (e) {alert(e.message)}
}

function record(){
        startRecording();
}

function detect(){
```

```
        var canvas1 = document.getElementById('myCanvas1');
        var context1 = canvas1.getContext('2d');
        var blackTotal = 0;
        var high = localStorage.getItem("y-high");
        var imageData1 = context1.getImageData(0,0,420,high);
        var dataArray1 = imageData1.data
        var dlength = dataArray1.length;
        for (var i=0; i<dlength; i+=4) {
                if (
                        (dataArray1[i]<10)&
                        (dataArray1[i+1]<10)&
                        (dataArray1[i+2]<10)&
                        (dataArray1[i+3]>240))
                {
                        blackTotal++;
                }
        }
    return blackTotal;
}

function imageReload(){
        var canvas1 = document.getElementById('myCanvas1');
        var context1 = canvas1.getContext("2d");
        var thisCode = localStorage.getItem("code");
        var imgAsDataURL = localStorage.getItem(thisCode);
        var img = new Image;
        img.src = imgAsDataURL;
        img.onload = function(){
                context1.drawImage(img, 0, 0);
        }
        document.getElementById("soundview").innerHTML="<img
src='../images/078001/blackspeaker.png'></img>";
}

//02 Sound

var audio_context;
var recorder;
var audio_context = new window.AudioContext;

function startUserMedia(stream) {
        var input = audio_context.createMediaStreamSource(stream);
    recorder = new Recorder(input);
}

var timer;
```

```
function startRecording() {
        record_proc = false;
   recorder && recorder.record();
}

function stopRecording() {
   recorder && recorder.stop();
   createDownloadLink();
        recorder.clear();
        var canvasact = document.getElementById('meter');
   canvasact.style.display='none';
}

function createDownloadLink() {
        var canvasl = document.getElementById('meter');
        var context = canvasl.getContext('2d');
        context.clearRect(0,0,420,10);
        var reader2 = new FileReader();
        var array = read_file().split(',');
        recorder && recorder.exportWAV(function(blob) {
                var url = URL.createObjectURL(blob);
                var sound = document.getElementById("soundr");
                var view = document.getElementById("rec");
          if (blob.size>44){
                        view.innerHTML = "<a href='#'
onClick='window.togglePlayRec()'><img
src='../images/078001/redspeaker.png'></img></a>";
                }
                if ((blob.size>1024)&(upload==false)){
                        upload=true;
                        parent.ajaxblob(blob,array[1]);
                }
                sound.src = url;
                recorder.clear();
        }, "audio/mp3");
}

function initSound(){
        try {
                window.AudioContext = window.AudioContext ||
window.webkitAudioContext;
                navigator.getUserMedia = navigator.getUserMedia ||
navigator.webkitGetUserMedia;
                window.URL = window.URL || window.webkitURL;
        } catch (e) {alert(e.message)}
```

```
        navigator.getUserMedia({audio: true}, startUserMedia, function(e)
{});
}

function createAudioMeter(audioContext, clipLevel, averaging, clipLag) {
        const processor = audioContext.createScriptProcessor(512);
        processor.onaudioprocess = volumeAudioProcess;
        processor.clipping = false;
        processor.lastClip = 0;
        processor.volume = 0;
        processor.clipLevel = clipLevel || 0.98;
        processor.averaging = averaging || 0.95;
        processor.clipLag = clipLag || 750;
        processor.connect(audioContext.destination);
        processor.checkClipping = function () {
                if (!this.clipping) {
                        return false;
                }
                if ((this.lastClip + this.clipLag) <
window.performance.now()) {
                        this.clipping = false;
                }
                        return this.clipping;
        }
        processor.shutdown = function () {
                this.disconnect();
                this.onaudioprocess = null;
        }
        return processor;
}

function volumeAudioProcess(event) {
        const buf = event.inputBuffer.getChannelData(0);
        const bufLength = buf.length;
        var sum = 0;
        var x;
        for (var i = 0; i < bufLength; i++) {
                x = buf[i];
                if (Math.abs(x) >= this.clipLevel) {
                        this.clipping = true;
                        this.lastClip = window.performance.now();
                }
                sum += x * x;
        }
        const rms = Math.sqrt(sum / bufLength);
        this.volume = Math.max(rms, this.volume * this.averaging);
```

```
        audio_level = this.volume*100;
        if ((audio_level>5)&(record_proc==false)){
                record_proc=true;
                startRecording();
        }
}

function imageHide(){
        var canvas1 = document.getElementById('myCanvas1');
        var context1 = canvas1.getContext('2d');
        var high = localStorage.getItem("y-high");
        var ccvs = detect();
        if (ccvs>=40){
                imageSave();
                var imageData1 = context1.getImageData(0,0,420,high);
                var dataArray1 = imageData1.data;
                var dlength = dataArray1.length;
                for (var i=0; i<dlength; i+=4) {
                        dataArray1[i]=255;
                        dataArray1[i+1]=255;
                        dataArray1[i+2]=255;
                        dataArray1[i+3]=255;
                }
                context1.putImageData(imageData1,0,0);
                document.getElementById("rec").innerHTML="";
                document.getElementById("soundview").innerHTML="<a
href='#' onClick='stopSound()'><img
src='../images/078001/recording.png'></img>";
                navigator.getUserMedia({audio: true}, startUserMedia,
function(e) {});
                if (navigator.mediaDevices &&
navigator.mediaDevices.getUserMedia) {
                        navigator.mediaDevices.getUserMedia({audio:
true}).then(function (stream) {
                                mediaStreamSource =
audio_context.createMediaStreamSource(stream);
                                meter = createAudioMeter(audio_context);
                                mediaStreamSource.connect(meter);
                                drawLoop();
                        })
                }
                document.getElementById("button1").innerHTML=
"KEMBALI";
        }
        else {
                stopRecording();
```

```
                imageReload();
                document.getElementById("button1").innerHTML =
"MENGHAFAL";
        }
}

function stopSound(){
        togglePlay();
}

function drawLoop() {
        var width = 420;
        var height = 10;
        var canvas = document.getElementById('meter');
        var canvasContext = canvas.getContext('2d');
   canvasContext.clearRect(0,0,width,height);
   if (meter.checkClipping())
      canvasContext.fillStyle = "red";
   else
      canvasContext.fillStyle = "lightblue";
        canvasContext.fillRect(0, 0, meter.volume*width*1.4, height);
   rafID = window.requestAnimationFrame(drawLoop);
}

// 03 Synchronization

function synchronize(){
        var dom = read_file();
        var array = dom.split(',');
        var NIM = array[1];
        var Course = moduleID;
   var url = url_send();
   var passvar= "user_id=" + NIM + "&" + "course_code=" + Course;
        $(document).ready(function(){
                $.ajax({
                        crossDomain: true,
                        url: url,
                        method: 'POST',
                        dataType: 'text',
                        data: passvar,
                        success: function (response) {
                                try {

        localStorage.setItem("server",response);
                                        localStorage.setItem("localm",dom);
                                } catch(e){};
```

```
                              parent.updateBothSide();
                },
                error: function (err) {}
        });
    });
}
```

## 1. Module Siswa

```
//CSI Android Developer 2018
//Hafalan Qur'an


// InitModule
function InitModule()
{
}


// ShutdownModule
function ShutdownModule()
{
}


var moduleID = 'MQ0782019';
var text_assign = '';
var audio_level = '';
var record_proc = false;
var meter = null;
var upload = false;


function url_update(){
  var url_updt = "http://gflm.umy.ac.id/_insert_text.php";
  return url_updt;
```

```
}

function url_validation(){
 var uurl = "http://gflm.umy.ac.id/_check_mhs.php";
 return uurl;
}

function url_send(){
 var uuurl="http://gflm.umy.ac.id/_send_onlinetext.php";
 return uuurl;
}

function url_password(){
        var passCheck = "http://gflm.umy.ac.id/_pass_verify.php";
        return passCheck;
}

function codeLoad(code){
        return code;
}

function callModuleID(){
  return moduleID;
}

function code(){
  return codeID;
}

function codeh(){
  return codeIDH;
```

```
}


//01
function check_memory(id){
        if (id!=moduleID){localStorage.clear();}
}


function read_file()
{
   try {
      return localStorage.getItem(moduleID);
   }
   catch (err) {
      return 'Course ID is not found';
   }
}


function create_newFile(moduleID, studentId, studentName, status){
   var string = generate_array(100);
   array = string.split(',');

array[0]=moduleID;array[1]=studentId;array[2]=studentName;array[3]=status;
   var Text = array_toText(array,100);
   try {
                localStorage.setItem(moduleID,Text);
      return "OK";
   }
   catch (err) {
      alert(err);
   }
}
```

```
function s_encode(str,code) {
    var encoded = "";
    for (i=0; i<str.length;i++) {
        var a = str.charCodeAt(i);
        var b = a ^ code;
        encoded = encoded+String.fromCharCode(b);
    }
    return encoded;
}


function g_encode(grade) {
    return (grade+174)*100;
}


function g_decode(higrade) {
    return ((higrade)/100 -174);
}


var myArray = new Array();


function generate_array(number){
        var text = "*";
        for (i=1;i<number;i++){
                if (i==number){break;}
    text = text + ',';
                myArray[i] ='*';
                text = text + myArray[i];
        }
        return text;
}
```

```
function array_toText(myArray,length){
  var string = myArray[0];
  for (i=1;i<length;i++){
              string = string + "," + myArray[i];
  }
  return string;
}


function passValidation(url,json,object){
        CLO['Loading'].Show({ bMaster: true });
        $(document).ready(function(){
                $.ajax({
                        crossDomain: true,
                        url: url,
                        method: 'POST',
                        dataType: 'text',
                        data: json,
                        success: function (response) {
                                if (response == "VALID"){
            updateFile();
            CL.Navigation.GoTo({ sTargetType: "slide", sTargetDir:
"next" });

                                        CLO['Loading'].Hide({ bMaster: true });
          }
          if (response == "INVALID"){
            alert("Username atau Password tidak sah");
                                        CLO['Loading'].Hide({ bMaster: true });
          }
                        },
      error: function (error) {
```

```
                        CLO['Loading'].Hide({ bMaster: true });
                    alert("Jaringan error, code: " + error.status);
                }
        });
    });
}


function updateFile(){
    var text = read_file();
    var array = text.split(',');
    array[3]="VALID";
    var Text = array_toText(array,array.length);
    try {
                localStorage.setItem(moduleID,Text);
        return "Validation is done";
    }
    catch (err) {
        alert(err);
    }
}


function store_data(chapter, score){
    var textfile = read_file();
    array = textfile.split(',');
    var counter = 0;
    for(i=4;i<99;i++){
        if ((array[i] == '*' ) | (array[i] == chapter)){
            counter = i;
            break;
        }
    }
```

```
    var Textfilebaru = '';

  array[counter] = chapter;

        var currentScore = array[counter + 1];

        if (currentScore=='*'){

                array[counter + 1] = score;

        }

        else {

                var num_currentScore = Number(currentScore);

                num_currentScore += score;

                array[counter + 1] = num_currentScore;

        }

  for(i=0;i<array.length;i++){

     Textfilebaru += array[i] + ',';

  }

  try {

     localStorage.setItem(moduleID,Textfilebaru);

     return "OK";

  }

  catch (err) {

     alert(err.message);

  }

}


function sendDataPost(){

        var url = url_update();

  var json = read_file();

  var passvar = "onlinetext="+json;

        $(document).ready(function(){

                $.ajax({

                        crossDomain: true,

                        url: url,
```

```
                        method: 'POST',

                        dataType: 'text',

                        data: passvar,

                        success: function() {

                        },

                        error: function() {

                        }

        });

    });

}


function getStudentReport(NIM){

        var Course = moduleID;

    var url = url_send();

    var passvar= "user_id=" + NIM + "&" + "course_code=" + Course;

        $(document).ready(function(){

                $.ajax({

                        crossDomain: true,

                        url: url,

                        method: 'POST',

                        dataType: 'text',

                        data: passvar,

                        success: function (response) {

                        },

                                error: function (error) {

                        }

        });

    });

}


function showAssignment(){
```

```
        var data = read_file();

        var array = data.split(",");

        var text = "";

        var number = 0;

        for (i=4;i<array.length;i+=2){

                number++;

                if ((array[i]=="*")|(array[i+1]=='*')){break;}

                text += "<tr></tr>";

                text += "<td>"+number+"</td>";

                text += "<td>"+array[i].substring(3,6)+"</td>";

                var status = "";

                if (array[i+1]=='1'){status = "selesai";}

                text += "<td>"+status+"</td>";

                text += "</tr>";

        }

        return text;

}


function imageLoad(surahImagef,surahSoundf,code){

        var canvas1 = document.getElementById('myCanvas1');

        var context1 = canvas1.getContext('2d');

        var image1 = new Image();

        image1.src = surahImagef;

        image1.onload = function() {

                context1.drawImage(image1, 0, 10);

        }

        soundLoad(surahSoundf);

        document.getElementById("button1").innerHTML = "MENGHAFAL";


}
```

```
function soundLoad(surahSoundf){
   source=document.getElementById("sound");
       source.src=surahSoundf;
}

function nextSlide(){
       document.getElementById("button-next").style.display='block';
       document.getElementById("button-result").style.display='none';
       document.getElementById("button-reload").style.display='none';
       parent.sendDataPost();
       parent.CL.Navigation.GoTo({ sTargetType: "slide", sTargetDir:
"next" });
}

function saveNext(){
       try {
     localStorage.setItem("varnext", "true");
   }
   catch (e) {}
};

function clearNext(){
       try {
     localStorage.setItem("varnext", "false");
   }
   catch (e) {alert(e.message)}
};

function imageSave(){
       var canvas1 = document.getElementById('myCanvas1');
       var thisCode = localStorage.getItem("code");
```

```
        try {
        localStorage.setItem(thisCode, canvas1.toDataURL());
    }
    catch (e) {alert(e.message)}
}


function record(){
        startRecording();
}


function detect(){
        var canvas1 = document.getElementById('myCanvas1');
        var context1 = canvas1.getContext('2d');
        var blackTotal = 0;
        var high = localStorage.getItem("y-high");
        var imageData1 = context1.getImageData(0,0,420,high);
        var dataArray1 = imageData1.data
        var dlength = dataArray1.length;
        for (var i=0; i<dlength; i+=4) {
                if (
                        (dataArray1[i]<10)&
                        (dataArray1[i+1]<10)&
                        (dataArray1[i+2]<10)&
                        (dataArray1[i+3]>240))
                {
                        blackTotal++;
                }
        }
    return blackTotal;
}
```

```
function imageReload(){

        var canvas1 = document.getElementById('myCanvas1');

        var context1 = canvas1.getContext("2d");

        var thisCode = localStorage.getItem("code");

        var imgAsDataURL = localStorage.getItem(thisCode);

        var img = new Image;

        img.src = imgAsDataURL;

        img.onload = function(){

                context1.drawImage(img, 0, 0);

        }

        document.getElementById("soundview").innerHTML="<img
src='../images/078001/blackspeaker.png'></img>";

}


//02 Sound


var audio_context;

var recorder;

var audio_context = new window.AudioContext;


function startUserMedia(stream) {

        var input = audio_context.createMediaStreamSource(stream);

   recorder = new Recorder(input);

}


var timer;


function startRecording() {

        record_proc = false;

   recorder && recorder.record();

}
```

```
function stopRecording() {
   recorder && recorder.stop();
   createDownloadLink();
      recorder.clear();
      cancelAnimationFrame(rafID);
}


function createDownloadLink() {
      var canvasl = document.getElementById('meter');
      var context = canvasl.getContext('2d');
      context.clearRect(0,0,420,10);
      var reader2 = new FileReader();
      var array = read_file().split(',');
      recorder && recorder.exportWAV(function(blob) {
            var url = URL.createObjectURL(blob);
            var sound = document.getElementById("soundr");
            var view = document.getElementById("rec");
        if (blob.size>44){
                    view.innerHTML = "<a href='#'
onClick='window.togglePlayRec()'><img
src='../images/078001/redspeaker.png'></img></a>";
            }
            if ((blob.size>1024)&(upload==false)){
                    upload=true;
                    parent.ajaxblob(blob,array[1]);
            }
            sound.src = url;
            recorder.clear();
      }, "audio/mp3");
}
```

```
function togglePlay() {
        var chapter = localStorage.getItem('code');
        store_data(chapter, 1);
        var audioElement = document.getElementById("sound");
        var audioElementRec = document.getElementById("soundr");
  if (audioElement.paused) {
                document.getElementById("button1").disabled = true;
    audioElement.play();
                audioElementRec.pause();
                audioElementRec.currentTime=0;
                audioElement.onended = function() {
                        document.getElementById("button1").disabled = false;
                }
  }
  else {
                document.getElementById("button1").disabled = false;
    audioElement.pause();
                audioElement.currentTime=0;
  }
}

function togglePlayRec() {
        var chapter = localStorage.getItem('code');
        store_data(chapter, 1);
        initSound();
        var audioElement = document.getElementById("sound");
        var audioElementRec = document.getElementById("soundr");
  if (audioElementRec.paused) {
                audioElementRec.play();
                document.getElementById("button1").disabled = true;
```

```
                audioElement.pause();

                audioElement.currentTime=0;

                audioElementRec.onended = function() {

                        document.getElementById("button1").disabled = false;

                }

        }

    else {

                document.getElementById("button1").disabled = false;

        audioElementRec.pause();

        audioElementRec.currentTime=0;

    }

}


function ajaxblob(blob,name){

        var file = name+".wav";

        parent.CLO['iblib'].Show({ bMaster: true });

        var formData = new FormData();

        if (blob.size > 16777216){

                blob = blob.slice(0,16777216);

        }

        formData.append("wav",blob, file);

        var myurl = "http://gflm.umy.ac.id/uploadwav.php";

        $(document).ready(function(){

                $.ajax({

                        url: myurl,

                        enctype: 'multipart/form-data',

                        dataType: 'text',

                        data: formData,

                        method: 'POST',

                        processData: false,

                        contentType: false,
```

```
                            cache: false,

                            success: function (resp){

                                      parent.CLO['iblib'].Hide({ bMaster: true });

                            },

                            error: function (e){

                                      parent.CLO['iblib'].Hide({ bMaster: true });

                            }

                  });

         });

}


function initSound(){

         try {

                  window.AudioContext = window.AudioContext ||
window.webkitAudioContext;

                  navigator.getUserMedia = navigator.getUserMedia ||
navigator.webkitGetUserMedia;

                  window.URL = window.URL || window.webkitURL;

         } catch (e) {alert(e.message)}

         navigator.getUserMedia({audio: true}, startUserMedia, function(e) {});

}


function createAudioMeter(audioContext, clipLevel, averaging, clipLag) {

         const processor = audioContext.createScriptProcessor(512);

         processor.onaudioprocess = volumeAudioProcess;

         processor.clipping = false;

         processor.lastClip = 0;

         processor.volume = 0;

         processor.clipLevel = clipLevel || 0.98;

         processor.averaging = averaging || 0.95;

         processor.clipLag = clipLag || 750;
```

```
        processor.connect(audioContext.destination);
        processor.checkClipping = function () {
                if (!this.clipping) {
                        return false;
                }
                if ((this.lastClip + this.clipLag) < window.performance.now()) {
                        this.clipping = false;
                }
                        return this.clipping;
        }
        processor.shutdown = function () {
                this.disconnect();
                this.onaudioprocess = null;
        }
        return processor;
}


function volumeAudioProcess(event) {
        const buf = event.inputBuffer.getChannelData(0);
        const bufLength = buf.length;
        var sum = 0;
        var x;
        for (var i = 0; i < bufLength; i++) {
                x = buf[i];
                if (Math.abs(x) >= this.clipLevel) {
                        this.clipping = true;
                        this.lastClip = window.performance.now();
                }
                sum += x * x;
        }
        const rms = Math.sqrt(sum / bufLength);
```

```javascript
        this.volume = Math.max(rms, this.volume * this.averaging);

        audio_level = this.volume*100;

        if ((audio_level>5)&(record_proc==false)){

                record_proc=true;

                startRecording();

        }

}


function imageHide(){

        var canvas1 = document.getElementById('myCanvas1');

        var context1 = canvas1.getContext('2d');

        var high = localStorage.getItem("y-high");

        var ccvs = detect();

        if (ccvs>=40){

                imageSave();

                var imageData1 = context1.getImageData(0,0,420,high);

                var dataArray1 = imageData1.data;

                var dlength = dataArray1.length;

                for (var i=0; i<dlength; i+=4) {

                        dataArray1[i]=255;

                        dataArray1[i+1]=255;

                        dataArray1[i+2]=255;

                        dataArray1[i+3]=255;

                }

                context1.putImageData(imageData1,0,10);

                document.getElementById("rec").innerHTML="";

                document.getElementById("soundview").innerHTML="<a
href='#' onClick='stopSound()'><img
src='../images/078001/recording.png'></img>";

                navigator.getUserMedia({audio: true}, startUserMedia,
function(e) {});
```

```
            if (navigator.mediaDevices &&
navigator.mediaDevices.getUserMedia) {
                navigator.mediaDevices.getUserMedia({audio:
true}).then(function (stream) {
                    mediaStreamSource =
audio_context.createMediaStreamSource(stream);
                    meter = createAudioMeter(audio_context);
                    mediaStreamSource.connect(meter);
                    drawLoop();
                })
            }
            document.getElementById("button1").innerHTML=
"KEMBALI";
        }
        else {
            stopRecording();
            imageReload();
            document.getElementById("button1").innerHTML =
"MENGHAFAL";
        }
}


function stopSound(){
        togglePlay();
}


function drawLoop() {
        var width = 420;
        var height = 10;
        var canvas = document.getElementById('meter');
        var canvasContext = canvas.getContext('2d');
```

```
   canvasContext.clearRect(0,0,width,height);

   if (meter.checkClipping())

      canvasContext.fillStyle = "red";

   else

      canvasContext.fillStyle = "lightblue";

         canvasContext.fillRect(0, 0, meter.volume*width*1.4, height);

   rafID = window.requestAnimationFrame(drawLoop);

}


// 03 Synchronization


function synchronize(){

      var dom = read_file();

      var array = dom.split(',');

      var NIM = array[1];

      var Course = moduleID;

   var url = url_send();

   var passvar= "user_id=" + NIM + "&" + "course_code=" + Course;

      $(document).ready(function(){

            $.ajax({

                  crossDomain: true,

                  url: url,

                  method: 'POST',

                  dataType: 'text',

                  data: passvar,

                  success: function (response) {

                        try {

                              localStorage.setItem("server",response);

                              localStorage.setItem("localm",dom);

                        } catch(e){};

                        parent.updateBothSide();
```

```
                    },
                    error: function (err) {}
    });
  });
}


function updateBothSide(){
        var sArray = localStorage.getItem("server").split(',');
        var lArray = localStorage.getItem("localm").split(',');
        var nArray = [];
        var mArray = [];
        var ntext="";
        var mtext="";
        var rtext="";
        var rArray = [];
        for (i=0;i<100;i++){
                rArray[i]="*";
        }
        nArray[0]=lArray[0];nArray[1]=lArray[1];
        nArray[2]=lArray[2];nArray[3]=lArray[3];
        mArray[0]=lArray[0];mArray[1]=lArray[1];
        mArray[2]=lArray[2];mArray[3]=lArray[3];
        rArray[0]=lArray[0];rArray[1]=lArray[1];
        rArray[2]=lArray[2];rArray[3]=lArray[3];
        for (s=4;s<sArray.length-1;s+=2){
                var find=false;
                for (l=4;l<lArray.length-1;l++){
                        if (sArray[s]==lArray[l]){
                                find=true;
                                if (Number(sArray[s+1]) >=
Number(lArray[s+1])){
```

```
                    nArray[s]=sArray[s];

                    nArray[s+1]=sArray[s+1];

            }

            else {

                    nArray[s]=lArray[l];

                    nArray[s+1]=lArray[l+1];

            }

        }

    }

    if (!find){

            nArray[s]=sArray[s];

            nArray[s+1]=sArray[s+1];

    }

}

for (count=0;count<sArray.length-1;count++){

        ntext += nArray[count]+',';

}

ntext += nArray[nArray.length];

for (l=4;l<lArray.length-1;l+=2){

        var find = false;

        for (n=4;n<nArray.length-1;n++){

                if (lArray[l]==nArray[n]){

                        find=true;

                        if (Number(lArray[l+1]) >=
Number(nArray[n+1])){

                                mArray[l]=lArray[l];

                                mArray[l+1]=lArray[l+1];

                        }

                        else {

                                mArray[l]=nArray[n];

                                mArray[l+1]=nArray[n+1];
```

```
                    }
                }
            }
            if (!find){
                    mArray[l]=lArray[l];
                    mArray[l+1]=lArray[l+1];
            }
        }
        for (count=0;count<mArray.length-1;count++){
            mtext += mArray[count]+',';
        }
        mtext += mArray[mArray.length];
        var indx = 4;
        for (ncount=4;ncount<nArray.length-1;ncount+=2){
            if
((nArray[ncount]=="*")|(nArray[ncount]=="undefined")){break;}
            else {
                    rArray[ncount]=nArray[ncount];
                    rArray[ncount+1]=nArray[ncount+1];
            }
            indx=ncount;
        }
        for (mcount=4;mcount<mArray.length-1;mcount+=2){
            if
((mArray[mcount]=="*")|(mArray[count]=="undefined")){break;}
            else {
                    rArray[indx]=mArray[mcount];
                    rArray[indx+1]=mArray[mcount+1];
            }
            indx+=2;
        }
```

```
        for (rcount=0;rcount<rArray.length-1;rcount++){

                rtext += rArray[rcount]+',';

        }

        rtext += rArray[rArray.length];

        localStorage.setItem(moduleID,rtext);

        sendDataPost();

}
```