

MAKALAH
PENDAFTARAN GOOGLE API



Oleh:

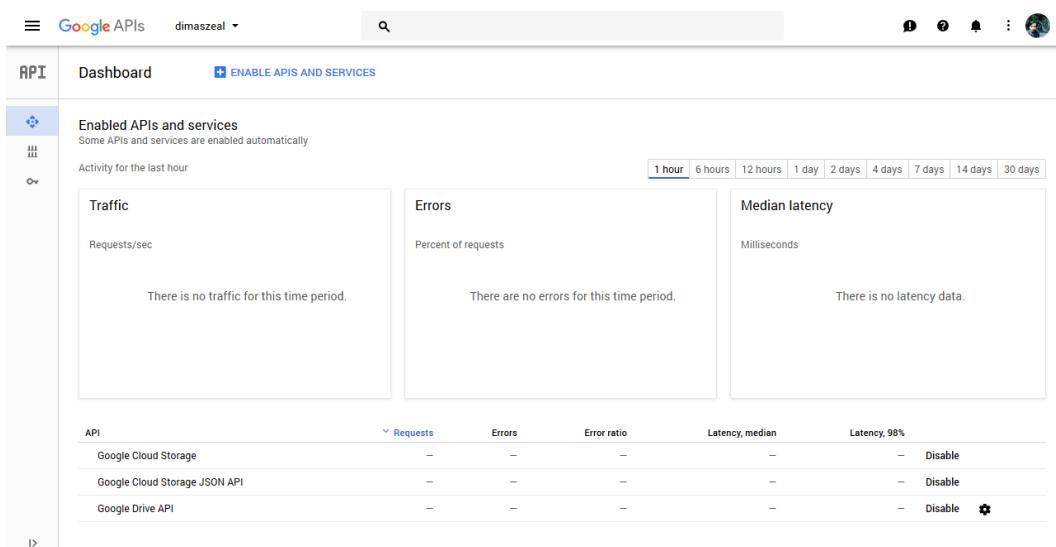
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**PROGRAM STUDI TEKNIK INFORMATIKA
FAKULTAS TEKNIK
UNIVERSITAS BHAYANGKARA SURABAYA
2017**

Pendaftaran Google API

Untuk membuat sebuah project atau menggunakan Google API kita terlebih dahulu harus melakukan pendaftaran akun di google Developers. Untuk create akun google developer kita bisa mengakses halaman <https://console.developers.google.com/project> , maka akan muncul sebuah windows yang akan terlihat pada gambar dibawah ini :



Pada langkah selanjutnya kita pilih layer persetujuan OAuth, maka akan muncul windows seperti gambar di bawah ini :

Screenshot of the Google APIs Credentials page under OAuth consent screen tab.

The page shows the following configuration:

- Email address:** dimasluthfipratama@gmail.com
- Product name shown to users:** dimaszeal
- Homepage URL (Optional):** https:// or http://
- Product logo URL (Optional):** http://www.example.com/logo.png
- Privacy policy URL:** Optional until you deploy your app
- Terms of service URL (Optional):** https:// or http://

On the right side, there is a note: "The consent screen will be shown to users whenever you request access to their private data using your client ID. It will be shown for all applications registered in this project." Below it, another note says: "You must provide an email address and product name for OAuth to work."

At the bottom, there are "Save" and "Cancel" buttons.

Jika sudah muncul windows seperti gambar diatas, selanjutnya silahkan isi nama produk yang akan di tampilkan kepada pengguna lalu klik simpan. Jika berhasil maka akan muncul windows permintaan membuat id client seperti gambar di bawah ini :

≡ Google APIs dimaszeal ▾

Create client ID

Web application Android [Learn more](#) Chrome App [Learn more](#) iOS [Learn more](#) PlayStation 4 Other

Name

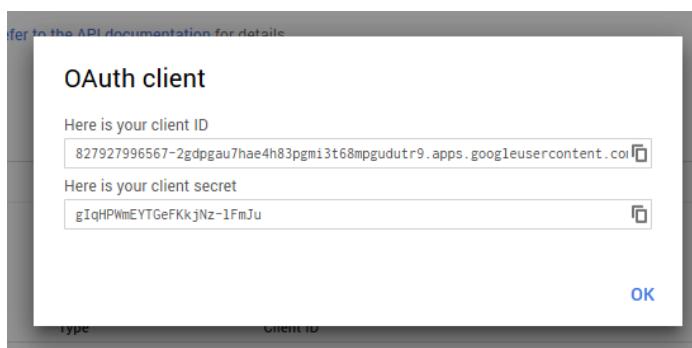
Restrictions
Enter JavaScript origins, redirect URIs, or both

Authorized JavaScript origins
For use with requests from a browser. This is the origin URI of the client application. It can't contain a wildcard (`https://*.example.com`) or a path (`https://example.com/subdir`). If you're using a nonstandard port, you must include it in the origin URI.

Authorized redirect URIs
For use with requests from a web server. This is the path in your application that users are redirected to after they have authenticated with Google. The path will be appended with the authorization code for access. Must have a protocol. Cannot contain URL fragments or relative paths. Cannot be a public IP address.

|>

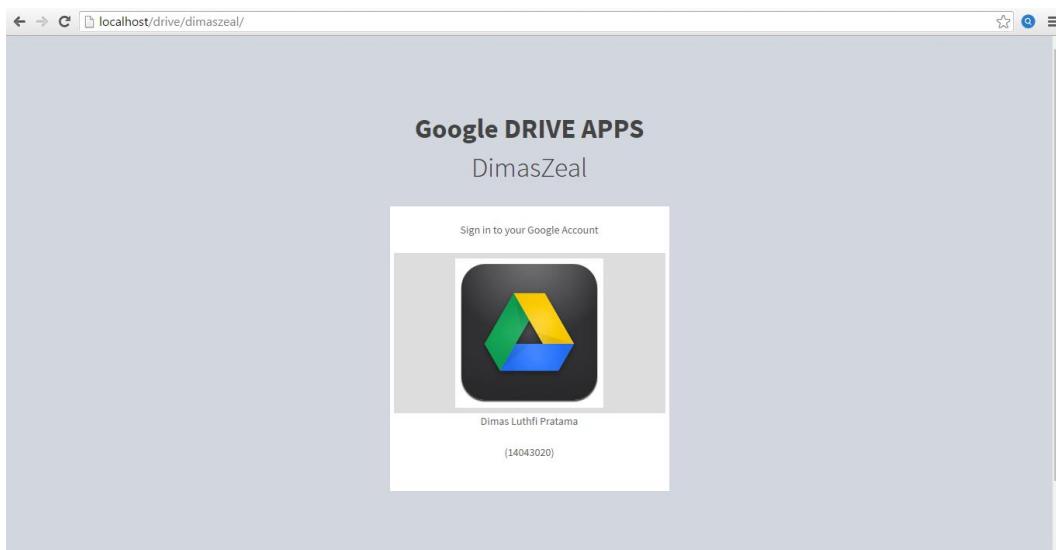
Pilih jenis aplikasi yang akan digunakan, selanjutnya isi field nama jika sudah klik buat/create. Jika berhasil maka anda akan mendapatkan key, seperti gambar di bawah ini :



Dan jika anda ingin mendownload file json tinggal klik download seperti gambar dibawah ini:

OAuth 2.0 client IDs			
<input type="checkbox"/>	Name	Creation date	Type
	Web client 2	Oct 23, 2017	Web application
			827927996567-2gdpbau7hae4h83pgmi3t68mpgudutr9.apps.googleusercontent.com

Tampilan Aplikasi



Sign in - Google Accounts - Google Chrome

https://accounts.google.com/signin/oauth/identifier?client_id=827927996567-u5

Google

Sign in
to continue to [dimaszeal](#)

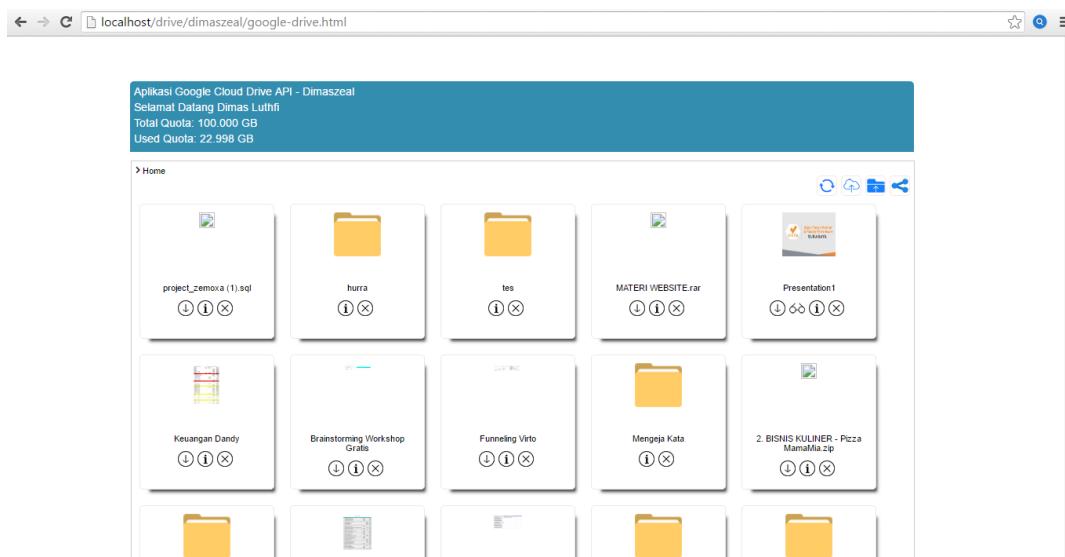
Email or phone

[Forgot email?](#)

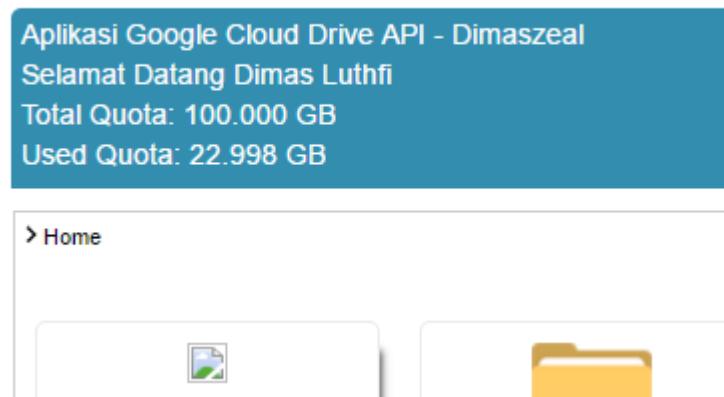
[NEXT](#)

English (United States) ▾

[Help](#) [Privacy](#) [Terms](#)



Disini bisa menampilkan detail akun google drive anda



Source Code

```
*****
```

Bytutorial.com - online community to share articles for web and mobile programming and designers.

Author: Andy Suwandy

NOTE: Please change the CLIENT ID by creating your own app in google.

In order to work in your local computer, please change the client ID in the code and set the url of where the google drive app will be loaded.

otherwise you should get an error message saying the url you try to load does not match.

****/

```
***** GLOBAL VARIABLES *****
var SCOPES = [ 'https://www.googleapis.com/auth/drive','profile'];
var CLIENT_ID = '827927996567-u5p7hi20m6brr9nfa912njko9gb1k7a5.apps.googleusercontent.com';
var API_KEY = 'AIzaSyCZ0eNDy8JLCPbezzHA_sGI6BVibQohk4g';
var FOLDER_NAME = "";
var FOLDER_ID = "root";
var FOLDER_PERMISSION = true;
var FOLDER_LEVEL = 0;
var NO_OF_FILES = 1000;
var DRIVE_FILES = [];
var FILE_COUNTER = 0;
var FOLDER_ARRAY = [];

***** AUTHENTICATION *****
function handleClientLoad() {
    // Load the API client and auth2 library
    gapi.load('client:auth2', initClient);
}

//authorize apps
function initClient() {
    gapi.client.init({
        apiKey: API_KEY, //THIS IS OPTIONAL AND WE DONT ACTUALLY
NEED THIS, BUT I INCLUDE THIS AS EXAMPLE
        clientId: CLIENT_ID,
        scope: SCOPES.join(' ')
}
```

```

}).then(function () {
    // Listen for sign-in state changes.
    gapi.auth2.getAuthInstance().isSignedIn.listen(updateSigninStatus);
    // Handle the initial sign-in state.
    updateSigninStatus(gapi.auth2.getAuthInstance().isSignedIn.get());
});
}

//check the return authentication of the login is successful, we
//display the drive box and hide the login box.
function updateSigninStatus(isSignedIn) {
    if (isSignedIn) {
        window.location = "google-drive.html";
        //$("#drive-box").show();
        $("#drive-box").css("display","inline-block");
        //$("#login-box").hide();
        showLoading();
        getDriveFiles();
    } else {
        $("#login-box").show();
        $("#drive-box").hide();
    }
}

function handleAuthClick(event) {
    gapi.auth2.getAuthInstance().signIn();
}

function handleSignoutClick(event) {
    if(confirm("Are you sure you want to logout?")){
        gapi.auth2.getAuthInstance().signOut();
    }
}

***** END AUTHENTICATION *****

***** PAGE LOAD *****

```

```

$(function(){
    $("#button-reload").click(function () {
        showLoading();
        showStatus("Loading Google Drive files...");
        getDriveFiles();
    });

    $("#button-upload").click(function () {
        $("#fUpload").click();
    });

    $("#fUpload").bind("change", function () {
        var uploadObj = $('[id$=fUpload]');
        showLoading();
        showStatus("Uploading file in progress...");
        var file = uploadObj.prop("files")[0];
        var metadata = {
            'title': file.name,
            'description': "bytutorial.com File Upload",
            'mimeType': file.type || 'application/octet-stream',
            'parents': [{
                "kind": "drive#file",
                "id": FOLDER_ID
            }]
        };
        var arrayBufferView = new Uint8Array(file);
        var uploadData = new Blob(arrayBufferView, {type: file.type
        || 'application/octet-stream'});
        showProgressPercentage(0);

        try{
            var uploader =new MediaUploader({
                file: file,
                token:
gapi.auth2.getAuthInstance().currentUser.get().getAuthResponse().acc
ess_token,
                metadata: metadata,
                onError: function(response){
                    var errorResponse = JSON.parse(response);
                    showErrorMessage("Error: " +
errorResponse.error.message);

```

```

        $("#fUpload").val("");
        $("#upload-percentage").hide(1000);
        getDriveFiles();
    },
    onComplete: function(response){
        hideStatus();
        $("#upload-percentage").hide(1000);
        var errorResponse = JSON.parse(response);
        if(errorResponse.message != null){
            showErrorMessage("Error: " +
errorResponse.error.message);
            $("#fUpload").val("");
            getDriveFiles();
        }else{
            showStatus("Loading Google Drive files...");
            getDriveFiles();
        }
    },
    onProgress: function(event) {
        showProgressPercentage(Math.round(((event.loaded
/event.total)*100), 0));
    },
    params: {
        convert:false,
        ocr: false
    }
});
uploader.upload();
}catch(exc){
    showErrorMessage("Error: " + exc);
    $("#fUpload").val("");
    getDriveFiles();
}
});

$("#button-share").click(function () {
    FOLDER_NAME = "";
    FOLDER_ID = "root";
    FOLDER_LEVEL = 0;
    FOLDER_ARRAY = [];
    $("#span-navigation").html("");

```

```

$(this).toggleClass("flash");
if($(this).attr("class").indexOf("flash") >= 0){
    $("#span-sharemode").html("ON");
} else{
    $("#span-sharemode").html("OFF");
}
showLoading();
showStatus("Loading Google Drive files...");
getDriveFiles();
});

$("#button-addfolder").click(function () {
    $("#transparent-wrapper").show();
    $("#float-box").show();
    $("#txtFolder").val("");
});

$("#btnAddFolder").click(function () {
    if ($("#txtFolder").val() == "") {
        alert("Please enter the folder name");
    } else {
        $("#transparent-wrapper").hide();
        $("#float-box").hide();
        showLoading();
        showStatus("Creating folder in progress...");
        var access_token =
gapi.auth2.getAuthInstance().currentUser.get().getAuthResponse().acc
ess_token;
        var request = gapi.client.request({
            'path': '/drive/v2/files/',
            'method': 'POST',
            'headers': {
                'Content-Type': 'application/json',
                'Authorization': 'Bearer ' + access_token,
            },
            'body':{
                "title" : $("#txtFolder").val(),
                "mimeType" : "application/vnd.google-
apps.folder",
                "parents": [{{
                    "kind": "drive#file",

```

```

        "id": FOLDER_ID
    }]
}
});

request.execute(function(resp) {
    if (!resp.error) {
        showStatus("Loading Google Drive files...");
        getDriveFiles();
    }else{
        hideStatus();
        hideLoading();
        showErrorMessage("Error: " +
resp.error.message);
    }
});
}

$(".btnClose, .imgClose").click(function () {
    $("#transparent-wrapper").hide();
    $(".float-box").hide();
});
});

/***************** END PAGE LOAD *******/

/***************** DRIVER API *******/
function getDriveFiles(){
    showStatus("Loading Google Drive files...");
    gapi.client.load('drive', 'v2', getFiles);
}

function getFiles(){
    var query = "";
    if (ifShowSharedFiles()) {
        $(".button-opt").hide();
        query = (FOLDER_ID == "root") ? "trashed=false and
sharedWithMe" : "trashed=false and '" + FOLDER_ID + "' in parents";
        if (FOLDER_ID != "root" && FOLDER_PERMISSION == "true") {
            $(".button-opt").show();
        }
    }
}

```

```

        }
    }else{
        $(".button-opt").show();
        query = "trashed=false and '" + FOLDER_ID + "' in parents";
    }
    var request = gapi.client.drive.files.list({
        'maxResults': NO_OF_FILES,
        'q': query
    });

    request.execute(function (resp) {
        if (!resp.error) {
            showUserInfo();
            DRIVE_FILES = resp.items;
            buildFiles();
        }else{
            showErrorMessage("Error: " + resp.error.message);
        }
    });
}

function showUserInfo(){
    var request = gapi.client.drive.about.get();
    var obj = {};
    request.execute(function(resp) {
        if (!resp.error) {
            $("#drive-info").show();
            $("#span-name").html(resp.name);
            $("#span-
totalQuota").html(formatBytes(resp.quotaBytesTotal));
            $("#span-
usedQuota").html(formatBytes(resp.quotaBytesUsed));
        }else{
            showErrorMessage("Error: " + resp.error.message);
        }
    });
}

function buildFiles(){
    var fText = "";
    if (DRIVE_FILES.length > 0) {

```

```

        for (var i = 0; i < DRIVE_FILES.length; i++) {
            DRIVE_FILES[i].textContentURL = "";
            DRIVE_FILES[i].level = (parseInt(FOLDER_LEVEL) +
1).toString();
            DRIVE_FILES[i].parentID = (DRIVE_FILES[i].parents.length
> 0) ? DRIVE_FILES[i].parents[0].id : "";
            DRIVE_FILES[i].thumbnailLink =
DRIVE_FILES[i].thumbnailLink || '';
            DRIVE_FILES[i].fileType = (DRIVE_FILES[i].fileExtension
== null) ? "folder" : "file";
            DRIVE_FILES[i].permissionRole =
DRIVE_FILES[i].userPermission.role;
            DRIVE_FILES[i].hasPermission =
(DRIVE_FILES[i].permissionRole == "owner" ||
DRIVE_FILES[i].permissionRole == "writer");
            var textContentURL = '';
            if(DRIVE_FILES[i]['exportLinks'] != null){
                DRIVE_FILES[i].fileType = "file";
                DRIVE_FILES[i].textContentURL =
DRIVE_FILES[i]['exportLinks']['text/plain'];
            }
            var textTitle = (DRIVE_FILES[i].fileType != "file") ?
"Browse " + DRIVE_FILES[i].title : DRIVE_FILES[i].title;

            fText += "<div class='"
+ DRIVE_FILES[i].fileType + "-box'>";
            if (DRIVE_FILES[i].fileType != "file") {
                fText += "<div class='folder-icon' data-level='"
+ DRIVE_FILES[i].level + "' data-parent='"
+ DRIVE_FILES[i].parentID + "' data-size='"
+ DRIVE_FILES[i].fileSize + "' data-id='"
+ DRIVE_FILES[i].id + "' title='"
+ textTitle + "' data-name='"
+ DRIVE_FILES[i].title + "' data-has-permission='"
+ DRIVE_FILES[i].hasPermission + "'><div class='image-preview'><img
src='images/folder.png'/></div></div>";
            } else {
                if (DRIVE_FILES[i].thumbnailLink) {
                    fText += "<div class='image-icon'><div
class='image-preview'><a href='"
+ DRIVE_FILES[i].thumbnailLink.replace("s220", "s800") + "' data-
lightbox='image-' + i + "'><img src='"
+ DRIVE_FILES[i].thumbnailLink + "'/></a></div></div>";
                }
            }
        }
    }
}

```

```

        }else {
            fText += "<div class='file-icon'><div
class='image-preview'><img src='images/" +
DRIVE_FILES[i].fileExtension + "-icon.png" + "'/></div></div>";
        }
    }
    fText += "<div class='item-title'>" +
DRIVE_FILES[i].title + "</div>";

    //button actions
    fText += "<div class='button-box'>";
    if (DRIVE_FILES[i].fileType != "folder") {
        fText += "<div class='button-download'
title='Download' data-id='" + DRIVE_FILES[i].id + "' data-file-
counter='" + i + "'></div>";
    }

    if (DRIVE_FILES[i].textContentURL != null &&
DRIVE_FILES[i].textContentURL.length > 0) {
        fText += "<div class='button-text' title='Get
Text' data-id='" + DRIVE_FILES[i].id + "' data-file-counter='" + i +
"'></div>";
    }

    fText += "<div class='button-info' title='Info'
data-id='" + DRIVE_FILES[i].id + "' data-file-counter='" + i +
"'></div>";

    if (DRIVE_FILES[i].hasPermission) {
        if (DRIVE_FILES[i].permissionRole == "owner") {
            fText += "<div class='button-delete'
title='Delete' data-id='" + DRIVE_FILES[i].id + "'></div>";
        }else if(DRIVE_FILES[i].fileType != "folder"){
            fText += "<div class='button-delete'
title='Delete' data-id='" + DRIVE_FILES[i].id + "'></div>";
        }
    }
}

fText += "</div>";

//closing div

```

```

        fText += "</div>";
    }
} else {
    fText = 'No files found.';
}
hideStatus();
$("#drive-content").html(fText);
initDriveButtons();
hideLoading();
}

//Initialize the click button for each individual drive file/folder
//this need to be recalled everytime the Google Drive data is
generated
function initDriveButtons(){
    //Initiate the delete button click
    $(".button-delete").unbind("click");
    $(".button-delete").click(function () {
        var c = confirm("Are you sure you want to delete this?");
        if (c) {
            showLoading();
            showStatus("Deleting file in progress...");
            var request = gapi.client.drive.files.delete({
                'fileId': $(this).attr("data-id")
            });

            request.execute(function(resp) {
                hideStatus();
                if (resp.error) {
                    showErrorMessage("Error: " +
resp.error.message);
                }
                getDriveFiles();
            });
        }
    });
}

//Initiate the download button
$(".button-download").unbind("click");
$(".button-download").click(function () {
    showLoading();

```

```

showStatus("Downloading file in progress...");
FILE_COUNTER = $(this).attr("data-file-counter");
setTimeout(function () {
    //If there is a text version, we get this version instead.
    if(DRIVE_FILES[FILE_COUNTER].webContentLink == null){
        window.open(DRIVE_FILES[FILE_COUNTER]['exportLinks']['text/plain']);
    }else{
        window.open(DRIVE_FILES[FILE_COUNTER].webContentLink);
    }
    hideLoading();
    hideStatus();
}, 1000);
});

$(".button-info").unbind("click");
$(".button-info").click(function () {
FILE_COUNTER = $(this).attr("data-file-counter");
$("#transparent-wrapper").show();
$("#float-box-info").show();
if (DRIVE_FILES[FILE_COUNTER] != null) {
    var createdDate = new
Date(DRIVE_FILES[FILE_COUNTER].createdDate);
    var modifiedDate = new
Date(DRIVE_FILES[FILE_COUNTER].modifiedDate);
    $("#spanCreatedDate").html(createdDate.toString("ddd, d
MMMM yyyy h:mm:ss tt"));
    $("#spanModifiedDate").html(modifiedDate.toString("ddd,
d MMMM yyyy h:mm:ss tt"));

$("#spanOwner").html((DRIVE_FILES[FILE_COUNTER].owners[0].displayName
.length > 0) ? DRIVE_FILES[FILE_COUNTER].owners[0].displayName :
 ""));
    $("#spanTitle").html(DRIVE_FILES[FILE_COUNTER].title);
    $("#spanSize").html((DRIVE_FILES[FILE_COUNTER].fileSize
== null) ? "N/A" : formatBytes(DRIVE_FILES[FILE_COUNTER].fileSize));

$("#spanExtension").html(DRIVE_FILES[FILE_COUNTER].fileExtension);
}
})

```

```

});;

//Initiate the get text button
$(".button-text").unbind("click");
$(".button-text").click(function () {
    FILE_COUNTER = $(this).attr("data-file-counter");
    showLoading();
    showStatus("Getting text file in progress...");
    var accessToken =
gapi.auth2.getAuthInstance().currentUser.get().getAuthResponse().ac-
cess_token;
    var xhr = new XMLHttpRequest();
    xhr.open('GET',
DRIVE_FILES[FILE_COUNTER]['exportLinks']['text/plain']);
    xhr.setRequestHeader('Authorization', 'Bearer ' +
accessToken);
    xhr.onload = function() {
        callBackGetText(xhr.responseText);
    };
    xhr.onerror = function() {
        callBackGetText(null);
    };
    xhr.send();
});

//Initiate the click folder browse icon
$(".folder-icon").unbind("click");
$(".folder-icon").click(function () {
    browseFolder($(this));
});

//Initiate the breadcrumb navigation link click
$("#drive-breadcrumb a").unbind("click");
$("#drive-breadcrumb a").click(function () {
    browseFolder($(this));
});
}

//browse folder
function browseFolder(obj) {

```

```

FOLDER_ID = $(obj).attr("data-id");
FOLDER_NAME = $(obj).attr("data-name");
FOLDER_LEVEL = parseInt($(obj).attr("data-level"));
FOLDER_PERMISSION = $(obj).attr("data-has-permission");

if (typeof FOLDER_NAME === "undefined") {
    FOLDER_NAME = "";
    FOLDER_ID = "root";
    FOLDER_LEVEL = 0;
    FOLDER_PERMISSION = true;
    FOLDER_ARRAY = [];
} else {
    if (FOLDER_LEVEL == FOLDER_ARRAY.length && FOLDER_LEVEL > 0)
{
    //do nothing
} else if (FOLDER_LEVEL < FOLDER_ARRAY.length) {
    var tmpArray = cloneObject(FOLDER_ARRAY);
    FOLDER_ARRAY = [];

    for (var i = 0; i < tmpArray.length; i++) {
        FOLDER_ARRAY.push(tmpArray[i]);
        if (tmpArray[i].Level >= FOLDER_LEVEL) { break; }
    }
} else {
    var fd = {
        Name: FOLDER_NAME,
        ID: FOLDER_ID,
        Level: FOLDER_LEVEL,
        Permission: FOLDER_PERMISSION
    }
    FOLDER_ARRAY.push(fd);
}
}

var sbNav = "";
for (var i = 0; i < FOLDER_ARRAY.length; i++) {
    sbNav += "<span class='breadcrumb-arrow'></span>";
    sbNav += "<span class='folder-name'><a data-id='" +
FOLDER_ARRAY[i].ID + "' data-level='" + FOLDER_ARRAY[i].Level + "' "
data-name='" + FOLDER_ARRAY[i].Name + "' data-has-permission='"
FOLDER_PERMISSION + "'>" + FOLDER_ARRAY[i].Name + "</a></span>";
}

```

```

        }
        $($("#span-navigation")).html(sbNav.toString());

        showLoading();
        showStatus("Loading Google Drive files...");
        getDriveFiles();
    }

    //call back function for getting text
    function callBackGetText(response){
        if(response == null){
            showErrorMessage("Error getting text content.");
        }else{
            hideLoading();
            hideStatus();
            $("#transparent-wrapper").show();
            $("#float-box-text").show();
            $("#text-content").html(response.replace(/(\r\n|\n|\r)/gm,
            "<br>"));
        }
    }

    //function to clone an object
    function cloneObject(obj) {
        if (obj === null || typeof obj !== 'object') {
            return obj;
        }
        var temp = obj.constructor();
        for (var key in obj) {
            temp[key] = cloneObject(obj[key]);
        }
        return temp;
    }

    //show whether the display mode is share files or not
    function ifShowSharedFiles() {
        return ($("#button-share.flash").length > 0) ? true : false;
    }

    //function to return bytes into different string data format
    function formatBytes(bytes) {

```

```

        if (bytes < 1024) return bytes + " Bytes";
        else if (bytes < 1048576) return (bytes / 1024).toFixed(3) + " KB";
        else if (bytes < 1073741824) return (bytes / 1048576).toFixed(3) + " MB";
        else return (bytes / 1073741824).toFixed(3) + " GB";
    };

    **** END DRIVER API ****

    **** NOTIFICATION ****
//show loading animation
function showLoading() {
    if ($("#drive-box-loading").length === 0) {
        $("#drive-box").prepend("<div id='drive-box-loading'></div>");
    }
    $("#drive-box-loading").html("<div id='loading-wrapper'><div id='loading'><img src='images/loading-bubble.gif'></div></div>");
}

//hide loading animation
function hideLoading() {
    $("#drive-box-loading").html("");
}

//show status message
function showStatus(text) {
    $("#status-message").show();
    $("#status-message").html(text);
}

//hide status message
function hideStatus() {
    $("#status-message").hide();
    $("#status-message").html("");
}

//show upload progress

```

```

function showProgressPercentage(percentageValue) {
    if ($("#upload-percentage").length == 0) {
        $("#drive-box").prepend("<div id='upload-percentage' class='flash'></div>");
    }
    if (!$("#upload-percentage").is(":visible")) {
        $("#upload-percentage").show(1000);
    }
    $("#upload-percentage").html(percentageValue.toString() + "%");
}

//show error message
function showErrorMessage(errorMessage) {
    $("#error-message").html(errorMessage);
    $("#error-message").show(100);
    setTimeout(function () {
        $("#error-message").hide(100);
    }, 3000);
}

***** END NOTIFICATION *****/

```