

기획자/마케터 역량강화를 위한 프로그래밍 camp

Google tag manager

Recap

- javaScript Basic
- Google Tag Manager
 - GA Pageview
 - GA Click Event
 - GA Scroll Event

Index

- javaScript HTML DOM
- Facebook Pixel(Audience to Conversion)
- Adwords Script(Countdown, Pause Keywords)

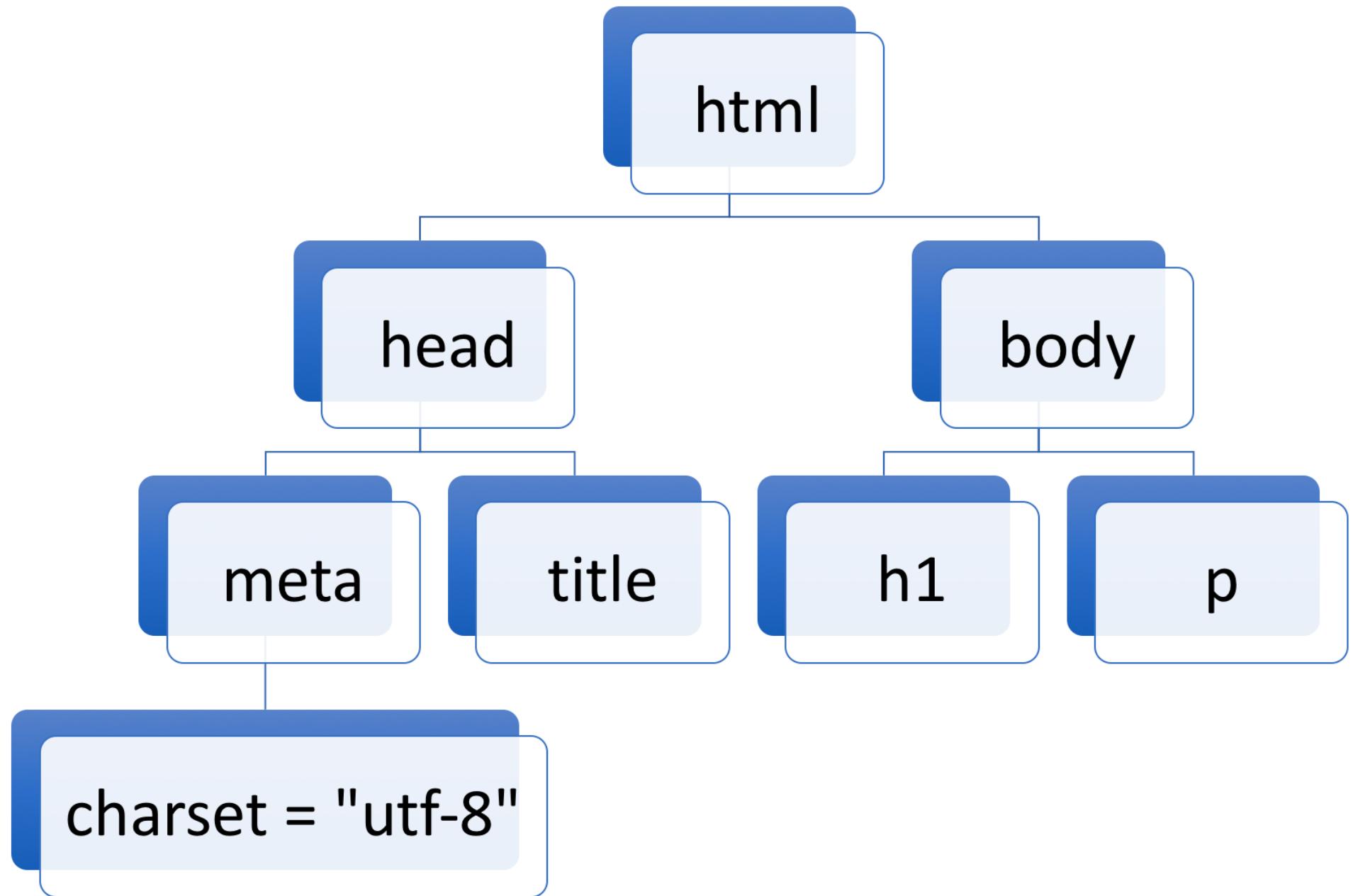
javaScript HTML DOM

DOM

Document Object Model

```
<!doctype html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My page</title>
  </head>
  <body>
    <h1>Home</h1>
    <p>Hello there!</p>
  </body>
</html>
```

DOM



with HTML DOM, javaScript can ..

- HTML 요소, 속성 생성, 변경, 삭제
- HTML 이벤트 수행
- CSS 스타일 변경

HTML Document Object

- `document`는 웹페이지의 모든 요소의 소유자입니다.

Set document

```
<!doctype html>
<html>
  <head>
    <meta charset="utf-8">
    <title>DOM Practice</title>
  </head>
  <body>
    <div id="container">
      <h1 id="article-title"></h1>
      <p class="article-text"></p>
    </div>
  </body>
</html>
```

Find Element

```
document.getElementById(id)
document.getElementsByTagName(tagname)
document.getElementsByClassName(classname)
```

```
var mainArticle = document.querySelectorAll("div.main-article");
```

Change Element

```
element.innerHTML = 'new content'
element.{{attribute}} = 'new value'
element.setAttribute(attribute, value)
element.style.{{property}} = 'new style'
```

Add Element

```
document.createElement(element)
document.appendChild(element)
document.write(text)
```

Replace and Delete Element

```
document.replaceChild(element)
document.removeChild(element)
```

DOM Event

Mouse Event

onclick

onmouseover

onmouseout

onmousedown

onmouseup

DOM Event

Keyboard Event

onkeypress

onkeyup

onkeydown

DOM Event

Form Event

onchange

oninput

onselect

onsubmit



Add Event Handler

```
element.onclick = function(){alert('hello')}
```

Add Event Listener

```
element.addEventListener("click", function(){alert('hello')});
```

Facebook - Audience to Conversion

Facebook implementation

[chrome pixel helper](#)

Facebook implementation

픽셀 기본 코드 설치(필수)

아래 코드를 복사하여 웹사이트 코드의 <head>와 </head> 태그 사이에 붙여넣으세요. 픽셀이 웹사이트의 모든 페이지에 대한 방문수를 추적합니다. [픽셀 설치 도움말 보기](#).

```
<!-- Facebook Pixel Code -->
<script>
!function(f,b,e,v,n,t,s){if(f.fbq)return;n=f.fbq=function(){n.callMethod?
n.callMethod.apply(n,arguments):n.queue.push(arguments)};if(!f._fbq)f._fbq=r
n.push=n;n.loaded=!0;n.version='2.0';n.queue=[];t=b.createElement(e);t.async
t.src=v;s=b.getElementsByTagName(e)[0];s.parentNode.insertBefore(t,s)}(window,
document,'script','https://connect.facebook.net/en_US/fbevents.js');
fbq('init', '1933341146893723');
fbq('track', 'PageView');
</script>
<noscript></noscript>
<!-- DO NOT MODIFY -->
<!-- End Facebook Pixel Code -->
```

고급 매칭 ⓘ

[돌아가기](#) [이벤트 설정](#) [이메일로 픽셀 코드 보내기](#)

Facebook implementation

X Facebook - Audience - AllPages SAVE

Tag Configuration

Tag type

Custom HTML

Custom HTML Tag

HTML [?]

```
1 <!-- Facebook Pixel Code -->
2 <script>
3 !function(f,b,e,v,n,t,s){if(f.fbq)return;n=f.fbq=function(){n.callMethod?
4 n.callMethod.apply(n,arguments):n.queue.push(arguments)};if(!f._fbq)f._fbq=n;
5 n.push=n;n.loaded=!0;n.version='2.0';n.queue=[];t=b.createElement(e);t.async=!0;
6 t.src=v;s=b.getElementsByTagName(e)[0];s.parentNode.insertBefore(t,s)}(window,
7 document,'script','https://connect.facebook.net/en_US/fbevents.js');
8 fbq('init', '1933341146893723');
9 fbq('track', 'PageView');
10 </script>
11 <noscript></noscript>
14 <!-- DO NOT MODIFY -->
15 <!-- End Facebook Pixel Code -->
```

Triggering

Firing Triggers

All Pages

Page View

ADD EXCEPTION

The screenshot shows the 'Tag Configuration' section of Google Tag Manager. It's set to 'Custom HTML' type. The 'HTML' code block contains the Facebook Pixel tracking code. Below it, the 'Triggering' section shows a single trigger named 'All Pages' for 'Page View'. A 'SAVE' button is visible at the top right.

Facebook implementation

Tags Fired On This Page:

CU - Scroll Tracking - LunaMetrics Plugin
Custom HTML - Fired 1 time(s)

Facebook - Audience - AllPages
Custom HTML - Fired 1 time(s)

GA - Event - Scroll Tracking
Universal Analytics - Fired 2 time(s)

Google Analytics - PageView - AllPages
Universal Analytics - Fired 1 time(s)

Structured Data - Organization Description
Custom HTML - Fired 1 time(s)

Tags Not Fired On This Page:

Google Analytics - Event - Cleanup Click
Universal Analytics

Google Analytics - Event - Main Click
Universal Analytics

Google Analytics - Event - \$
Universal Analytics

Facebook implementation

Facebook Pixel Helper
offered by Facebook

★★★★★ (291) [Developer Tools](#) 357,974 users

[+ ADD TO CHROME](#) [Share](#)

OVERVIEW REVIEWS SUPPORT RELATED G+1 555

 Pixel Helper

 1 pixel found on parse.com

Custom Audience Pixel loaded successfully.
Event ID: PixellInitialized
[View Event Log ▶](#)

Compatible with your device
This item is compatible with your device

The Facebook Pixel Helper works in the background to look for conversion or Facebook pixels and provide realtime feedback on the implementation. A small number will appear on the Facebook Pixel Helper icon to indicate number of pixel events. When clicked, a panel will expand to show a detailed overview of the page's pixels, including warnings, errors and successes. Learn more about using Facebook pixels here: [Facebook Pixels Documentation](#)

[Website](#) [Report Abuse](#)

Additional Information
Version: 0.7.12
Updated: November 18, 2016
Size: 505KIB
Language: English

USERS OF THIS EXTENSION HAVE ALSO USED

User-Agent Switcher for Google Chrome Postman Interceptor Eye Dropper Web Developer

◀ User-Agent Switcher for Google Chrome Postman Interceptor Eye Dropper Web Developer ▶

기획자/마케터 역량강화를 위한 프로그래밍 camp, Wooyoung Choi, 2018



Facebook Pixel Helper

[Learn More](#)



One pixel found on fcdmsgtm.herokuapp.com



Facebook Pixel

Pixel ID: 1933341146893723

▼ PageView

EVENT INFO

URL Called: Show

Load Time: 34.75 ms

Pixel Code: Show

Pixel Location: Show

Time To Request: 1570.98 ms

Frame: Window

Facebook Conversion Tracking

Facebook Conversion Tracking

reference

| 웹사이트 행동 | 설명 | 표준 이벤트 코드 |
|-----------|-------------------------------------|---|
| 주요 페이지 조회 | 주요 페이지 조회 추적(예: 제품 페이지, 랜딩 페이지, 기사) | <code>fbq('track', 'ViewContent');</code> |
| 검색 | 웹사이트 내 검색 추적(예: 제품 검색) | <code>fbq('track', 'Search');</code> |

Facebook Conversion Tracking

| 웹사이트 행동 | 설명 | 표준 이벤트 코드 |
|---------------|---|--|
| 장바구니 에 담기 | 장바구니에 상품이 담기면 추적(예: 장바구니에 담기에 대한 클릭, 랜딩 페이지) | <code>fbq('track', 'AddToCart');</code> |
| 위시리스 트에 추가 | 위시리스트에 상품이 추가되면 추적(예: 위시리스트에 담기에 대한 클릭, 랜딩 페이지) | <code>fbq('track', 'AddToWishlist');</code> |
| 결제 시작 | 결제 플로가 시작되면 추적(예: 결제 버튼에 대한 클릭, 랜딩 페이지) | <code>fbq('track', 'InitiateCheckout');</code> |

Facebook Conversion Tracking

| 웹사이트 이벤트 행동 | 설명 | 표준 이벤트 코드 |
|-------------|--|--|
| 결제 정보 추가 | 결제 플로에 결제 정보가 추가되면 추적 (예: 청구 정보에 대한 클릭, 랜딩 페이지) | <code>fbq('track', 'AddPaymentInfo');</code> |
| 구매 | 구매 또는 결제 플로 완료 추적(예: "감사합니다" 또는 확인 페이지 랜딩) | <code>fbq('track', 'Purchase', {value: '0.00', currency: 'USD'});</code> |

Facebook Conversion Tracking

| 웹사이트 행 동 | 설명 | 표준 이벤트 코드 |
|----------|--|--|
| 잠재 고객 | 누군가 상품에 관심을 표현하면 추적(예: 양식 제출, 체험판 등록, 가격 페이지 랜딩) | <code>fbq('track', 'Lead');</code> |
| 등록 완료 | 등록 양식이 작성되면 추적(예: 구독 완료, 서비스 가입) | <code>fbq('track', 'CompleteRegistration');</code> |

Facebook Conversion Tracking

Facebook - Track - ShopDetailView



The screenshot shows a code editor window with the title "Facebook - Track - ShopDetailView". The tab bar indicates the file type is "HTML". The code itself is a snippet of JavaScript and HTML used for Facebook pixel tracking. It includes a script tag that calls the fbq function with 'track' and 'ViewContent' parameters, setting the value to 4.99 and the currency to USD. It also includes a noscript tag with a fallback image URL pointing to Facebook's tracking endpoint. The code is numbered from 1 to 13.

```
1 <!-- Facebook Pixel Code -->
2 <script>
3 fbq('track', 'ViewContent', {
4   value: 4.99,
5   currency: 'USD'
6 });
7 </script>
8 <noscript></noscript>
11 <!-- DO NOT MODIFY -->
12 <!-- End Facebook Pixel Code -->
13
```

Facebook Conversion Tracking

```
<!-- Facebook Pixel Code -->
<script>
fbq('track', 'ViewContent', {
value: 4.99,
currency: 'USD'
});
</script>
<noscript></noscript>
11 <!-- DO NOT MODIFY -->
12 <!-- End Facebook Pixel Code -->
13
```

Facebook Conversion Tracking

One pixel found on localhost



Facebook Pixel

Pixel ID: 1933341146893723

- ▶ PageView
- ▶ ViewContent
- ▶ AddToCart

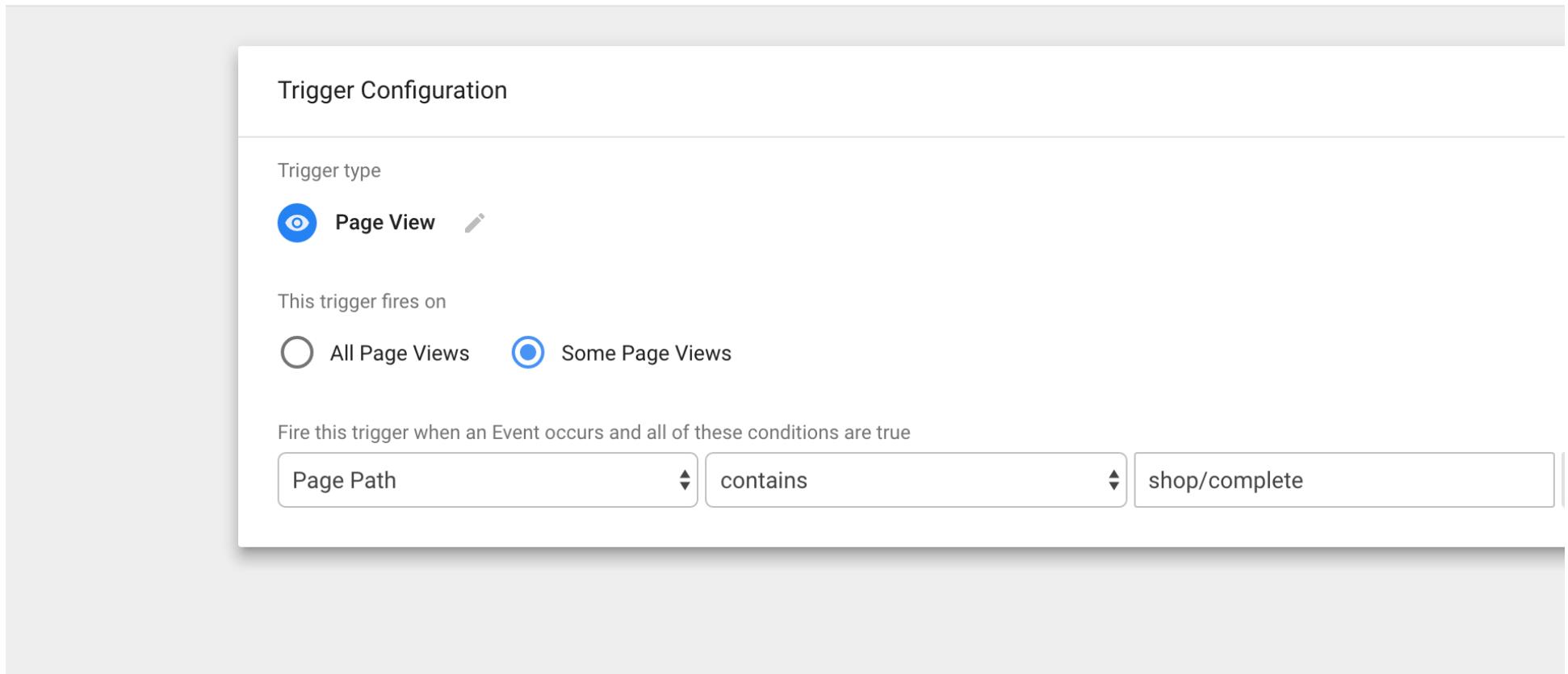
Facebook Conversion Tracking

The screenshot shows a digital marketing tool interface with the following elements:

- Top navigation bar: "ger", "Tags" (highlighted in blue), "Variables", "Data Layer", and "QUICK_PREVIEW".
- Section title: "Tags Fired On This Page:"
- Tag list:
 - CU - Scroll Tracking - LunaMetrics Plugin
Custom HTML - Fired 1 time(s)
 - Facebook - Audience - AllPages
Custom HTML - Fired 2 time(s)
 - Facebook - Conversion - Add To Cart
Custom HTML - Fired 1 time(s)
 - Facebook - Conversion - ShopDetailView
Custom HTML - Fired 1 time(s)
 - GA - Event - Scroll Tracking
Universal Analytics - Fired 5 time(s)
 - Structured Data - Organization Description
Custom HTML - Fired 1 time(s)

Facebook Conversion Tracking

Purchase Complete Trigger



The screenshot shows the 'Trigger Configuration' dialog for a 'Purchase Complete Trigger'. The trigger type is set to 'Page View'. It fires on 'Some Page Views' where the 'Page Path' contains the string 'shop/complete'. The configuration is as follows:

Trigger Configuration

Trigger type

Page View 

This trigger fires on

All Page Views Some Page Views

Fire this trigger when an Event occurs and all of these conditions are true

Page Path  contains  shop/complete

Facebook Conversion Tracking

Facebook - Conversion - Purchase Complete □

```
1  <!-- Facebook Pixel Code -->
2  <script>
3  fbq('track', 'Purchase', {
4  value: 4.99,
5  currency: 'USD'
6 });
7 </script>
8 <noscript></noscript>
11 <!-- DO NOT MODIFY -->
12 <!-- End Facebook Pixel Code -->
13
```

Facebook Conversion Tracking

One pixel found on localhost



Facebook Pixel

Pixel ID: 1933341146893723

- ▶ ✓ PageView
- ▼ ✓ Purchase

CUSTOM PARAMETERS SENT

value: 4.99

currency: USD

EVENT INFO

URL Called: Show

Load Time: 23.22 ms

Pixel Code: Show

Pixel Location: Show

Frame: Window

Facebook Conversion Tracking

Facebook - Audience - AllPages

Custom HTML - Fired 1 time(s)

Facebook - Conversion - Purchase Complete

Custom HTML - Fired 1 time(s)

Adwords Customize

Start Adwords Script

The screenshot shows the Google AdWords interface. At the top, there's a dark header bar with a "GO TO" button, a filter icon, a wrench icon, and a search bar. Below the header, a light gray navigation bar has a "Return to project" link. The main content area is divided into three columns. The left column, titled "BULK ACTIONS", contains links for "All bulk actions", "Rules", "Scripts" (which is highlighted with a gray background), and "Uploads". The middle column, titled "MEASUREMENT", contains links for "Conversions", "Google Analytics", and "Search attribution". The right column, which starts with a "SE" icon, contains links for "Billing", "Business", "Accounts", "Linked", and "Preferences".

BULK ACTIONS

All bulk actions

Rules

Scripts

Uploads

MEASUREMENT

Conversions

Google Analytics

Search attribution

SE

Billing

Business

Accounts

Linked

Preferences

Start Adwords Script

The screenshot shows the 'SCRIPTS' tab selected in the Google Adwords Scripts interface. On the left, a sidebar lists 'All bulk actions', 'Rules', 'Scripts' (which is highlighted in blue), and 'Uploads'. A large blue '+' button is centered above the main content area. The main area has two columns: 'Script' and 'Created by'. There is one visible row for a script named '↑'.

| Script | Created by |
|--------|------------|
| ↑ | |

Start Adwords Script

Scripts > New script

Script name: * [Unnamed script](#)

⚠ Scripts make changes on a user's behalf. You must authorize scripts before they can make any changes. [Learn more](#)

```
1 function main() {  
2  
3 }
```



Hi Clifford



ulgoon89@gmail.com

Unnamed script wants to



Manage your AdWords campaigns



Allow Unnamed script to do this?

By clicking Allow, you allow this app to use your information in accordance to their terms of service and privacy policies. You can remove this or any other app with access to your account in [My Account](#)

Start Adwords Script

Scripts > New script

Script name: * Unnamed script

```
1 function main( ) {  
2  
3 }
```

10 keywords with most impressions yesterday

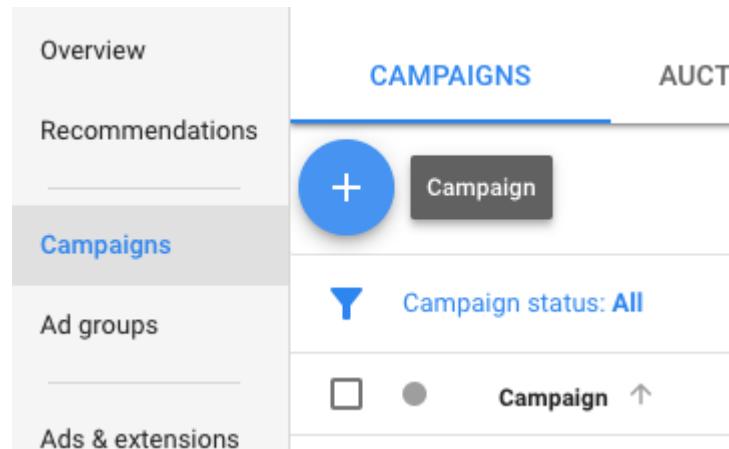
```
function main() {
  var keywords = AdWordsApp.keywords()
    .orderBy("Impressions DESC")
    .forDateRange("YESTERDAY")
    .withLimit(10)
    .get();

  Logger.log("10 keywords with most impressions yesterday");
  while (keywords.hasNext()) {
    var keyword = keywords.next();
    Logger.log(keyword.getText() + ": " +
      keyword.getStatsFor("YESTERDAY").getImpressions());
  }
}
```

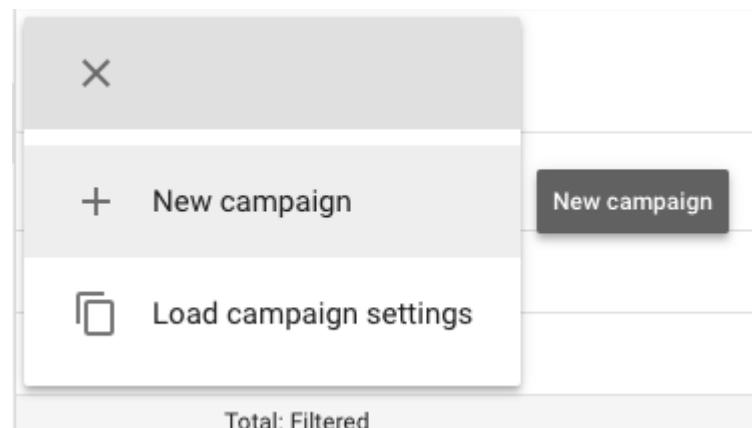
See result!



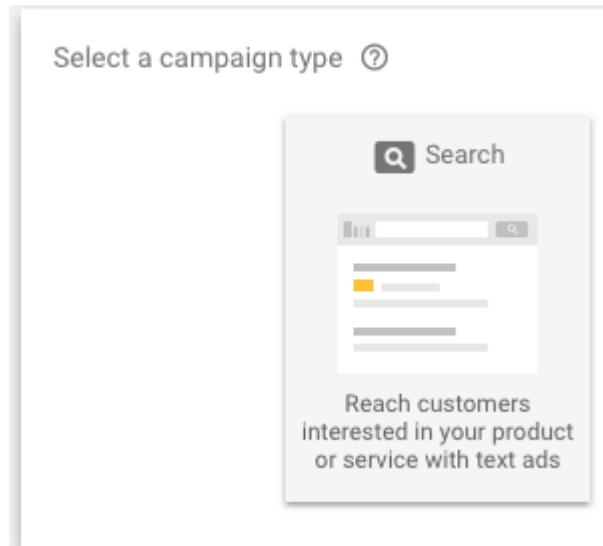
Count Down - Add New Campaign



Count Down - Add New Campaign



Count Down - Add New Campaign



Count Down - Add New Campaign

The screenshot shows the 'Add New Campaign' wizard in Google Ads. The top navigation bar includes 'Search', 'Display', and a placeholder icon. The main section asks to select a single goal for the campaign. Three options are listed: 'Sales' (tag icon), 'Leads' (upward arrow icon), and 'Website traffic' (blue checkmark icon). The 'Website traffic' option is selected. To the right, a detailed description of the website traffic goal is provided, mentioning its benefits like increasing visits and reaching new customers. Below this, a link to 'Create your campaign without a goal' is available. The next step, 'Select the ways you'd like to reach your goal', is shown with a URL input field containing 'www.ulgoon.com'.

Select the single goal that would make this campaign successful to you [?](#)

Sales

Leads

Website traffic

Get the right people to your website

The **website traffic** goal reaches more people to your website

- Increase visits to your website
- Reach new customers
- Shape how people find your website

Create your campaign without a goal [?](#)

Select the ways you'd like to reach your goal [?](#)

www.ulgoon.com

Enter a URL to see keyword ideas when you set up your ad groups

Count Down - Add New Campaign

Set up ad groups

An ad group contains one or more ads and a set of related keywords. For best results, try to focus all the ads and keywords in an ad group on one product or service.

Ad group name
testAds2

python class
python tutorial
codecademy python

Match types help control which searches can trigger your ads

keyword = Broad match "keyword" = Phrase match [keyword] = Exact match [Learn more](#)

NEW AD GROUP

The screenshot shows the 'Set up ad groups' section of the Google Ads interface. An ad group named 'testAds2' is created, containing three keywords: 'python class', 'python tutorial', and 'codecademy python'. Below this, a note about match types is present, with links to learn more. At the bottom, there's a button to add a new ad group.

Get keyword ideas

www.ulgoon.com

python learn

| Keywords | Monthly searches |
|-----------------------------|------------------|
| + python class example | 100 – 1K |
| + introduction to python | 100 – 1K |
| + python machine learning | 100 – 1K |
| + learn python the hard way | 100 – 1K |

ADD ALL IDEAS

The screenshot shows the 'Get keyword ideas' section. It lists several keyword suggestions related to 'www.ulgoon.com' and 'python learn'. Below the list is a button to add all ideas at once.

Count Down - Add New Campaign

The image shows a user interface for creating a new text ad. On the left, there's a form with fields for 'New text ad' (status), 'Final URL' (www.ulgoon.com), 'Headline 1' ('Meet Awesome developer'), 'Headline 2' ('{param1:few} for days and {param2:&} for hours'), 'Display path' (www.ulgoon.com / Path 1 / Path 2), and 'Description' ('This is awesome developer on earth'). On the right, a preview window titled '1 of 2 previews' shows a mobile phone screen with the headline, URL, and description. A note at the bottom says 'Your ad might not always include all your text. Some shortening may also occur in some formats.'

| | |
|--|----------|
| New text ad | ★ |
| Final URL | ? |
| www.ulgoon.com | ? |
| Headline 1 | ? |
| Meet Awesome developer | ? |
| Headline 2 | 22 / 30 |
| {param1:few} for days and {param2:&} for hours | ? |
| Display path | ② |
| www.ulgoon.com / Path 1 | / Path 2 |
| Description | 0 / 15 |
| This is awesome developer on earth | ? |

1 of 2 previews < >

Mobile

Meet Awesome developer | {param1:few} for days and {param2:&} for hours

[Ad] www.ulgoon.com

This is awesome developer on earth

Your ad might not always include all your text. Some shortening may also occur in some formats.

On Headline1 or Headline2

{param1:few} for days and {param2:&} for hours

Count Down - Create New Scripts

The screenshot shows a user interface with a dark header bar containing 'GO TO', a search icon, and a wrench icon. Below the header is a 'Return to' button. The main area is divided into three columns:

| BULK ACTIONS | MEASUREMENT | |
|------------------|--------------------|--------|
| All bulk actions | Conversions | Billir |
| Rules | Google Analytics | Busi |
| Scripts | Search attribution | Acco |

Count Down - Set END_DATE and AD_GROUP_NAME

```
var END_DATE = new Date('April 11, 2018');  
var AD_GROUP_NAME = 'testAds3';
```

Count Down - Set day to ms

```
var DAY_IN_MILLISECONDS = 1000*60*60*24;
```

Count Down - get Ad Group

```
function getAdGroup(name) {  
  var adGroupIterator = AdWordsApp.adGroups()  
    .withCondition('Name = "' + name + '"')  
    .withLimit(1)  
    .get();  
  if (adGroupIterator.hasNext()) {  
    return adGroupIterator.next();  
  }  
}
```

Count Down - calculate countdown time

```
function calculateTimeLeftUntil(end) {  
    var current = new Date();  
    var timeLeft = {};  
    var daysFloat = (end - current) / (DAY_IN_MILLISECONDS);  
    timeLeft['days'] = Math.floor(daysFloat);  
    timeLeft['hours'] = Math.floor(24 * (daysFloat - timeLeft['days']));  
    return timeLeft;  
}
```

Count Down - main function

```
function main() {  
    var timeLeft = calculateTimeLeftUntil(END_DATE);  
    var adGroup = getAdGroup(AD_GROUP_NAME);  
    var keywords = adGroup.keywords().get();  
    while (keywords.hasNext()) {  
        var keyword = keywords.next();  
  
        keyword.setAdParam(1, timeLeft['days']);  
        keyword.setAdParam(2, timeLeft['hours']);  
  
    }  
}
```

Count Down - boost up

```
function main() {  
    var timeLeft = calculateTimeLeftUntil(END_DATE);  
    var adGroup = getAdGroup(AD_GROUP_NAME);  
    var keywords = adGroup.keywords().get();  
    while (keywords.hasNext()) {  
        var keyword = keywords.next();  
        // We want to update {param1} to use our calculated days and {  
        keyword.setAdParam(1, timeLeft['days']);  
        keyword.setAdParam(2, timeLeft['hours']);  
        if (timeLeft['days'] < 5) {  
            keyword.setMaxCpc(keyword.getTopOfPageCpc());  
        } else {  
            keyword.setMaxCpc(keyword.getFirstPageCpc());  
        }  
    }  
}
```

Count Down - Ad param added => Success

| CHANGES | | LOGS | |
|----------|----------|----------------|--------------|
| Campaign | Ad group | Change | Status |
| | | Ad param added | ✓ Successful |
| | | Ad param added | ✓ Successful |

Pause Keywords

```
var TO_NOTIFY = "your@email.com";
function main() {

    var kwIter = AdWordsApp.keywords()
        .withCondition("Impressions = 0")
        .forDateRange("ALL_TIME")
        .withCondition("Status = ENABLED")
        .withCondition("CampaignStatus = ENABLED")
        .withCondition("AdGroupStatus = ENABLED")
        .get();

    var toPause = [];
}
```

Pause Keywords

```
while (kwIter.hasNext()) {  
    var kw = kwIter.next();  
    toPause.push(kw);  
  
    if(AdWordsApp.getExecutionInfo().isPreview() &&  
        AdWordsApp.getExecutionInfo().getRemainingTime() < 10) {  
        break;  
    }  
}  
  
for(var i in toPause) {  
    toPause[i].pause();  
}
```

Pause Keywords

```
MailApp.sendEmail(TO_NOTIFY,
    "AdWords Script Paused "
    +toPause.length
    +" Keywords.",
    "Your AdWords Script paused "
    +toPause.length
    +" keywords.");
}
```