<!DOCTYPE html>

```html
<html>
<head>


<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<meta name="viewport" content="width=device-width" />

<meta name="Description" content="Follow the guide to Installing the Android SDK ,
which will help you setup your development environment. There&#39;s no additional
setup. Note: You are currently viewing the offline version of the Android developer
documentation. Because some features…">
<link rel="shortcut icon" type="image/x-icon" href="./favicon.ico" />
<title>Welcome | Android Developers</title>

<!-- STYLESHEETS -->
<link rel="stylesheet"
href="http://fonts.googleapis.com/css?family=Roboto+Condensed">
<link rel="stylesheet" href="http://fonts.googleapis.com/css?
family=Roboto:light,regular,medium,thin,italic,mediumitalic,bold"
  title="roboto">
<link href="./assets/css/default.css?v=2" rel="stylesheet" type="text/css">



<!-- JAVASCRIPT -->
<script src="http://www.google.com/jsapi" type="text/javascript"></script>
<script src="./assets/js/android_3p-bundle.js" type="text/javascript"></script>
<script type="text/javascript">
  var toRoot = "./";
```

```
  var metaTags = [];
  var devsite = false;
</script>
<script src="./assets/js/docs.js?v=2" type="text/javascript"></script>

<script>
  (function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){
  (i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o),
  m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m)
  })(window,document,'script','//www.google-analytics.com/analytics.js','ga');

  ga('create', 'UA-5831155-1', 'android.com');
  ga('create', 'UA-49880327-2', 'android.com', {'name': 'universal'});  // New
tracker);
  ga('send', 'pageview');
  ga('universal.send', 'pageview'); // Send page view for new tracker.
</script>

</head>

<body class="gc-documentation

" itemscope itemtype="http://schema.org/Article">

<a name="top"></a>

  <!-- Header -->
  <div id="header-wrapper">
    <div id="header">



      <div class="wrap" id="header-wrap">
        <div class="col-3 logo">
          <a href="./index.html">
            <img src="./assets/images/dac_logo.png"
                srcset="./assets/images/dac_logo@2x.png 2x"
                width="123" height="25" alt="Android Developers" />
          </a>
          <div class="btn-quicknav" id="btn-quicknav">
            <a href="#" class="arrow-inactive">Quicknav</a>
            <a href="#" class="arrow-active">Quicknav</a>
          </div>
        </div>
        <ul class="nav-x col-9">
            <li class="design">
              <a href="./design/index.html"
              zh-tw-lang="設計"
              zh-cn-lang="设计"
              ru-lang="Проектирование"
              ko-lang="디자인"
              ja-lang="設計"
              es-lang="Diseñar"
              >Design</a></li>
            <li class="develop"><a href="./develop/index.html"
              zh-tw-lang="開發"
              zh-cn-lang="开发"
              ru-lang="Разработка"
```

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                ko-lang="개발"
                ja-lang="開発"
                es-lang="Desarrollar"
                >Develop</a></li>
            <li class="distribute last"><a
href="./distribute/googleplay/index.html"
                zh-tw-lang="發佈"
                zh-cn-lang="分发"
                ru-lang="Распространение"
                ko-lang="배포"
                ja-lang="配布"
                es-lang="Distribuir"
                >Distribute</a></li>
        </ul>




<div class="menu-container">
  <div class="moremenu">
    <div id="more-btn"></div>
  </div>
  <div class="morehover" id="moremenu">
    <div class="top"></div>
    <div class="mid">
      <div class="header">Links</div>
      <ul>
        <li><a href="https://play.google.com/apps/publish/"
target="_googleplay">Google Play Developer Console</a></li>
        <li><a href="http://android-developers.blogspot.com/">Android Developers
Blog</a></li>
        <li><a href="./about/index.html">About Android</a></li>
      </ul>
      <div class="header">Android Sites</div>
      <ul>
        <li><a href="http://www.android.com">Android.com</a></li>
        <li class="active"><a>Android Developers</a></li>
        <li><a href="http://source.android.com">Android Open Source
Project</a></li>
      </ul>




      <br class="clearfix" />
    </div><!-- end 'mid' -->
    <div class="bottom"></div>
  </div><!-- end 'moremenu' -->

  <div class="search" id="search-container">
    <div class="search-inner">
      <div id="search-btn"></div>
      <div class="left"></div>
      <form onsubmit="return submit_search()">
        <input id="search_autocomplete" type="text" value="" autocomplete="off"
name="q"
          onfocus="search_focus_changed(this, true)"
onblur="search_focus_changed(this, false)"
          onkeydown="return search_changed(event, true, './')"
```

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        onkeyup="return search_changed(event, false, './')" />
      </form>
      <div class="right"></div>
      <a class="close hide">close</a>
      <div class="left"></div>
      <div class="right"></div>
    </div><!-- end search-inner -->
  </div><!-- end search-container -->

  <div class="search_filtered_wrapper reference">
    <div class="suggest-card reference no-display">
      <ul class="search_filtered">
      </ul>
    </div>
  </div>

  <div class="search_filtered_wrapper docs">
    <div class="suggest-card dummy no-display"> </div>
    <div class="suggest-card develop no-display">
      <ul class="search_filtered">
      </ul>
      <div class="child-card guides no-display">
      </div>
      <div class="child-card training no-display">
      </div>
      <div class="child-card samples no-display">
      </div>
    </div>
    <div class="suggest-card design no-display">
      <ul class="search_filtered">
      </ul>
    </div>
    <div class="suggest-card distribute no-display">
      <ul class="search_filtered">
      </ul>
    </div>
  </div>
</div><!-- end menu-container (search and menu widget) -->


        <!-- Expanded quicknav -->
        <div id="quicknav" class="col-13">
          <ul>
            <li class="about">
              <ul>
                <li><a href="./about/index.html">About</a></li>
                <li><a href="./wear/index.html">Wear</a></li>
                <li><a href="./tv/index.html">TV</a></li>
                <li><a href="./auto/index.html">Auto</a></li>
              </ul>
            </li>
            <li class="design">
              <ul>
                <li><a href="./design/index.html">Get Started</a></li>
                <li><a href="./design/devices.html">Devices</a></li>
                <li><a href="./design/style/index.html">Style</a></li>
                <li><a href="./design/patterns/index.html">Patterns</a></li>
                <li><a href="./design/building-blocks/index.html">Building
```

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Blocks</a></li>
                <li><a href="./design/downloads/index.html">Downloads</a></li>
                <li><a href="./design/videos/index.html">Videos</a></li>
              </ul>
            </li>
            <li class="develop">
              <ul>
                <li><a href="./training/index.html"
                  zh-tw-lang="訓練課程"
                  zh-cn-lang="培训"
                  ru-lang="Курсы"
                  ko-lang="교육"
                  ja-lang="トレーニング"
                  es-lang="Capacitación"
                  >Training</a></li>
                <li><a href="./guide/index.html"
                  zh-tw-lang="API 指南"
                  zh-cn-lang="API 指南"
                  ru-lang="Руководства по API"
                  ko-lang="API 가이드"
                  ja-lang="API ガイド"
                  es-lang="Guías de la API"
                  >API Guides</a></li>
                <li><a href="./reference/packages.html"
                  zh-tw-lang="參考資源"
                  zh-cn-lang="参考"
                  ru-lang="Справочник"
                  ko-lang="참조문서"
                  ja-lang="リファレンス"
                  es-lang="Referencia"
                  >Reference</a></li>
                <li><a href="./sdk/index.html"
                  zh-tw-lang="相關工具"
                  zh-cn-lang="工具"
                  ru-lang="Инструменты"
                  ko-lang="도구"
                  ja-lang="ツール"
                  es-lang="Herramientas"
                  >Tools</a>
                </li>
                <li><a href="./google/index.html">Google Services</a>
                </li>

              </ul>
            </li>
            <li class="distribute last">
              <ul>
                <li><a href="./distribute/googleplay/index.html">Google
Play</a></li>
                <li><a
href="./distribute/essentials/index.html">Essentials</a></li>
                <li><a href="./distribute/users/index.html">Get Users</a></li>
                <li><a href="./distribute/engage/index.html">Engage &amp;
Retain</a></li>
                <li><a href="./distribute/monetize/index.html">Monetize</a></li>
                <li><a href="./distribute/tools/index.html">Tools &amp;
Reference</a></li>
                <li><a href="./distribute/stories/index.html">Developer
Stories</a></li>
```

```html
            </ul>
          </li>
        </ul>
      </div><!-- /Expanded quicknav -->
    </div><!-- end header-wrap.wrap -->
  </div><!-- end header -->



    <div id="searchResults" class="wrap" style="display:none;">
      <h2 id="searchTitle">Results</h2>
      <div id="leftSearchControl" class="search-control">Loading...</div>
    </div>
  </div> <!--end header-wrapper -->

  <div id="sticky-header">
    <div>
      <a class="logo" href="#top"></a>
      <a class="top" href="#top"></a>
      <ul class="breadcrumb">

        <li class="current">Welcome</li>
      </ul>
    </div>
  </div>




  <div class="wrap clearfix" id="body-content">
    <div class="col-4" id="side-nav" itemscope
itemtype="http://schema.org/SiteNavigationElement">
      <div id="devdoc-nav">
      <div id="api-nav-header">
        <div id="api-level-toggle">
          <label for="apiLevelCheckbox" class="disabled"
            title="Select your target API level to dim unavailable APIs">API level:
</label>
          <div class="select-wrapper">
            <select id="apiLevelSelector">
              <!-- option elements added by buildApiLevelSelector() -->
            </select>
          </div>
        </div><!-- end toggle -->
        <div id="api-nav-title">Android APIs</div>
        </div><!-- end nav header -->
      <script>
        var SINCE_DATA = [   ];
        buildApiLevelSelector();
      </script>

      <div id="swapper">
        <div id="nav-panels">
          <div id="resize-packages-nav">
            <div id="packages-nav" class="scroll-pane">

              <ul>
```

```html
                    </ul><br/>

                  </div> <!-- end packages-nav -->
                </div> <!-- end resize-packages -->
                <div id="classes-nav" class="scroll-pane">


                    <p style="padding:10px">Select a package to view its members</p><br/>


                  </div><!-- end classes -->
                </div><!-- end nav-panels -->
                <div id="nav-tree" style="display:none" class="scroll-pane">
                  <div id="tree-list"></div>
                </div><!-- end nav-tree -->
              </div><!-- end swapper -->
              <div id="nav-swap">
              <a class="fullscreen">fullscreen</a>
              <a href='#' onclick='swapNav();return false;'><span id='tree-link'>Use Tree
          Navigation</span><span id='panel-link' style='display:none'>Use Panel
          Navigation</span></a>
              </div>
            </div> <!-- end devdoc-nav -->
          </div> <!-- end side-nav -->
          <script type="text/javascript">
            // init fullscreen based on user pref
            var fullscreen = readCookie("fullscreen");
            if (fullscreen != 0) {
              if (fullscreen == "false") {
                toggleFullscreen(false);
              } else {
                toggleFullscreen(true);
              }
            }
            // init nav version for mobile
            if (isMobile) {
              swapNav(); // tree view should be used on mobile
              $('#nav-swap').hide();
            } else {
              chooseDefaultNav();
              if ($("#nav-tree").is(':visible')) {
                init_default_navtree("./");
              }
            }
            // scroll the selected page into view
            $(document).ready(function() {
              scrollIntoView("packages-nav");
              scrollIntoView("classes-nav");
              });
          </script>



  <div class="col-12" id="doc-col" >
```

```html
        <h1 itemprop="name" >Welcome</h1>




  <div id="jd-content">


    <div class="jd-descr" itemprop="articleBody">
    <style type="text/css">
#qv h2 {
  font-size:1.5em;
  font-weight:bold;
  margin:12px 0 .5em 0;
  padding:5px;
  color:#7BB026;
  border:none;
}
#qv ul li {
  padding: 0 5px 1em 0;
}
</style>
<div id="mainBodyFluid">

<h1>Welcome to the Android SDK!</h1>

<div id="qv-wrapper">
<div id="qv">
  <h2>Get Started</h2>
  <ul>
    <li>Create a <a href="./training/basics/firstapp/index.html">Building Your
First App</a>
application</li>
    <li>Read <a href="./resources/browser.html?tag=sample">Sample Code</a>,
especially <a href="./resources/samples/ApiDemos/index.html">API Demos</a></li>
    <li>Read the <a href="./guide/components/index.html">Application
Fundamentals</a></li>
    <li>Read the <a href="./tools/workflow/index.html">Introduction</a> for using
the SDK
tools</li>
  </ul>
</div>
</div>

<h3>If you've downloaded the Android SDK for the first time</h3>

<p>Follow the guide to <a href="./sdk/installing/index.html">Installing the Android
SDK</a>, which
will help you setup your development environment.</p>

<h3>If you've installed new SDK components using the Android SDK Manager</h3>
```

```html
<p>There's no additional setup.</p>


<div class="note">
<p><strong>Note:</strong> You are currently viewing the offline version of the
Android developer
documentation. Because some features such as search and videos are network-based,
not everything
will work if you are not connected to the Internet. Additionally, the online
version may contain
more recently updated documents.</p>

<p>For the latest documentation, please visit
<b><a href="http://developer.android.com">developer.android.com</a></b>.
</p>
</div>

    </div>

      <div class="content-footer layout-content-row"
                  itemscope itemtype="http://schema.org/SiteNavigationElement">

        <div class="paging-links layout-content-col col-10">

        </div>
        <div class="layout-content-col plus-container col-2" >

            <div class="g-plusone" data-size="medium"></div>

        </div>

      </div>

  </div> <!-- end jd-content -->

<div id="footer" class="wrap" >


  <div id="copyright">

  Except as noted, this content is
  licensed under <a href="http://creativecommons.org/licenses/by/2.5/">
  Creative Commons Attribution 2.5</a>. For details and
  restrictions, see the <a href="./license.html">Content
  License</a>.
  </div>


  <div id="footerlinks">

  <p>
    <a href="./about/index.html">About Android</a>  | 
    <a href="./legal.html">Legal</a>  | 
    <a href="./support.html">Support</a>
  </p>
  </div>

</div> <!-- end footer -->
</div><!-- end doc-content -->
```

```html
</div> <!-- end body-content -->




  <script src="https://developer.android.com/ytblogger_lists_unified.js"
type="text/javascript"></script>
  <script src="./jd_lists_unified.js?v=2" type="text/javascript"></script>
  <script src="./jd_extras.js?v=3" type="text/javascript"></script>
  <script src="./jd_collections.js?v=3" type="text/javascript"></script>
  <script src="./jd_tag_helpers.js?v=2" type="text/javascript"></script>

</body>
</html>
```