

Google™



Google One Pass

Chase Hensel, Omi Chandiramani
May 10th, 2010

Feedback:



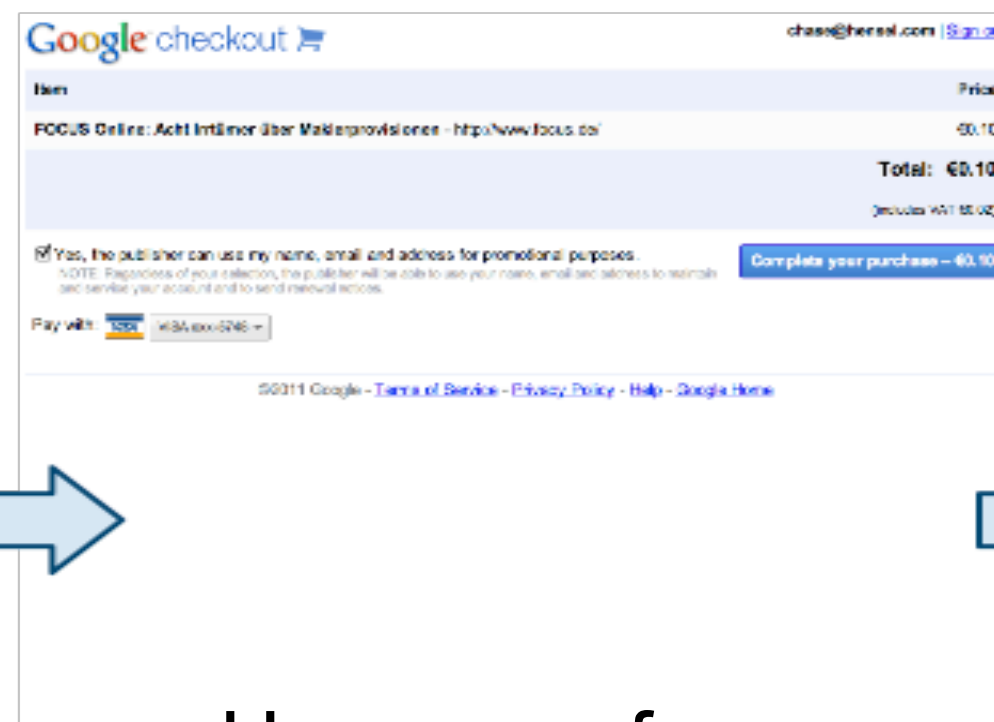
<http://goo.gl/lvXrr>

What is One Pass?

- An easy to use web API for authentication and payments
- A compliment to Google Checkout for provisioning access to content for Google Accounts
- Authentication platform for user rights



User doesn't have access to content



User pays for access to content



User has access to content

One Pass in the wild

Focus Online: <http://goo.gl/5CmqE>

The screenshot shows the top navigation bar of Focus Online with categories like Home, Politik, Finanzen, Wissen, Gesundheit, Kultur, Panorama, Sport, and Digital. Below this is a sub-navigation bar for real estate topics: Kaufen, Mieten, Bauen, Energiesparen, and Finanzieren. The main content area features the article title "Acht Irrtümer über Maklerprovisionen" under the sub-header "Hauskauf und Miete". The article is dated Thursday, January 20, 2011, at 06:32, by author Melanie Rübartsch. A "ZUM THEMA" section highlights "Immobilienmakler" and "Das Geschäft mit der Verzweiflung". A "SCHLAGWÖRTER" section lists terms like Hauskauf, Immobilie, Makler, Mieter, Provision, Vermieter, Vermittlung, and Vertrag. A grey box contains a "Google Checkout" button and text explaining that users must be logged in with a Google account to purchase the article. The article is priced at 0.10 €. The page is identified as "Seite 1 / 5" with a "weiter" button.

ONLINE FOCUS Home Politik Finanzen Wissen Gesundheit Kultur Panorama Sport Digital F

Kaufen | Mieten | Bauen | Energiesparen | Finanzieren

Hauskauf und Miete Seite 1 / 5 weiter >

Acht Irrtümer über Maklerprovisionen

Donnerstag, 20.01.2011, 06:32 · von FOCUS-Online-Autorin Melanie Rübartsch

ZUM THEMA

Immobilienmakler
Das Geschäft mit der Verzweiflung

SCHLAGWÖRTER

Hauskauf
Immobilie
Makler
Mieter
Provision
Vermieter
Vermittlung
Vertrag

Dieser Artikel inkl. aller Unterseiten kostet 0,10 €.

Google Checkout

Um diesen Artikel lesen zu können, müssen Sie ihn über Ihr Google-Konto kaufen.

Bereits gekauft?

Loggen Sie sich mit Ihrem **Google-Account** ein, um den Artikel lesen zu können.

Seite 1 / 5 weiter >

Where can One Pass be used?



Business models supported by One Pass

- Subscriptions
- Pay per article
- Rentals
- Free trials
- Metered access
- Access for non-digital (e.g. print) subscribers
- Discount coupons

What if I want to support x??



Publisher

We support that!



Google

Offer Setup



[Modify orders](#) [Reports](#) **Offers** [Google Checkout Settings »](#)

New Offer

- Type Subscription
 Pay-per-item
 Pay-per-multiple-items

This offer is for print subscribers only

Name

URLs [Add more](#)

Price Includes Tax

Term

Trial period

Countries Restrict to certain countries

Marketing Ask user for permission to use their contact information for marketing purposes
 Pre-check opt-in box to allow use of contact information

Publisher-customer relationship

Publishers are the merchant of record and host all content

- Publishers can access some user data for fulfillment, and marketing if users choose to receive promotional messages

Requirements - extremely simple API

It has to be easy

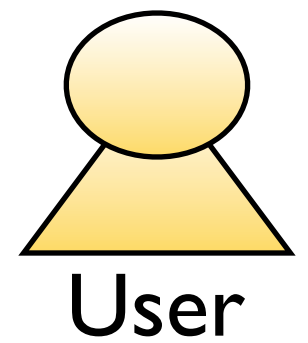
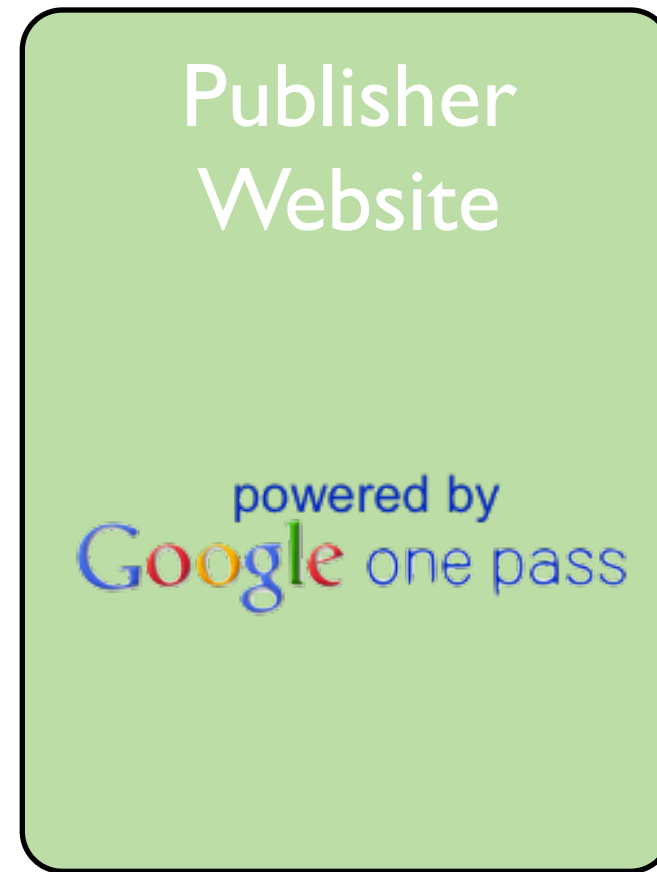
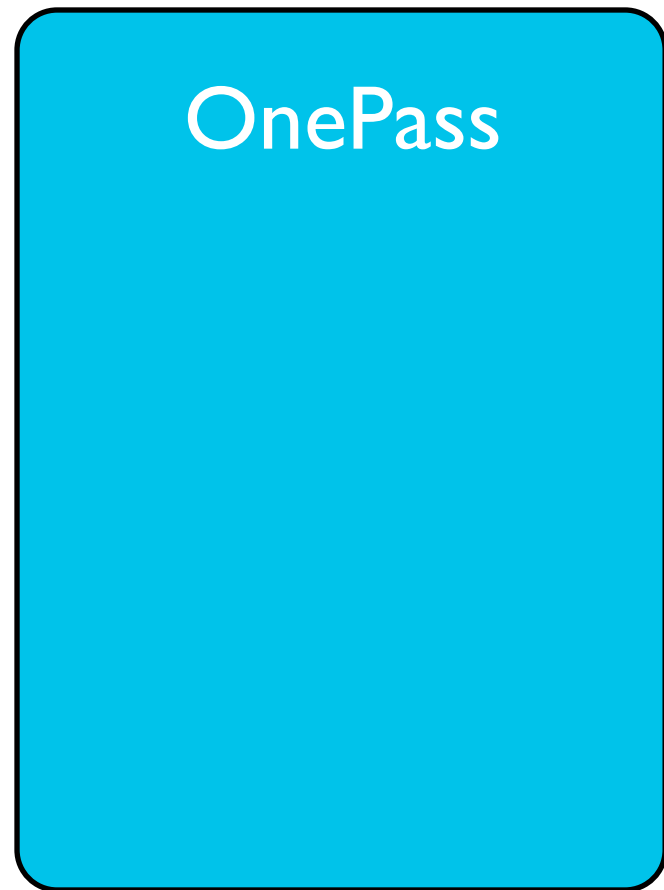
- Support all common browsers
 - Desktop, mobile, in app
- Minimal up front configuration and setup
- Minimal backend requirements (ideally none)
 - No database
 - No existing user repository
- All or most integration should be on client (Javascript OK)



User Flows

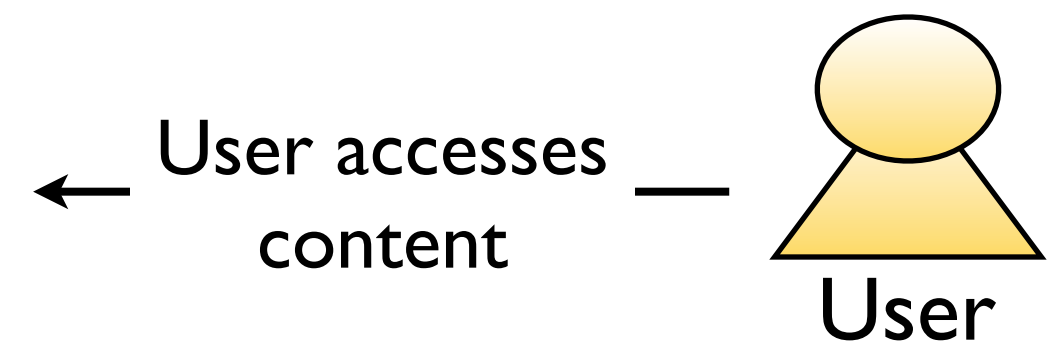
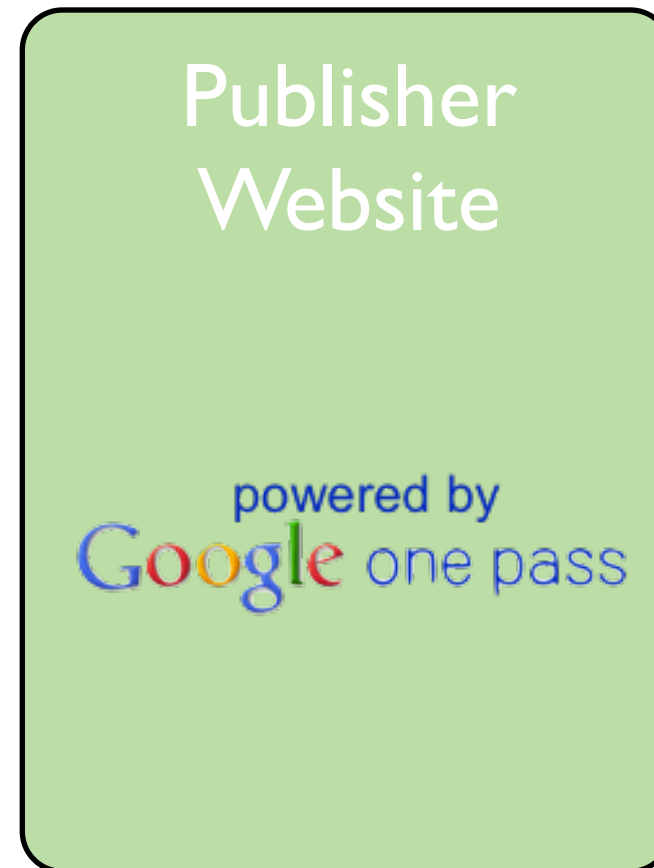
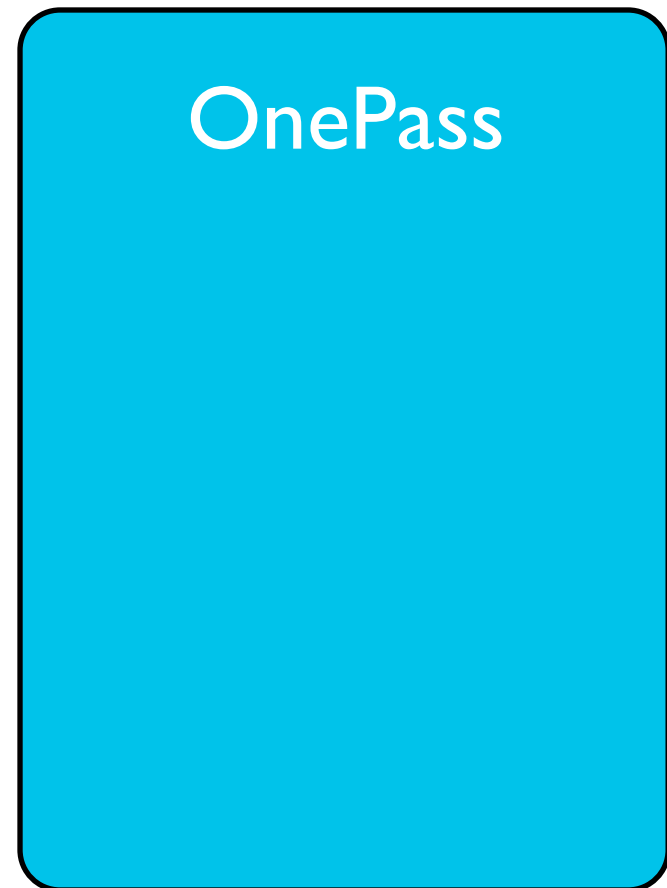
User Flows

Before purchase of content



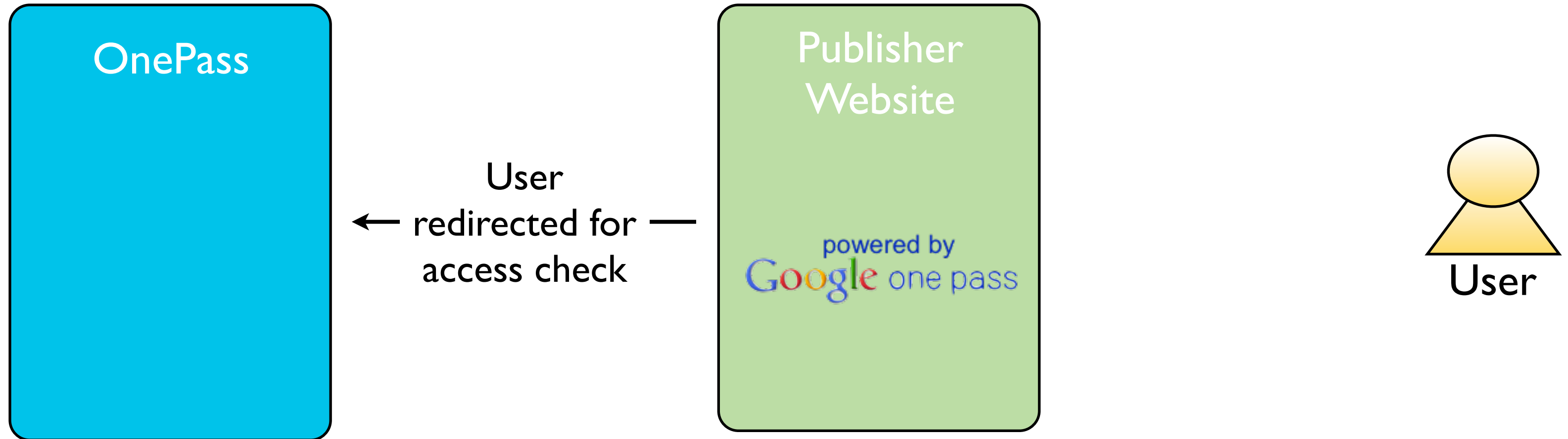
User Flows

Before purchase of content



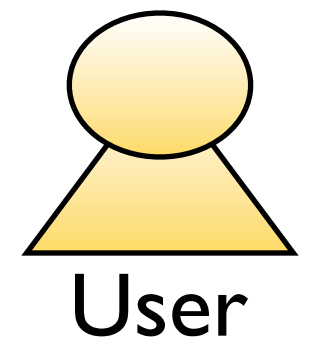
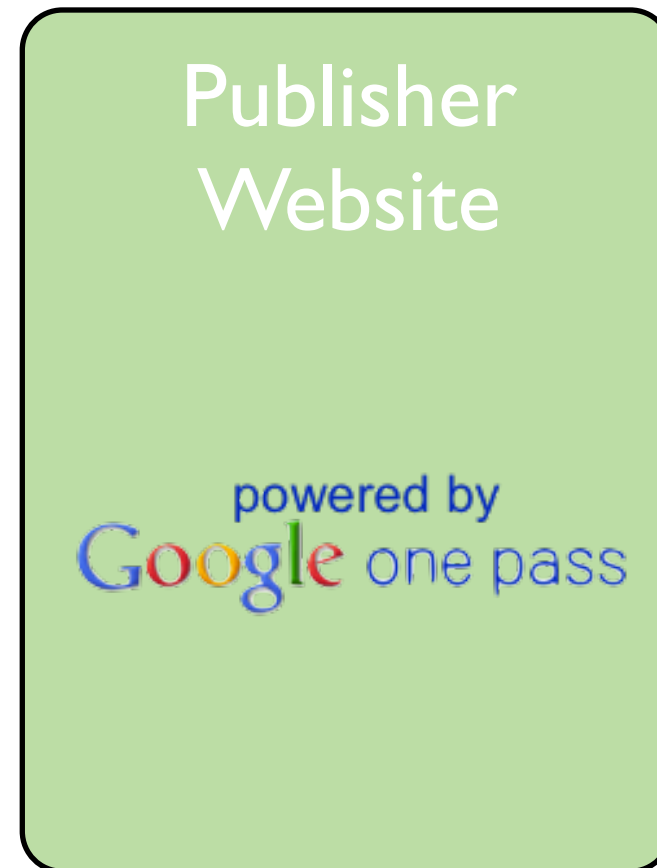
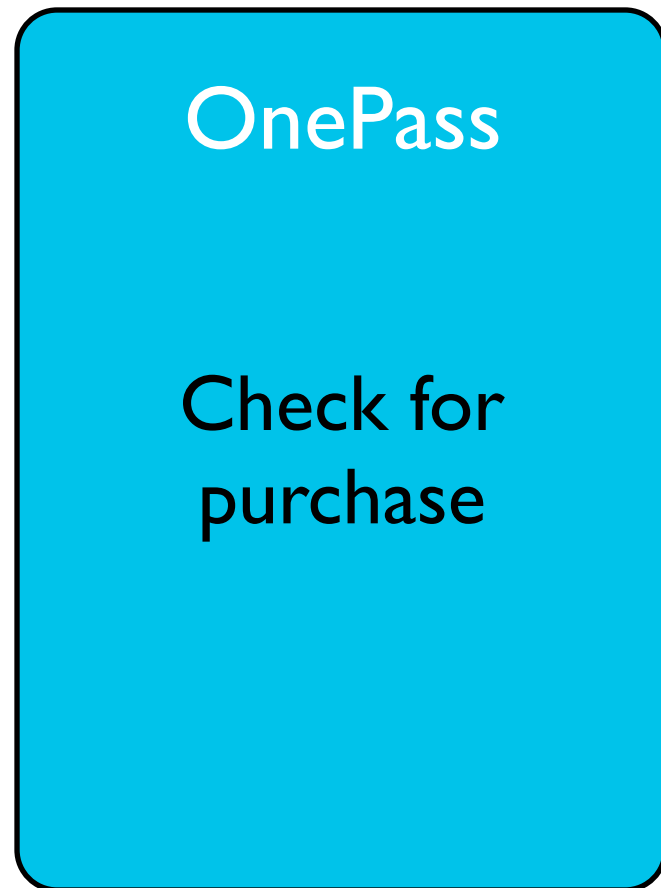
User Flows

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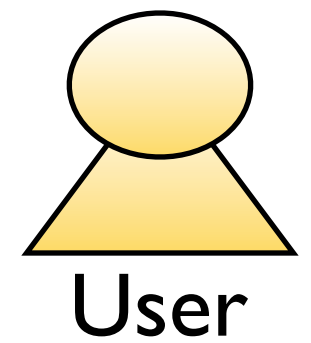
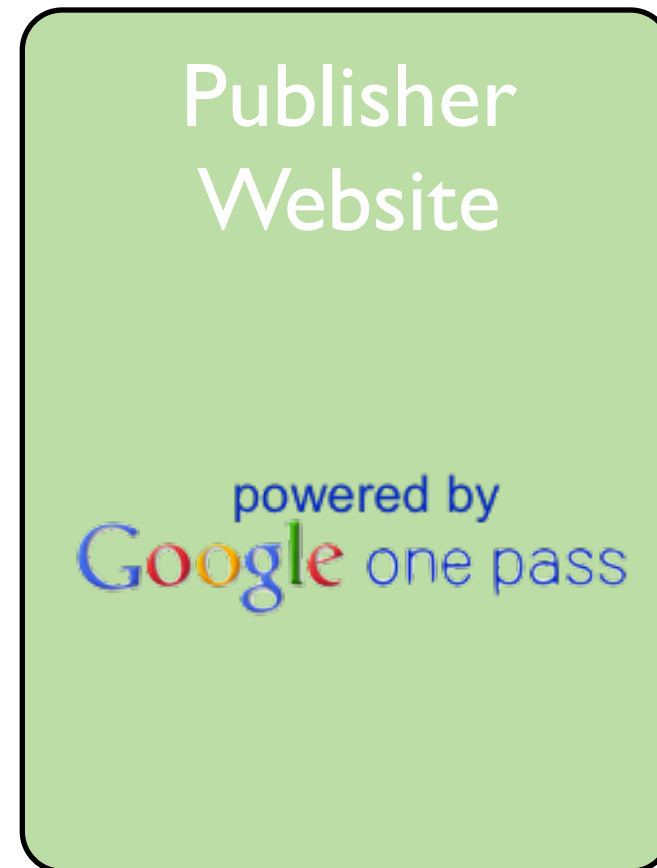
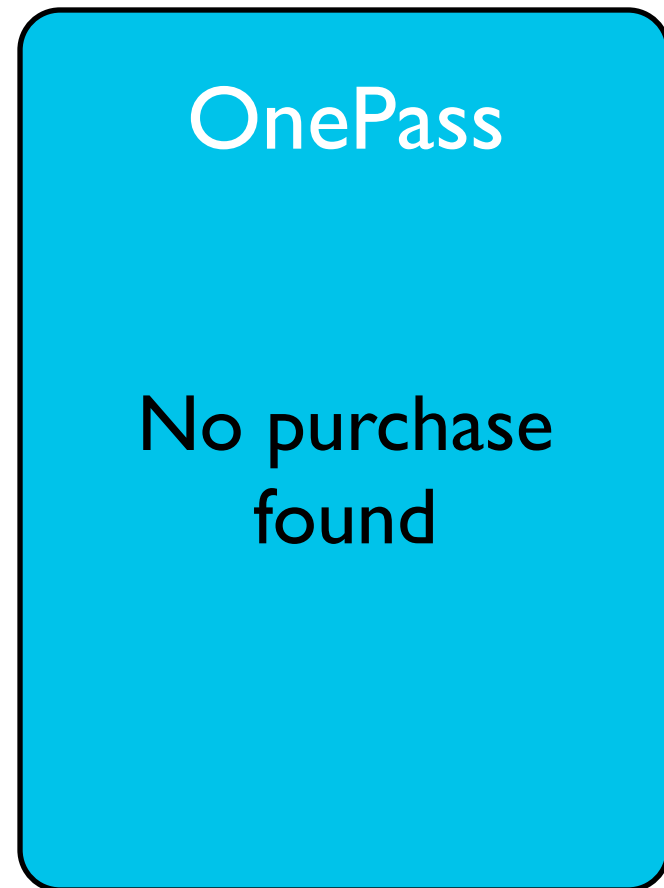
User Flows

Before purchase of content



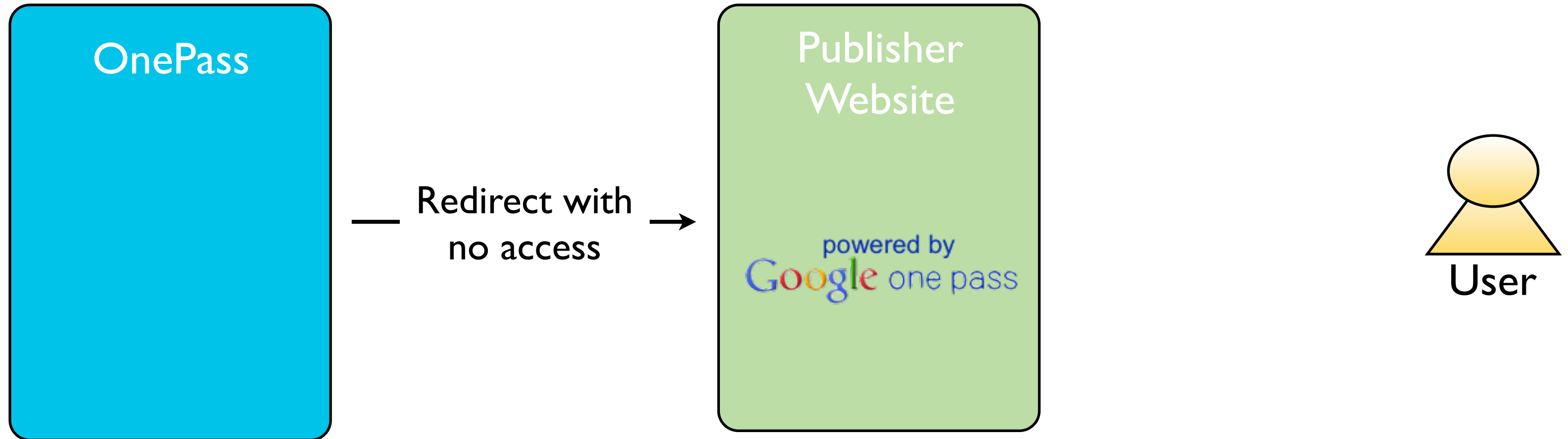
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Before purchase of content



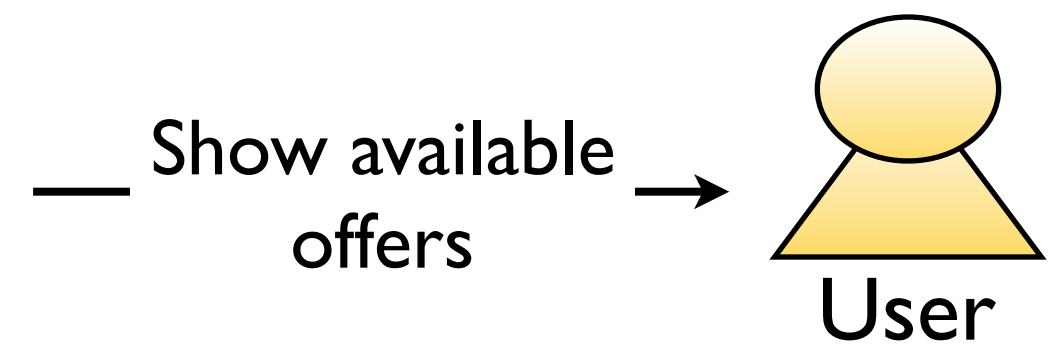
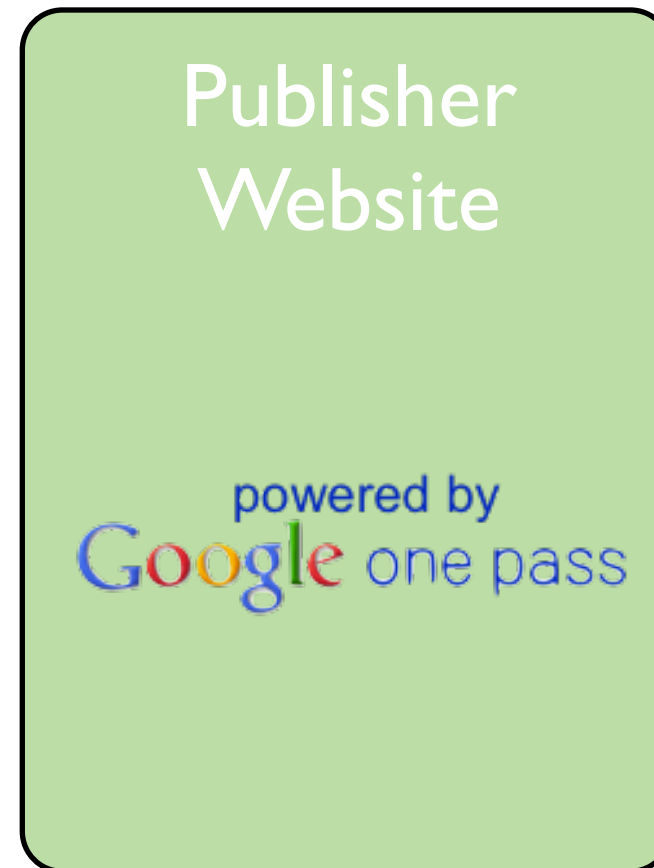
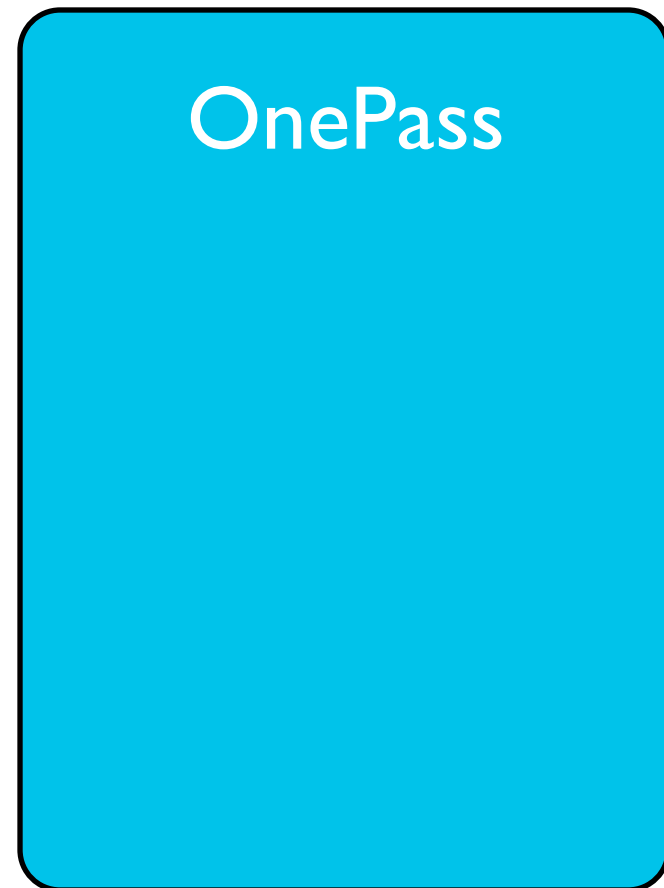
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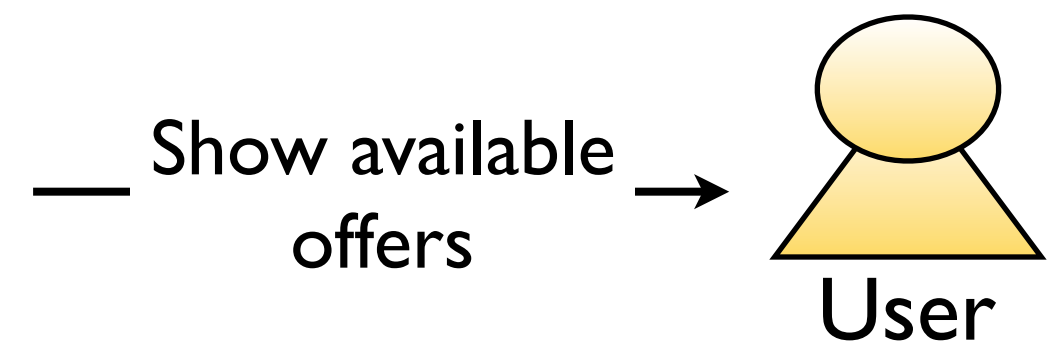
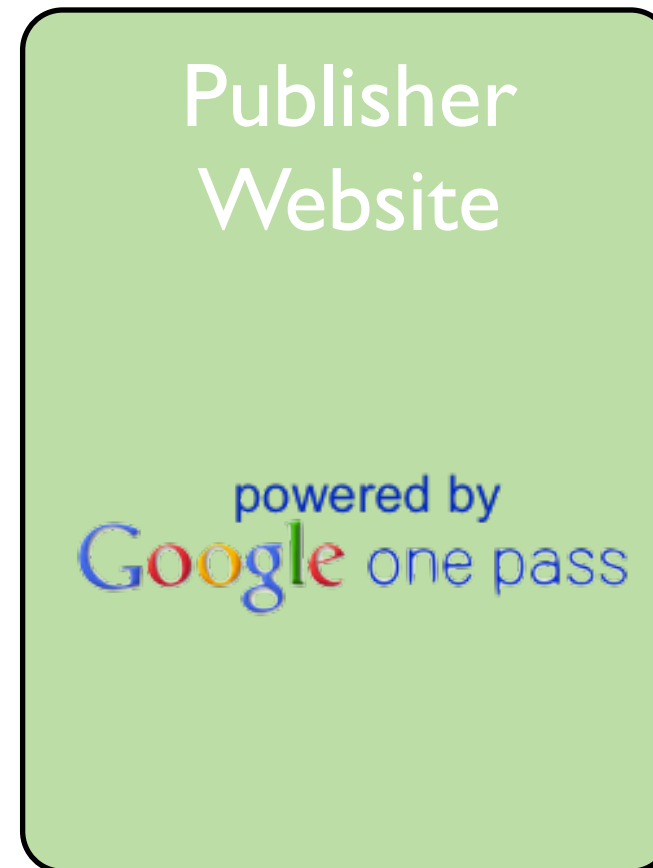
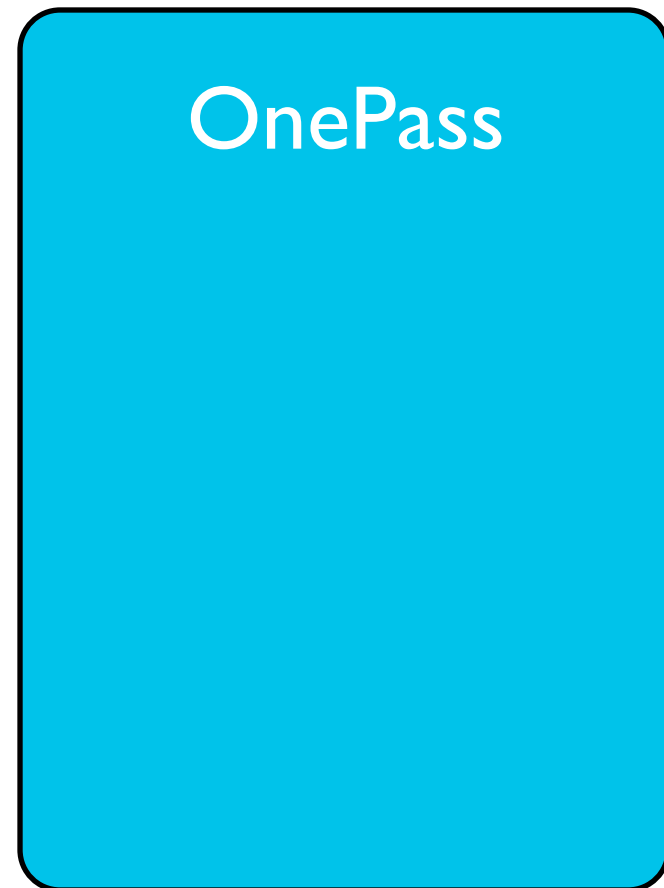
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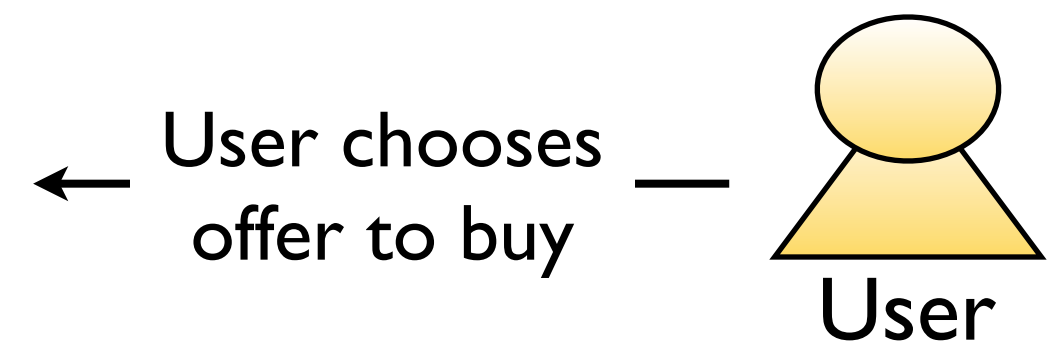
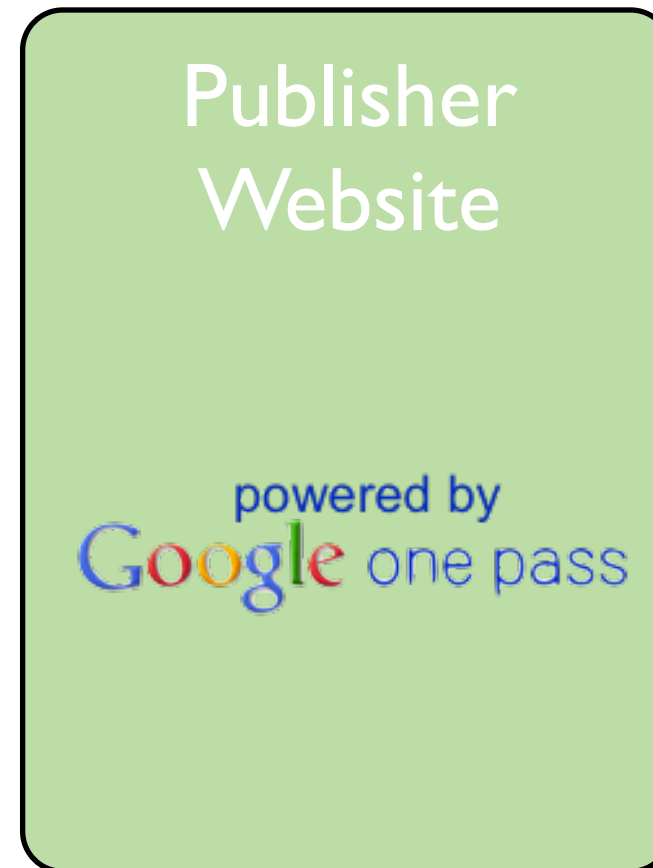
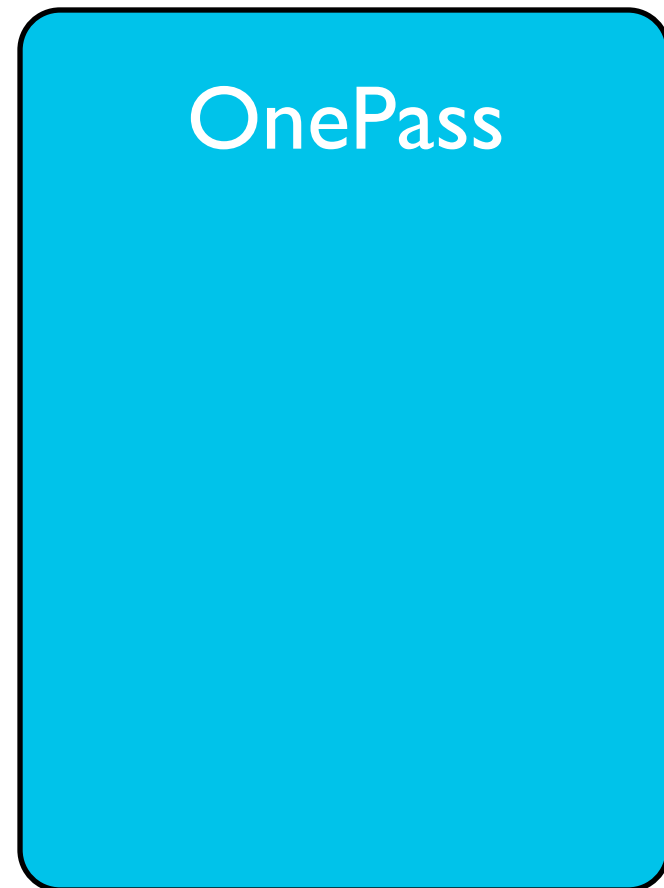
User Flows

Purchasing Content



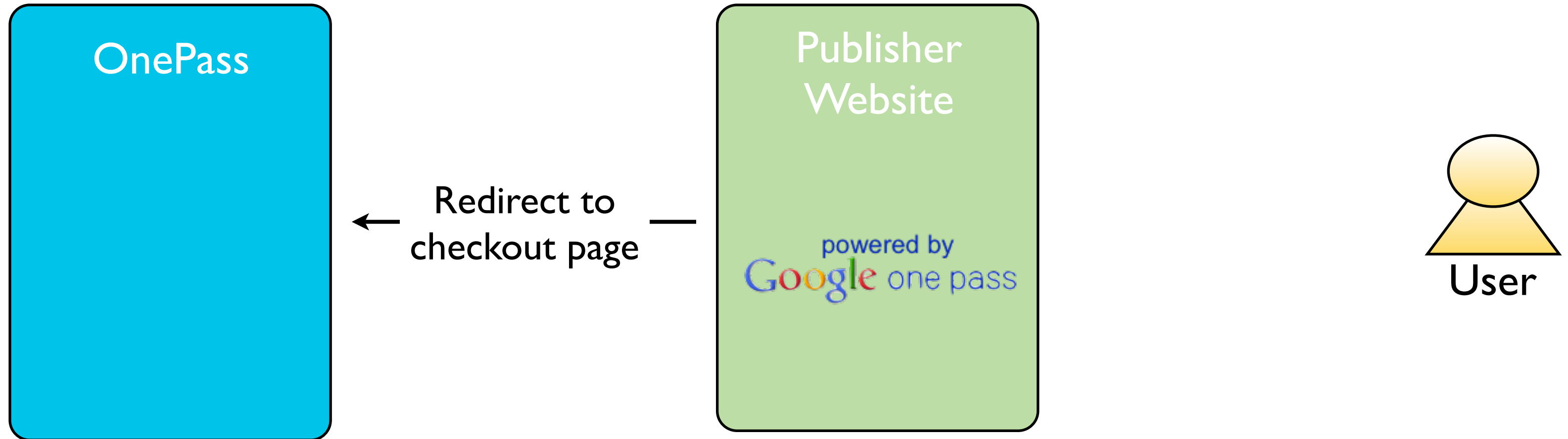
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Purchasing Content



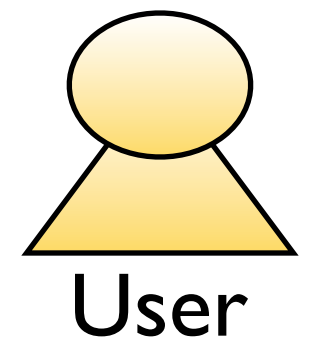
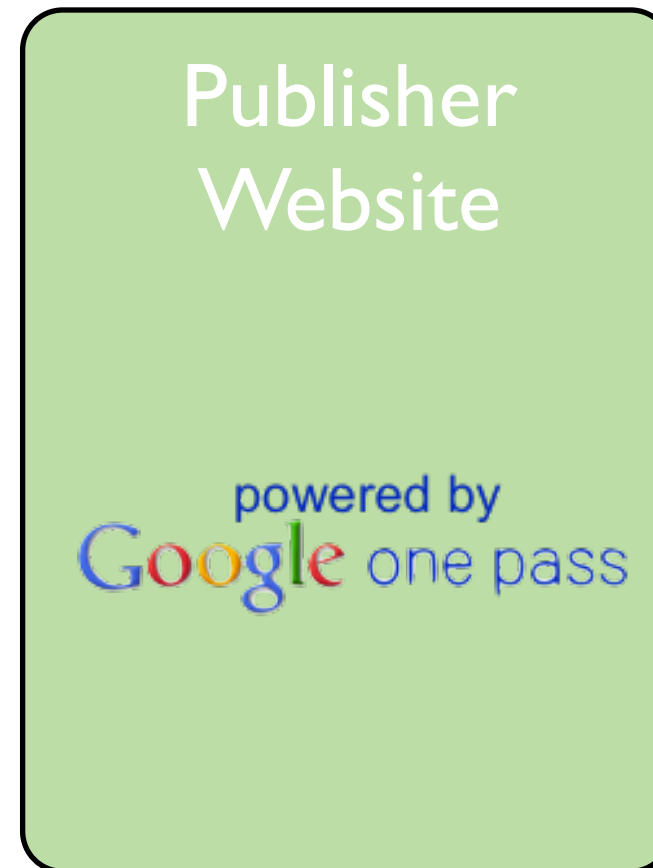
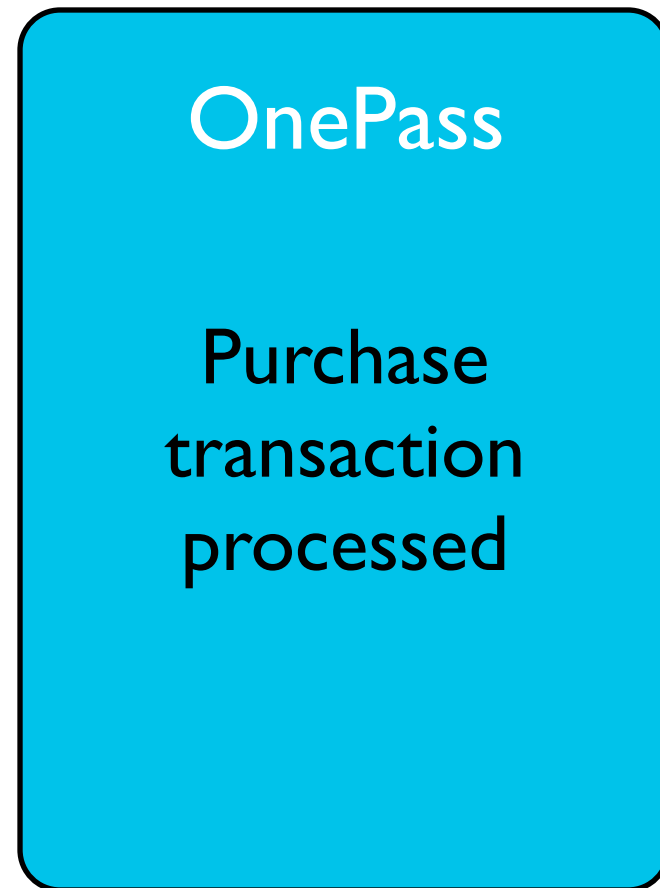
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Purchasing Content



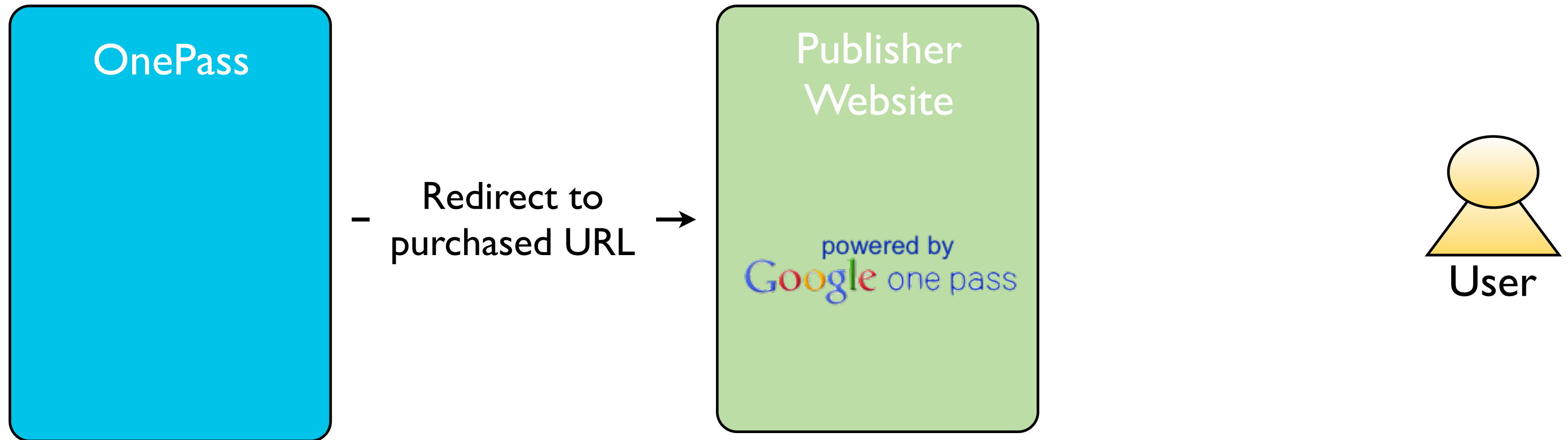
User Flows

Purchasing Content



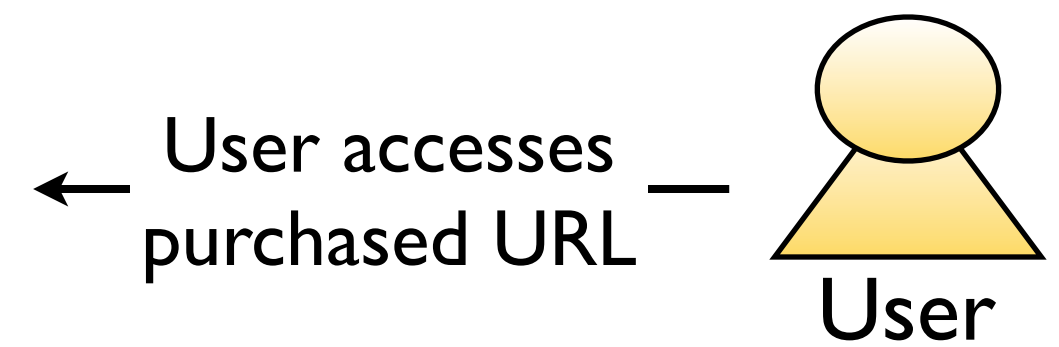
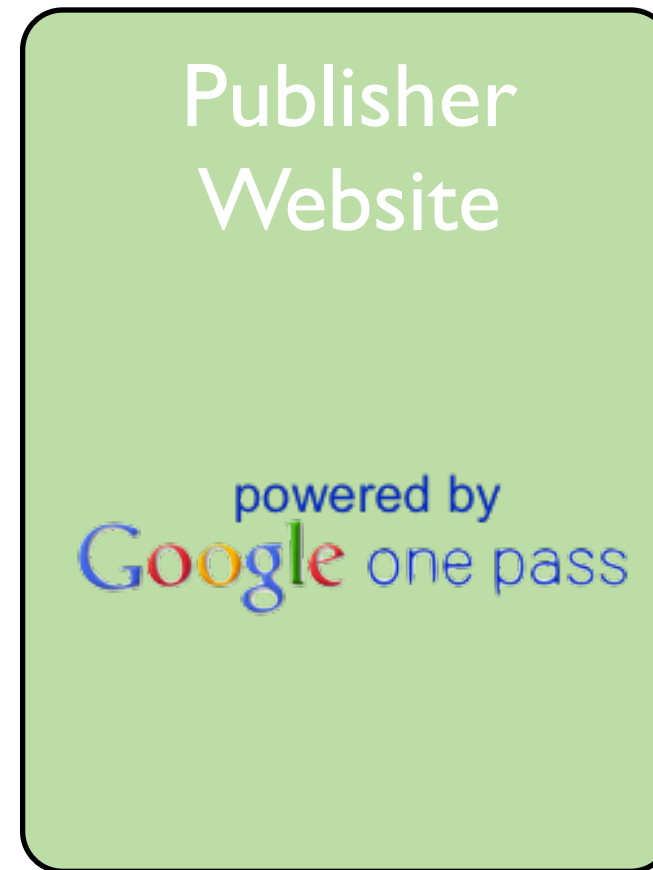
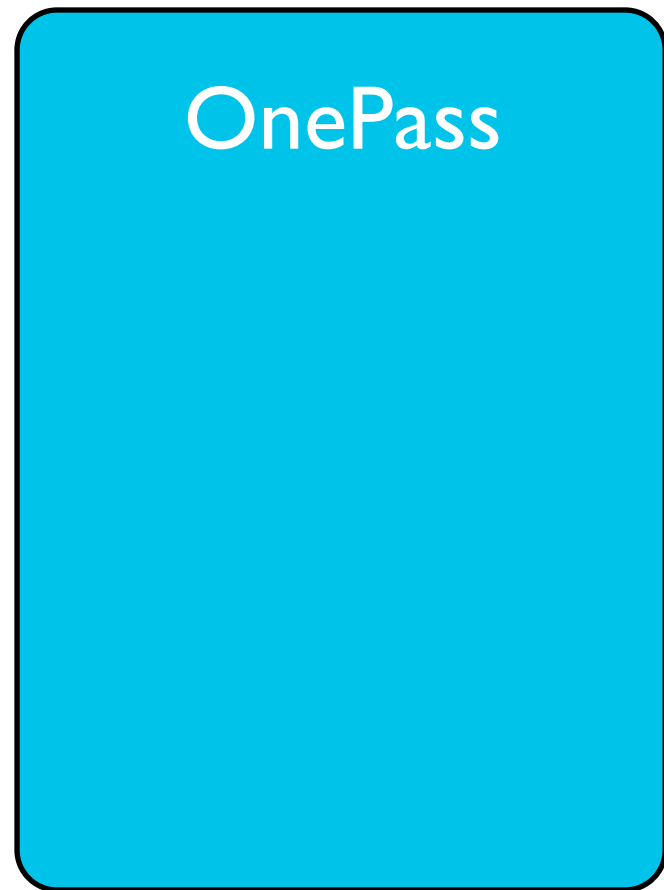
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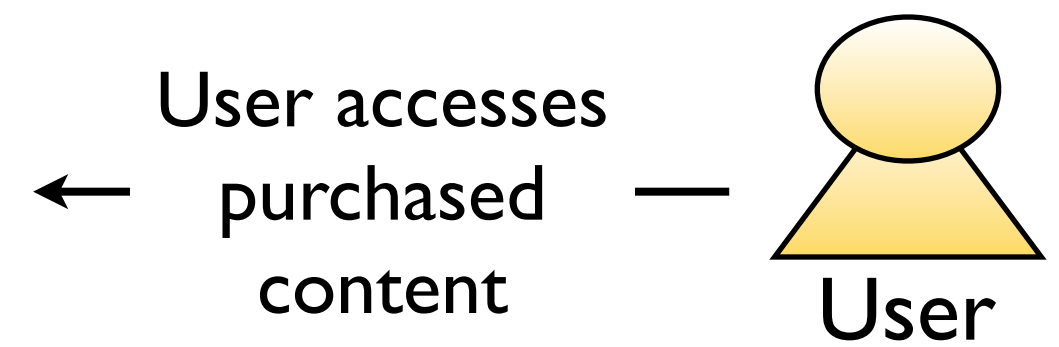
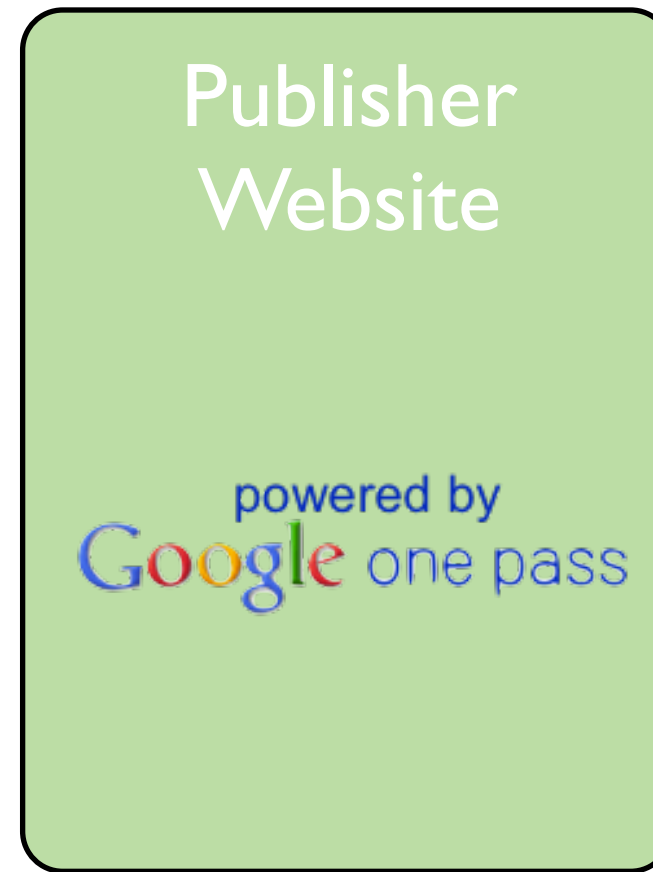
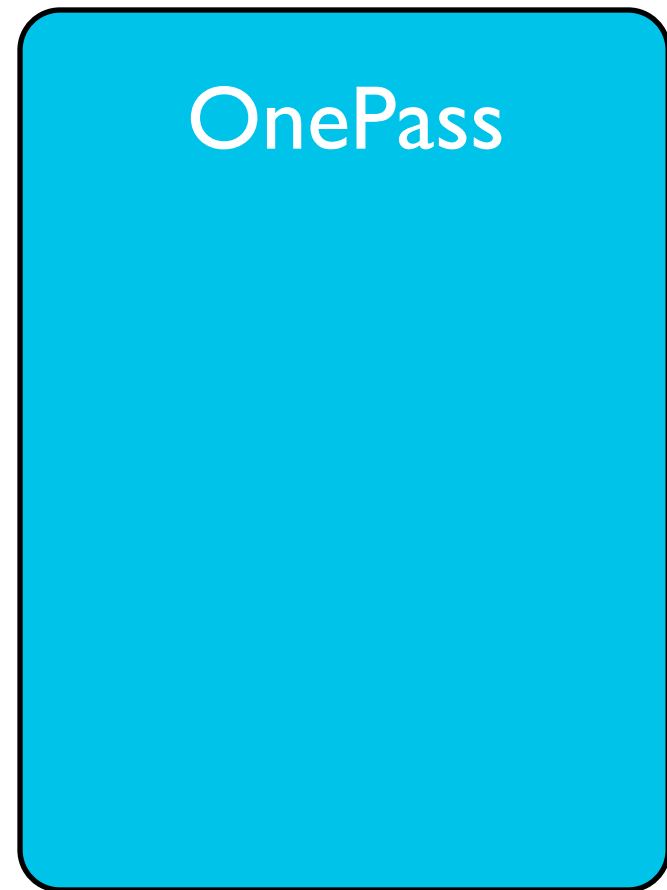
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Purchasing Content



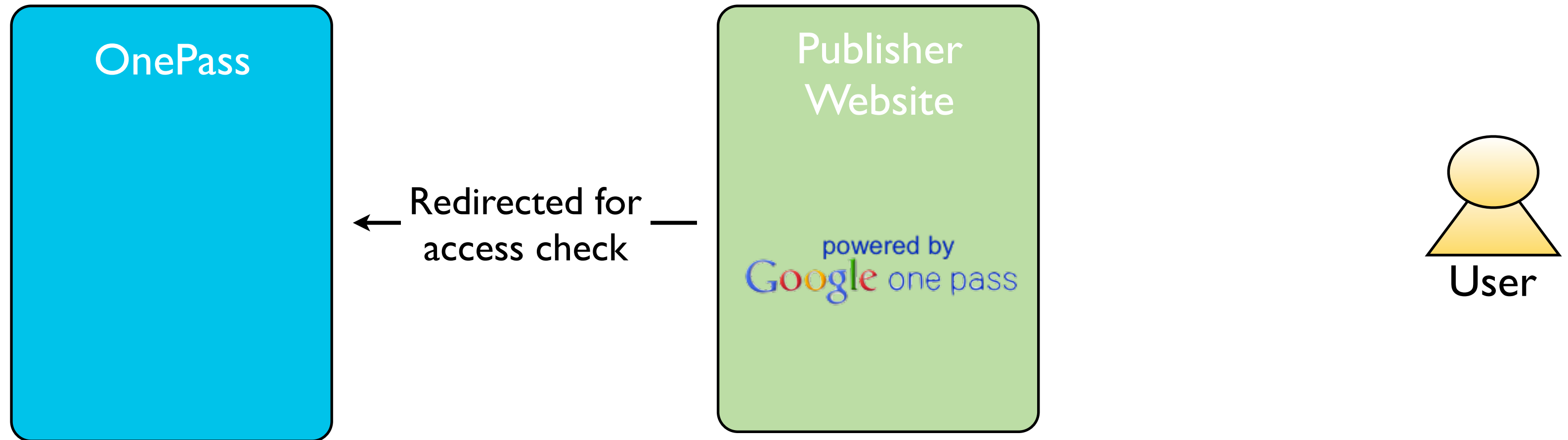
User Flows

After content has been purchased



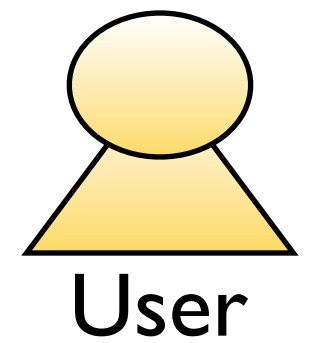
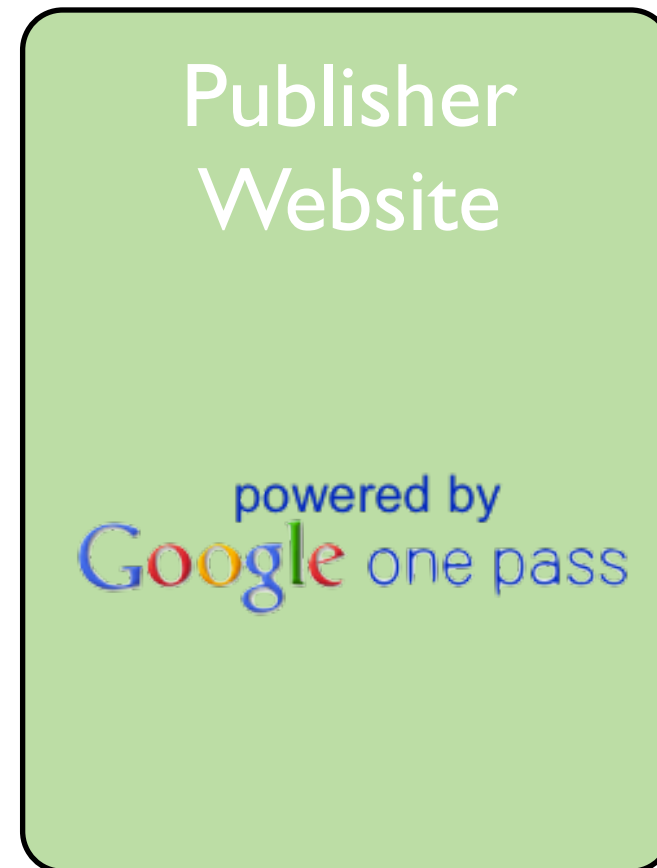
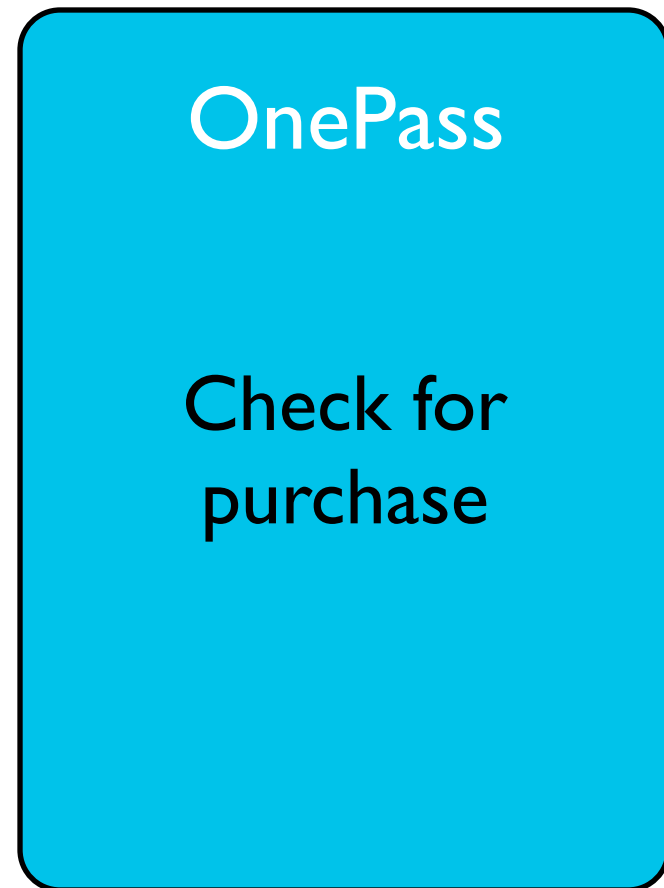
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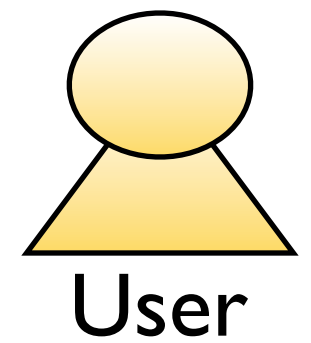
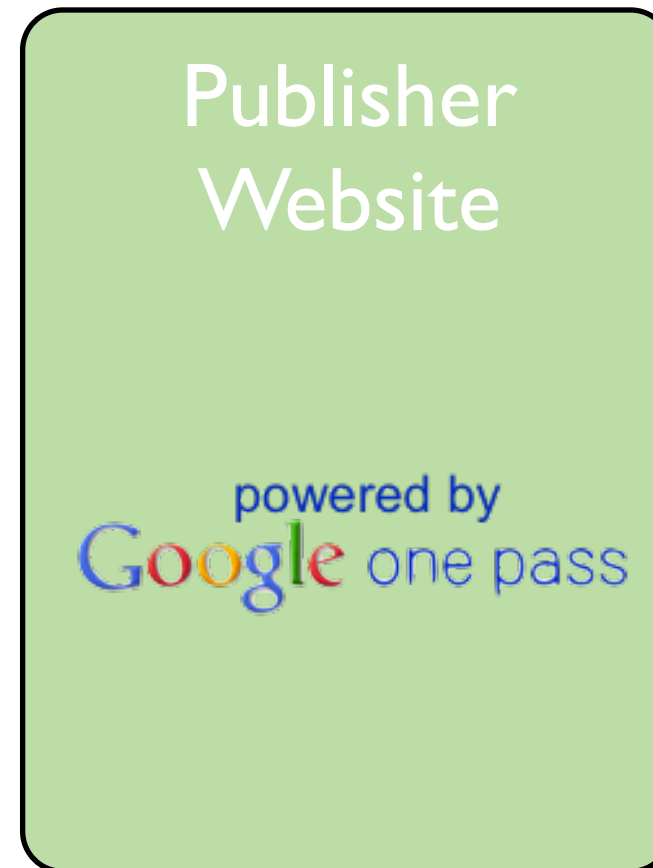
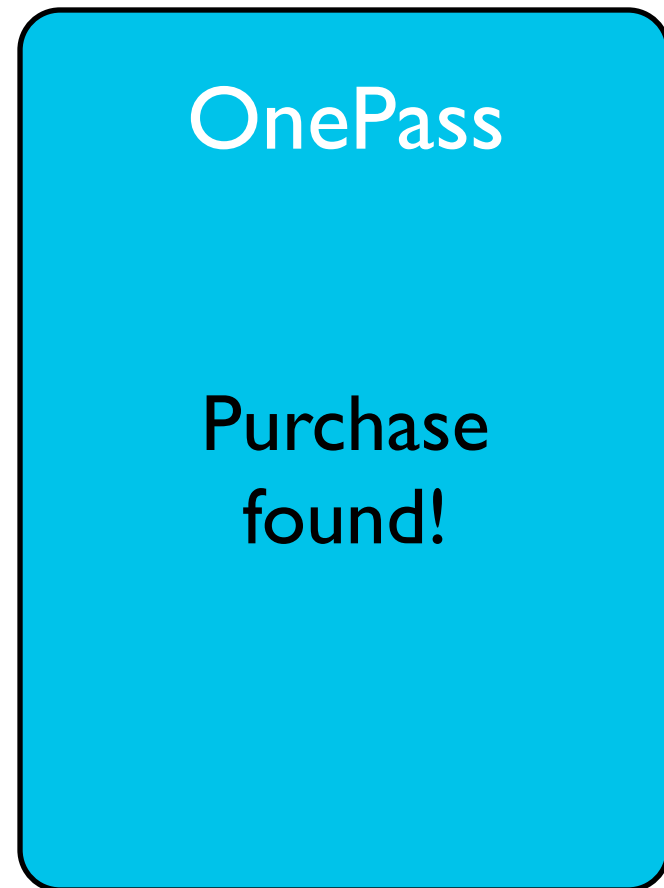
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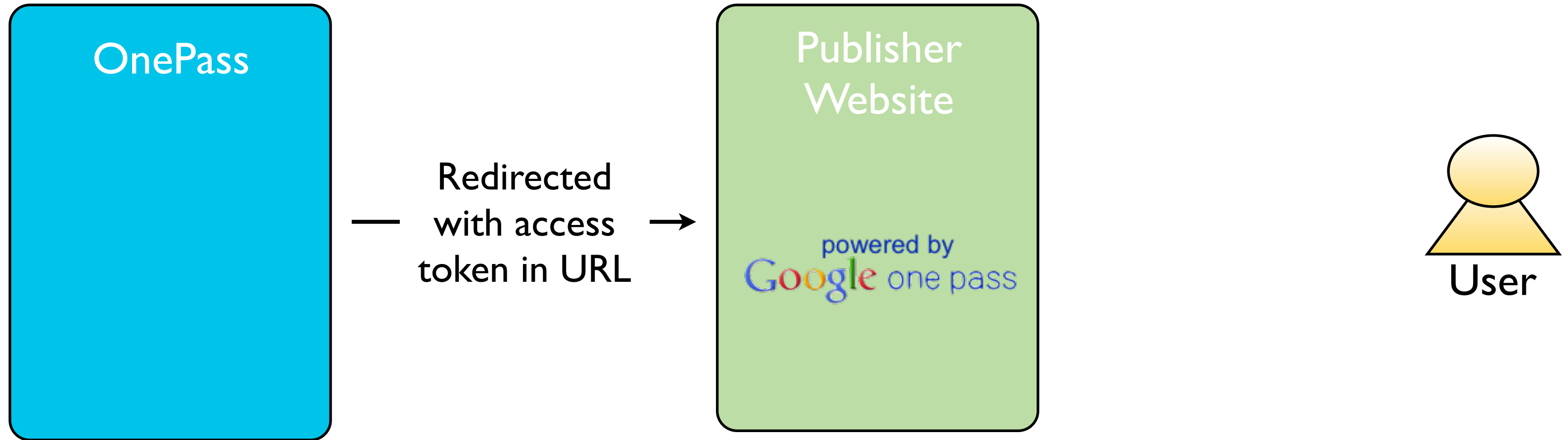
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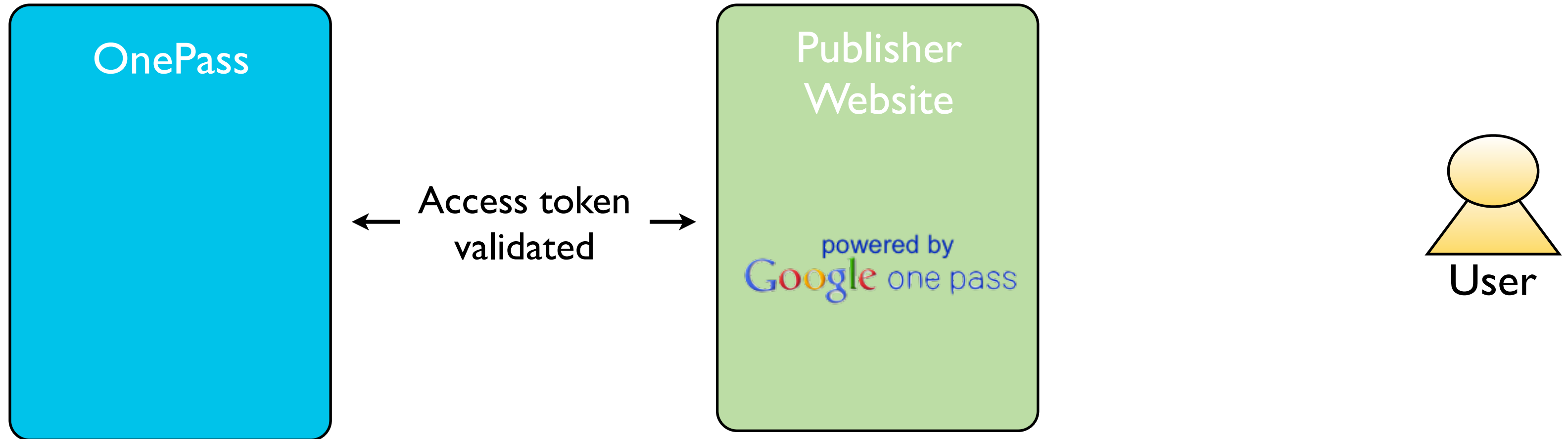
User Flows

After content has been purchased



User Flows

After content has been purchased



User Flows

After content has been purchased



Access Tokens

- Tokens encapsulate:
 - user identifier
 - offer that the user bought
- Validation against the URL being accessed
- Signed and encrypted so they can't be faked



Integrating with OnePass

Integrating with OnePass

1. Setup offers using the Publisher Center
2. Add access checking to your content
3. Build a UI to show offers to the users
4. Add backend code to validate access and return paid content

Your content

```
<html>
<body>
  <div class="title">Interesting Article</div>

  <div id="article-content">
    Lorem ipsum dolor sit amet, consectetur adipisicing
    elit, sed do eiusmod tempor incididunt ut labore et
    dolore magna aliqua. Ut enim ad minim veniam, quis
    nostrud exercitation ullamco laboris nisi ut aliquip
    ex ea commodo consequat. Duis aute irure dolor in
    reprehenderit in voluptate velit esse cillum dolore eu
    fugiat nulla pariatur. Excepteur sint occaecat cupidatat
    non proident, sunt in culpa qui officia deserunt mollit
    anim id est laborum.
  </div>
</body>
</html>
```

Remove paid content

```
<html>
<body>

  <div class="title">Interesting Article</div>

  <div id="article-preview">
    Lorem ipsum dolor sit amet, consectetur adipisicing elit,
    sed do eiusmod tempor...
  </div>

  <form id="purchaseForm"
        action="http://clients4.google.com/onepass/service/checkout"
        method="get">

    <div>Purchase access:</div>
    <div id="offers"></div>
    <input type="submit" value="Buy!" />
  </form>

</body>
```

Remove paid content

```
<html>  
<body>
```

```
  <div class="title">Interesting Article</div>
```

```
  <div id="article-preview">  
    Lorem ipsum dolor sit amet, consectetur adipisicing elit,  
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  </div>
```

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  <form id="purchaseForm"  
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    method="get">
```

```
    <div>Purchase access:</div>  
    <div id="offers"></div>  
    <input type="submit" value="Buy!" />  
  </form>
```

```
</body>
```

Remove paid content

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<html>  
<body>
```

```
  <div class="title">Interesting Article</div>
```

```
  <div id="article-preview">
```

```
    Lorem ipsum dolor sit amet, consectetur adipisicing elit,  
    sed do eiusmod tempor...
```

```
  </div>
```

```
  <form id="purchaseForm"
```

```
    action="http://clients4.google.com/onepass/service/checkout"
```

```
    method="get">
```

```
    <div>Purchase access:</div>
```

```
    <div id="offers"></div>
```

```
    <input type="submit" value="Buy!" />
```

```
  </form>
```

```
</body>
```

Add an access check

```
<script type="text/javascript">

  var onepassApi = "http://clients4.google.com/onepass/service";
  var escapedUrl = "";

  $(document).ready(function() {

    escapedUrl = escape(window.location);
    var urlParams = getUrlVars();

    if (!urlParams.response) {
      location.href = onepassApi + "/checkaccess?articleUrl=" +
        escapedUrl;
    } else if (urlParams.response == "no") {
      showOffers();
    }
  });

</script>
```


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<script type="text/javascript">

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      location.href = onepassApi + "/checkaccess?articleUrl=" +
        escapedUrl;
    } else if (urlParams.response == "no") {
      showOffers();
    }
  });
</script>
```

Show available offers to the user

```
<script type="text/javascript">

    function showOffers() {

        var pricingUrl = 'http://' + onepassApi +
            '/pricing?articleUrl=' + escapedCanonicalizedUrl +
            '&successCallback=createOffers&' +
            'errorCallback=errorHandler';

        $.getScript(pricingUrl);

    }

</script>
```

Show available offers to the user

```
<script type="text/javascript">

  function showOffers() {

    var pricingUrl = 'http://' + onepassApi +
      '/pricing?articleUrl=' + escapedCanonicalizedUrl +
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      '&successCallback=createOffers&' +
      'errorCallback=errorHandler';

    $.getScript(pricingUrl);

  }

</script>
```

Pricing JSON data

```
{
  "offers": [
    {
      "pricing": "$0.50",
      "id": "ChtodHRwOi8vd3d3LmNvcnAuZ29",
      "name": "Single Article Purchase",
      "taxincluded": false,
    },
    {
      "pricing": "$10.00",
      "id": "qgjLdKJhgsaryjwd3LmNvcnAuZ30",
      "name": "Monthly Subscription",
      "taxincluded": false,
    }
  ]
}
```

Purchase Form

```
<form id="purchaseForm"
  action="http://clients4.google.com/onepass/service/checkout"
  method="get">

  <div>Purchase access:</div>

  <div id="offers">
    <input type="radio" name="offerId" value="ChtodHRwOi8vd3d3LmNvcnAuZ29">
      Single Article Purchase - $0.50
    </input>
    <input type="radio" name="offerId" value="qgjLdKJhgsaryjwd3LmNvcnAuZ30">
      Monthly Subscription - $10.00
    </input>
  </div>

  <input type="hidden" name="articleUrl" value="escapedUrl"/>
  <input type="submit" value="Buy!" />
</form>
```


Purchase Form

```
<form id="purchaseForm"
  action="http://clients4.google.com/onepass/service/checkout"
  method="get">

  <div>Purchase access:</div>

  <div id="offers">
    <input type="radio" name="offerId" value="ChtodHRwOi8vd3d3LmNvcnAuZ29">
      Single Article Purchase - $0.50
    </input>
    <input type="radio" name="offerId" value="qgjLdKJhgsaryjwd3LmNvcnAuZ30">
      Monthly Subscription - $10.00
    </input>
  </div>

  <input type="hidden" name="articleUrl" value="escapedUrl"/>
  <input type="submit" value="Buy!" />
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  action="http://clients4.google.com/onepass/service/checkout"
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  <div>Purchase access:</div>

  <div id="offers">
    <input type="radio" name="offerId" value="ChtodHRwOi8vd3d3LmNvcnAuZ29">
      Single Article Purchase - $0.50
    </input>
    <input type="radio" name="offerId" value="qgjLdKJhgsaryjwd3LmNvcnAuZ30">
      Monthly Subscription - $10.00
    </input>
  </div>

  <input type="hidden" name="articleUrl" value="escapedUrl"/>
  <input type="submit" value="Buy!" />
</form>
```

Verify access on the backend

```
public class ContentServer extends HttpServlet {

    public void doGet(HttpServletRequest request,
                      HttpServletResponse response)
        throws IOException {

        PrintWriter out = response.getWriter();
        String accessResponse = request.getParameter("response");
        String accessToken = request.getParameter("token");

        if (accessResponse.equals("yes") &&
            validToken(accessToken)) {
            sendFullArticle(request, out);
        } else {
            sendArticleSnippet(request, out);
        }
    }
}
```

Verify access on the backend

```
public class ContentServer extends HttpServlet {  
  
    public void doGet(HttpServletRequest request,  
                      HttpServletResponse response)  
        throws IOException {  
  
        PrintWriter out = response.getWriter();  
        String accessResponse = request.getParameter("response");  
        String accessToken = request.getParameter("token");  
  
        if (accessResponse.equals("yes") &&  
            validToken(accessToken)) {  
            sendFullArticle(request, out);  
        } else {  
            sendArticleSnippet(request, out);  
        }  
    }  
}
```

Verify access on the backend

```
public class ContentServer extends HttpServlet {  
  
    public void doGet(HttpServletRequest request,  
                      HttpServletResponse response)  
        throws IOException {  
  
        PrintWriter out = response.getWriter();  
        String accessResponse = request.getParameter("response");  
        String accessToken = request.getParameter("token");  
  
        if (accessResponse.equals("yes") &&  
            validToken(accessToken)) {  
            sendFullArticle(request, out);  
        } else {  
            sendArticleSnippet(request, out);  
        }  
    }  
}
```

Verify access on the backend

```
public class ContentServer extends HttpServlet {  
  
    public void doGet(HttpServletRequest request,  
                      HttpServletResponse response)  
        throws IOException {  
  
        PrintWriter out = response.getWriter();  
        String accessResponse = request.getParameter("response");  
        String accessToken = request.getParameter("token");  
  
        if (accessResponse.equals("yes") &&  
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            sendFullArticle(request, out);  
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        }  
    }  
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Verify access on the backend

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        } else {  
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        }  
    }  
}
```

Token validation

```
private boolean validToken(String accessToken) {
    try {

        URL url = new URL(ONEPASS_TOKEN_API + "?token=" + accessToken);
        HttpURLConnection connection = (HttpURLConnection) url.openConnection();
        if (connection.getResponseCode() != 200) {
            throw new IOException(connection.getResponseMessage());
        }
        BufferedReader br = new BufferedReader(
            new InputStreamReader(connection.getInputStream()));
        StringBuilder sb = new StringBuilder();
        String line;
        while ((line = br.readLine()) != null) {
            sb.append(line);
        }
        br.close();
        connection.disconnect();

        return sb.toString().equals("yes");

    } catch (Exception e) {
        return false;
    }
}
```


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```

Summary

- A few dozen lines of Javascript on the client
- Less than that on the server side
- No user management, or database needs
- No messy integration with payments processor and cart software
- Support for multiple payment models: pay per article, subscriptions, free trials, etc
- Support for all major browsers and mobile platforms
- Support for international currencies and locales
- The same security and authentication behind every Google account



www.google.com/onepass



Q & A

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