OpenSocial:

The web is better when it's social

Sophia Liu

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Basics of OpenSocial

- A set of common APIs for building social applications
- Open, cross-platform thru single programming model
- Released under Apache 2.0 license
- Creative Commons license for documentations
- Uses Google’s gadget architecture w/extensions
- Uses standard JavaScript, HTML, and XML

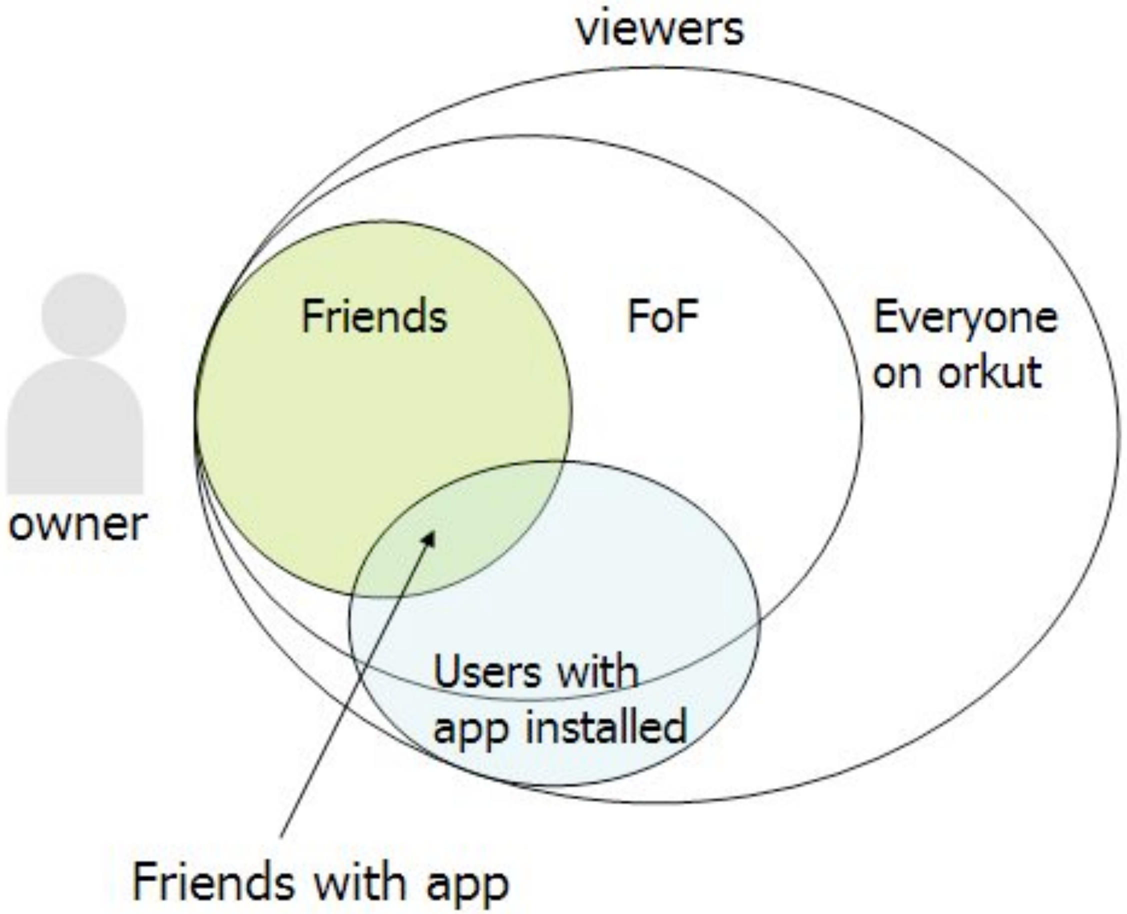
API Documentation

- Client-side using JavaScript API
  - People: information about people and their relationships
  - Activities: post and view updates of people's activities
  - Persistence: simple key-value data store to allow server-free stateful apps
- Server-side using REST or RPC protocols
  - Server interactions based on JSON-RPC protocol, AtomPub protocol, or plain XML
  - Authentication handled by OAuth

OpenSocial Containers

- MySpace
- Orkut
- LinkedIn
- Ning
- FotoFlexer
- iLike
- Theikos
- hi5
- RockYou!
- Slide
- viadeo
- Flixster
- SalesForce
- Virtual Tourist

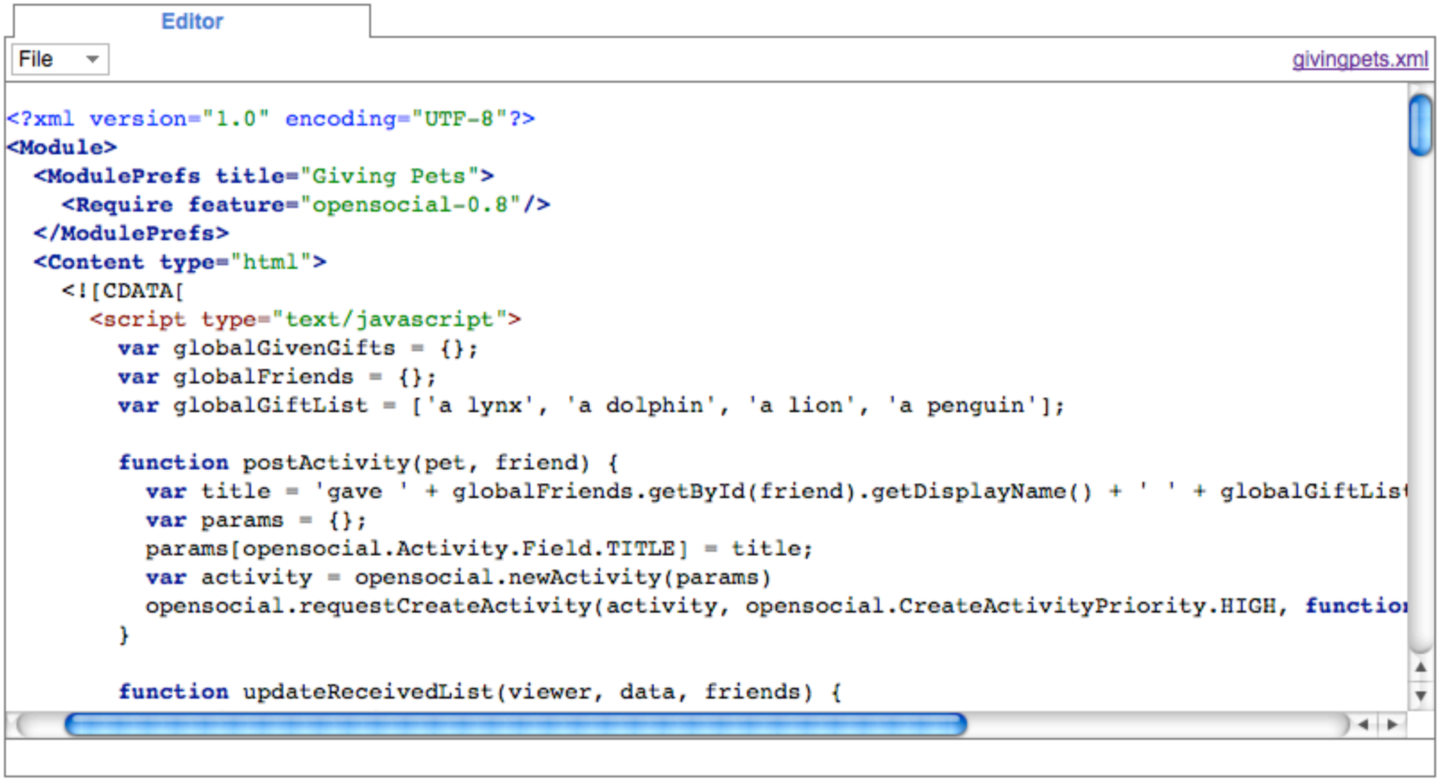
Relation to the OpenSocial App



DEMO

How to Give Pets to Friends in Orkut

Google Gadget Editor

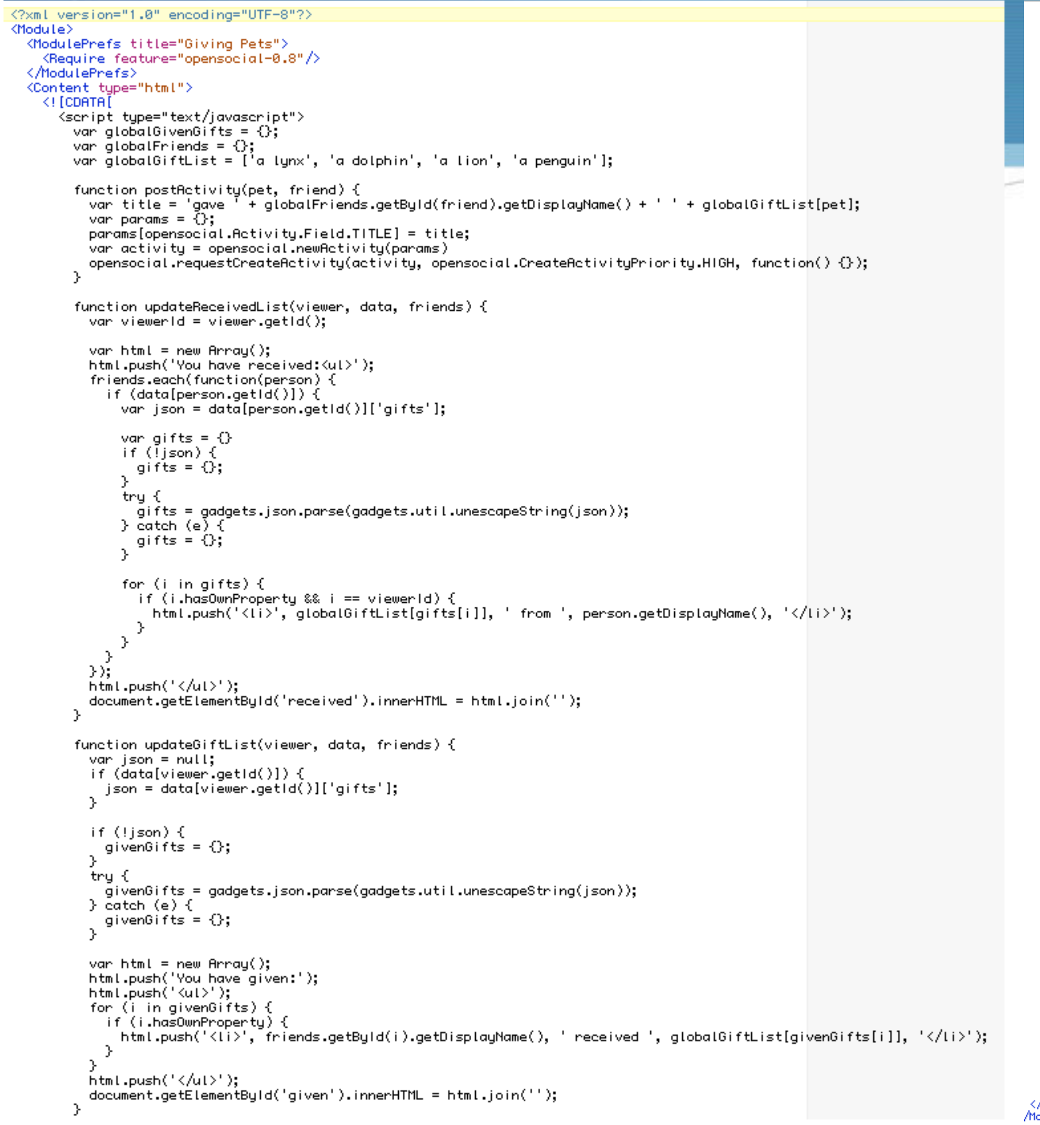


```
<?xml version="1.0" encoding="UTF-8"?>
<Module>
  <ModulePrefs title="Giving Pets">
    <Require feature="opensocial-0.8"/>
  </ModulePrefs>
  <Content type="html">
    <![CDATA[
      <script type="text/javascript">
        var globalGivenGifts = {};
        var globalFriends = {};
        var globalGiftList = ['a lynx', 'a dolphin', 'a lion', 'a penguin'];

        function postActivity(pet, friend) {
          var title = 'gave ' + globalFriends.getById(friend).getDisplayName() + ' ' + globalGiftLis
          var params = {};
          params[opensocial.Activity.Field.TITLE] = title;
          var activity = opensocial.newActivity(params)
          opensocial.requestCreateActivity(activity, opensocial.CreateActivityPriority.HIGH, functio
        }

        function updateReceivedList(viewer, data, friends) {
```

OpenSocial App for Giving Pets



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        function postActivity(pet, friend) {
          var title = 'gave ' + globalFriends.getById(friend).getDisplayName() + ' ' + globalGiftList[pet];
          var params = {};
          params[opensocial.Activity.Field.TITLE] = title;
          var activity = opensocial.newActivity(params)
          opensocial.requestCreateActivity(activity, opensocial.CreateActivityPriority.HIGH, function() {});
        }

        function updateReceivedList(viewer, data, friends) {
          var viewerId = viewer.getId();

          var html = new Array();
          html.push('You have received:<ul>');
          friends.each(function(person) {
            if (data[person.getId()]) {
              var json = data[person.getId()]['gifts'];

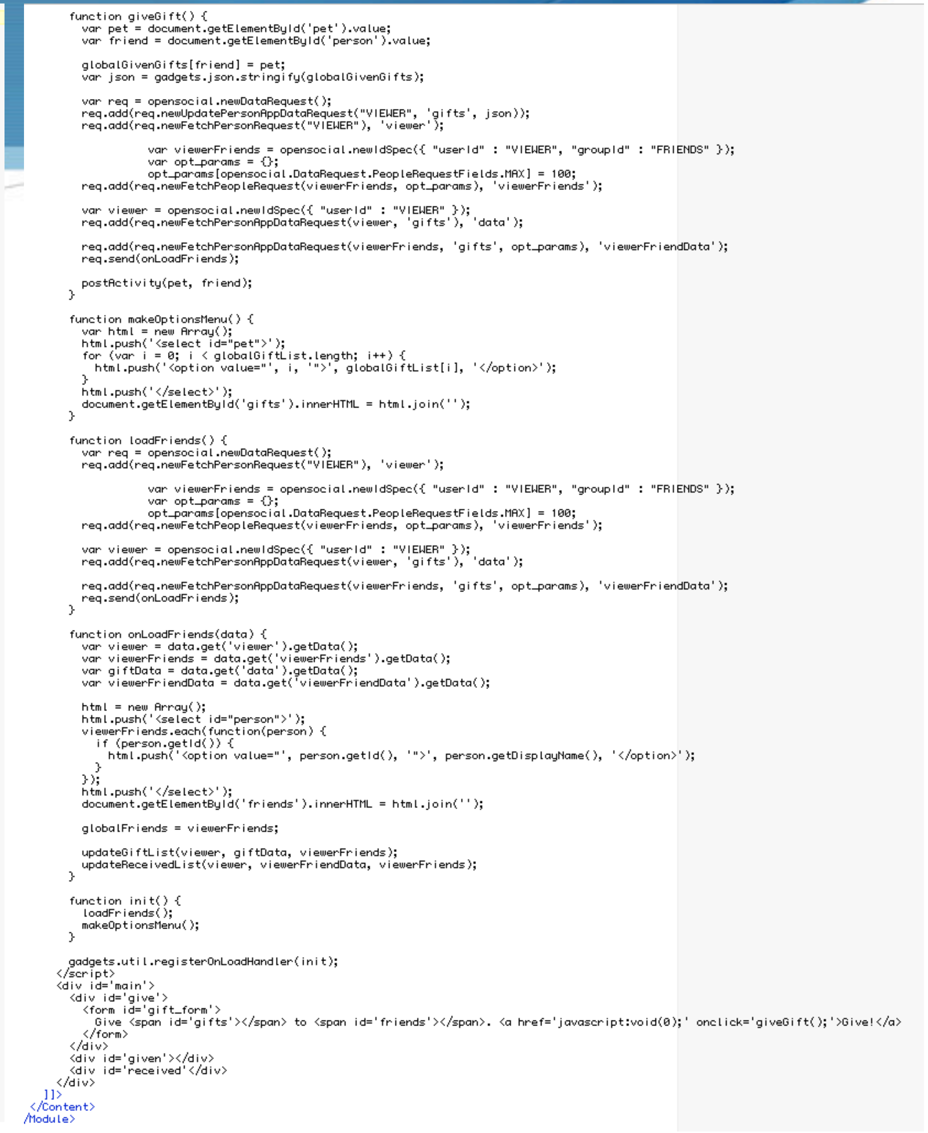
              var gifts = {}
              if (!json) {
                gifts = {};
              }
              try {
                gifts = gadgets.json.parse(gadgets.util.unescapeString(json));
              } catch (e) {
                gifts = {};
              }

              for (i in gifts) {
                if (i.hasOwnProperty && i == viewerId) {
                  html.push('<li>', globalGiftList[gifts[i]], ' from ', person.getDisplayName(), '</li>');
                }
              }
            }
          });
          html.push('</ul>');
          document.getElementById('received').innerHTML = html.join('');
        }

        function updateGiftList(viewer, data, friends) {
          var json = null;
          if (data[viewer.getId()]) {
            json = data[viewer.getId()]['gifts'];
          }

          if (!json) {
            givenGifts = {};
          }
          try {
            givenGifts = gadgets.json.parse(gadgets.util.unescapeString(json));
          } catch (e) {
            givenGifts = {};
          }

          var html = new Array();
          html.push('You have given:');
          html.push('<ul>');
          for (i in givenGifts) {
            if (i.hasOwnProperty) {
              html.push('<li>', friends.getById(i).getDisplayName(), ' received ', globalGiftList[givenGifts[i]], '</li>');
            }
          }
          html.push('</ul>');
          document.getElementById('given').innerHTML = html.join('');
        }
```



```
        function giveGift() {
          var pet = document.getElementById('pet').value;
          var friend = document.getElementById('person').value;

          globalGivenGifts[friend] = pet;
          var json = gadgets.json.stringify(globalGivenGifts);

          var req = opensocial.newDataRequest();
          req.add(req.newUpdatePersonAppDataRequest("VIEWER", 'gifts', json));
          req.add(req.newFetchPersonRequest("VIEWER"), 'viewer');

                    var viewerFriends = opensocial.newIdSpec({ "userId" : "VIEWER", "groupId" : "FRIENDS" });
                    var opt_params = {};
                    opt_params[opensocial.DataRequest.PeopleRequestFields.MAX] = 100;
          req.add(req.newFetchPeopleRequest(viewerFriends, opt_params), 'viewerFriends');

          var viewer = opensocial.newIdSpec({ "userId" : "VIEWER" });
          req.add(req.newFetchPersonAppDataRequest(viewer, 'gifts'), 'data');

          req.add(req.newFetchPersonAppDataRequest(viewerFriends, 'gifts', opt_params), 'viewerFriendData');
          req.send(onLoadFriends);

          postActivity(pet, friend);
        }

        function makeOptionsMenu() {
          var html = new Array();
          html.push('<select id="pet">');
          for (var i = 0; i < globalGiftList.length; i++) {
            html.push('<option value="', i, '">', globalGiftList[i], '</option>');
          }
          html.push('</select>');
          document.getElementById('gifts').innerHTML = html.join('');
        }

        function loadFriends() {
          var req = opensocial.newDataRequest();
          req.add(req.newFetchPersonRequest("VIEWER"), 'viewer');

                    var viewerFriends = opensocial.newIdSpec({ "userId" : "VIEWER", "groupId" : "FRIENDS" });
                    var opt_params = {};
                    opt_params[opensocial.DataRequest.PeopleRequestFields.MAX] = 100;
          req.add(req.newFetchPeopleRequest(viewerFriends, opt_params), 'viewerFriends');

          var viewer = opensocial.newIdSpec({ "userId" : "VIEWER" });
          req.add(req.newFetchPersonAppDataRequest(viewer, 'gifts'), 'data');

          req.add(req.newFetchPersonAppDataRequest(viewerFriends, 'gifts', opt_params), 'viewerFriendData');
          req.send(onLoadFriends);
        }

        function onLoadFriends(data) {
          var viewer = data.get('viewer').getData();
          var viewerFriends = data.get('viewerFriends').getData();
          var giftData = data.get('data').getData();
          var viewerFriendData = data.get('viewerFriendData').getData();

          html = new Array();
          html.push('<select id="person">');
          viewerFriends.each(function(person) {
            if (person.getId()) {
              html.push('<option value="', person.getId(), '">', person.getDisplayName(), '</option>');
            }
          });
          html.push('</select>');
          document.getElementById('friends').innerHTML = html.join('');

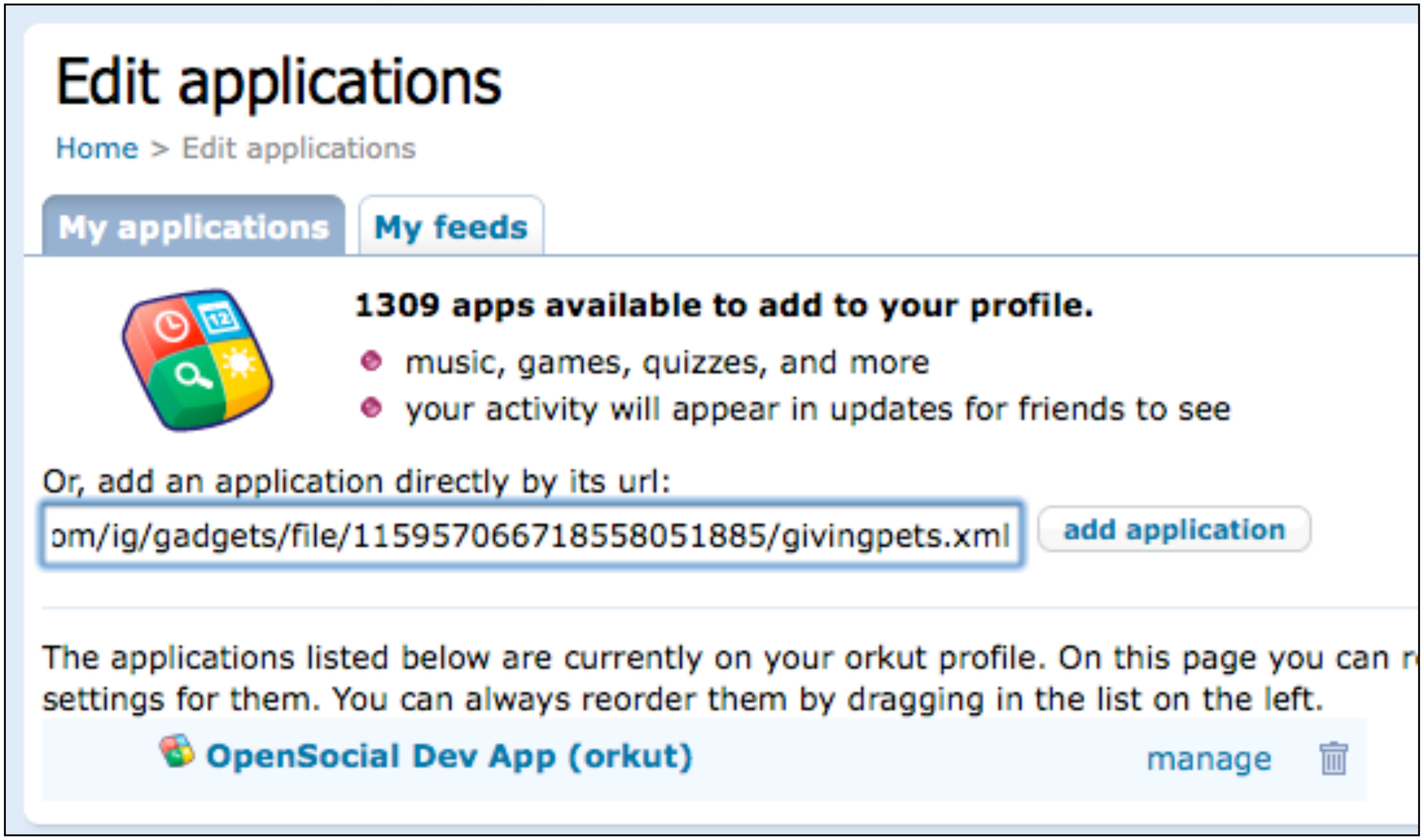
          globalFriends = viewerFriends;

          updateGiftList(viewer, giftData, viewerFriends);
          updateReceivedList(viewer, viewerFriendData, viewerFriends);
        }

        function init() {
          loadFriends();
          makeOptionsMenu();
        }

        gadgets.util.registerOnLoadHandler(init);
      </script>
      <div id='main'>
        <div id='give'>
          <form id='gift_form'>
            Give <span id='gifts'></span> to <span id='friends'></span>. <a href='javascript:void(0);' onclick='giveGift();'>Give!</a>
          </form>
        </div>
        <div id='given'></div>
        <div id='received'</div>
      </div>
    ]]>
  </Content>
/Module>
```

Add App in Orkut



Edit applications

Home > Edit applications

1309 apps available to add to your profile.

- music, games, quizzes, and more
- your activity will appear in updates for friends to see

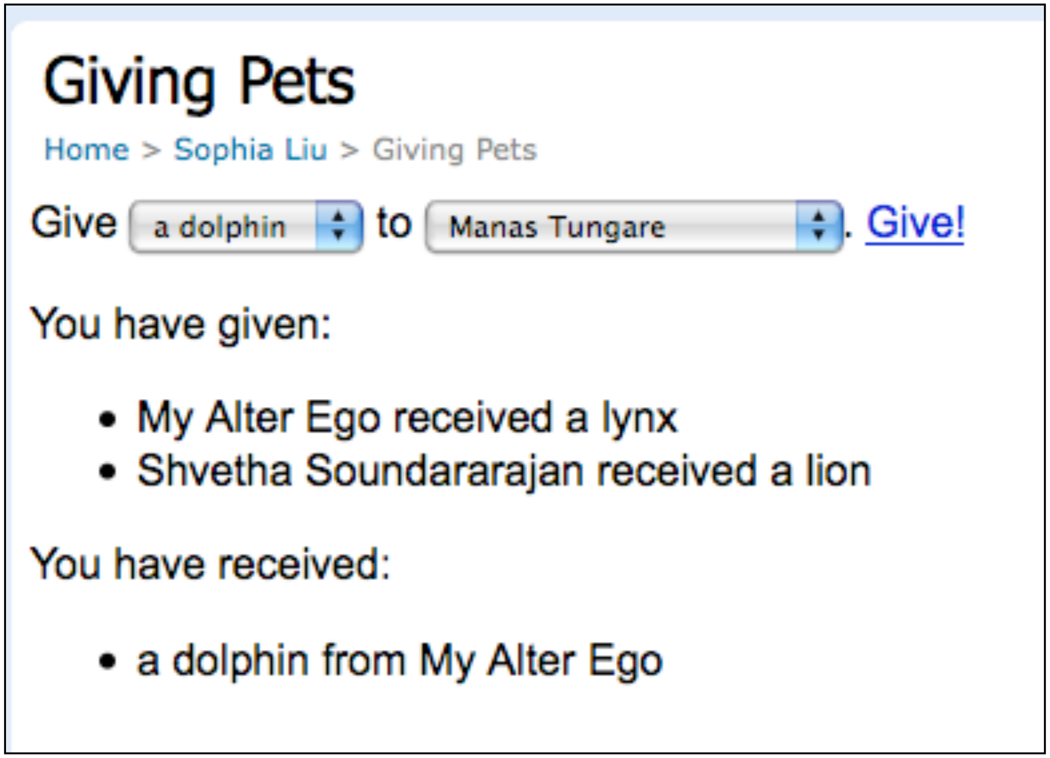
Or, add an application directly by its url:

om/ig/gadgets/file/115957066718558051885/givingpets.xml

The applications listed below are currently on your orkut profile. On this page you can r settings for them. You can always reorder them by dragging in the list on the left.

OpenSocial Dev App (orkut)

Giving Pets OpenSocial App



Giving Pets

Home > Sophia Liu > Giving Pets

Give a dolphin to Manas Tungare. Give!

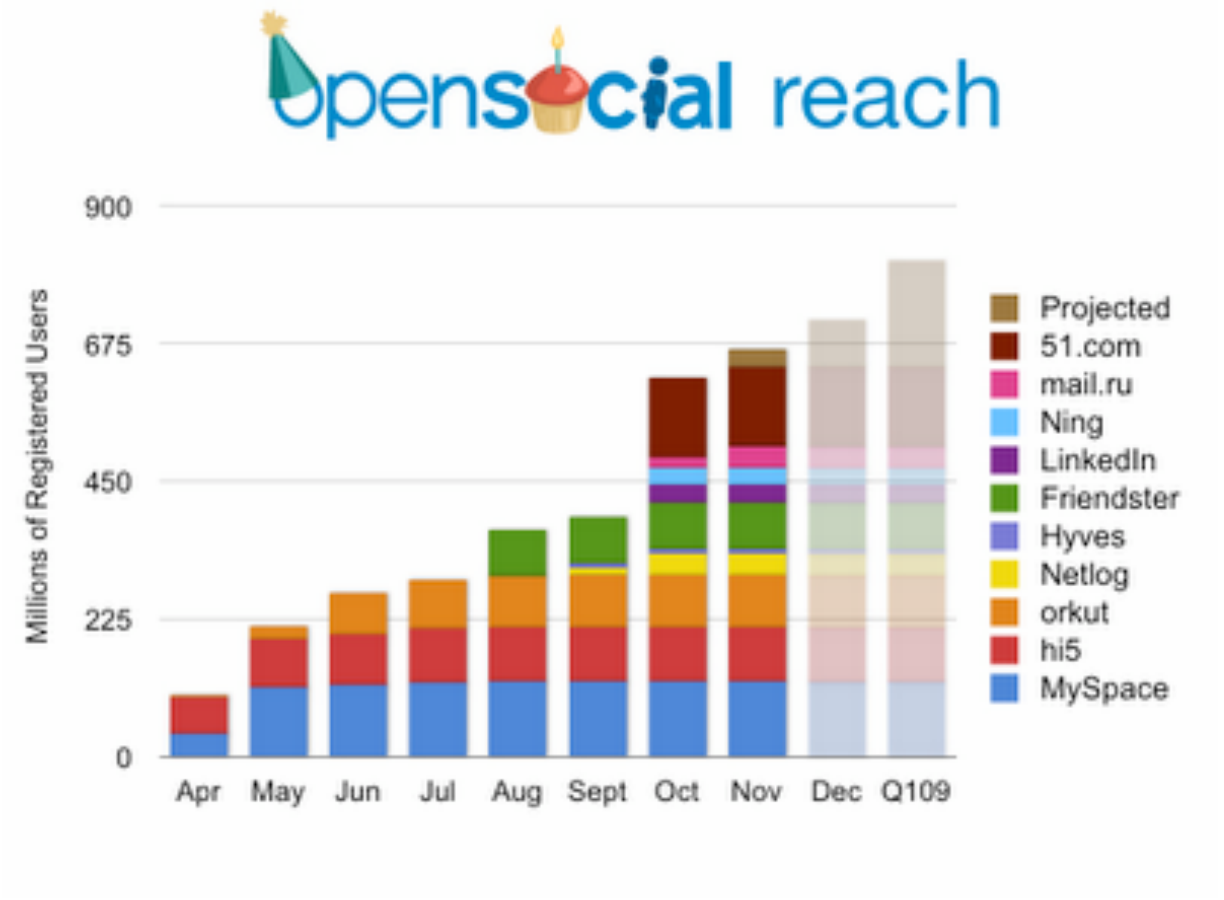
You have given:

- My Alter Ego received a lynx
- Shvetha Soundararajan received a lion

You have received:

- a dolphin from My Alter Ego

Almost Reaching 600M over 20 Sites



Thanks…Questions ?

http://code.google.com/apis/opensocial/

http://code.google.com/apis/orkut/articles/tutorial/tutorial.html#gge