

A decorative header at the top of the slide features four overlapping spheres. From left to right, they are light green, light blue, light red, and light yellow. A thin black horizontal line runs across the slide just below the spheres.

Part 3: UrlFetch and Mail APIs



Recap

- We've added a user profile to our wiki pages
- Users can add a photo of themselves to their profile - but now we want to add more information!

The Sandbox Environment

App Engine applications cannot:

- write to the filesystem.
- open a socket or access another host directly.
- spawn a sub-process or thread.
- make other kinds of system calls, such as signals.

URLFetch API

The URLFetch API is the API that we make available to retrieve content from other sites

```
urlfetch.fetch(url, payload=None, method=GET,  
headers={}, allow_truncated=False)
```

The fetch function:

- Supports GET, POST, PUT, HEAD and DELETE methods
- Allows you to specify a payload
- Allows you to set headers for the request



URLFetch Response

The response object from `urlfetch.fetch()` has the attributes:

- `headers`
- `status_code`
- `content`
- `content_was_truncated`

Please note that URLFetch does not follow redirects



URLFetch Example

```
appengine_feed = urlfetch.fetch('http://feeds.feedburner.  
com/GoogleAppEngineBlog?  
    format=xml')  
  
if appengine_feed.status_code == 200:  
    self.response.out.write(appengine_feed.content)
```



Mail API

Our Mail API allows you to send email from your application to any person

Email messages can specify the following fields:

- sender (must be an application admin or **current user**)
- to
- cc
- bcc
- reply_to
- subject
- body
- html
- attachments



Mail API Example

```
def post(self):  
    email_body = self.request.get('email_body')  
    mail.send_mail(sender=users.get_current_user().email,  
                  to="marce@google.com",  
                  subject="Wiki Page",  
                  body=body)  
    self.response.out.write('Email Sent')
```



Hack Session Part 3

- Add an XML feed to the user profile page
- Add a link to send email to the WikiAdmins