1/ redmine ignores accept headers and jQuery `dataType` attribute

The Accept request-header field can be used to specify certain media types which are acceptable for the response.

If no Accept header field is present, then it is assumed that the client accepts all media types. If an Accept header field is present, and if the server cannot send a response which is acceptable according to the combined Accept field value, then the server SHOULD send a 406 (not acceptable) response.

http://api.jquery.com/jQuery.ajax/

The type of data that you're expecting back from the server. If none is specified, jQuery will try to infer it based on the MIME type of the response (an XML MIME type will yield XML, in 1.4 JSON will yield a JavaScript object, in 1.4 script will execute the script, and anything else will be returned as a string). The available types (and the result passed as the first argument to your success callback) examples:

```bash
curl -v -H http://demo.redmine.org/issues.json
-> 200 + json OK!
```

but

```bash
-> 500 no builder for format
```

expected (with patch)
```bash
-> 200 + json output
```

in some cases html is returned even if json was requested

2/ 406 error raises exception

```bash
curl -v http://demo.redmine.org/issues.xxx
-> 406 + exception ActionController::UnknownFormat
```

expected (with patch)
```bash
-> 406 no exception
```

3/ csrf protection - useful to avoid exceptions because of site-scanner bots
-> 422 + exception ActionController::InvalidCrossOriginRequest: Security warning: an embedded <script> tag on another site requested protected JavaScript.

expected
-> 400 - no exception

History
#1 - 2017-09-15 12:25 - Toshi MARUYAMA
Could you add tests?
source:trunk/test/integration

#2 - 2017-09-15 23:18 - Pavel Rosický
- File api_test.rb.patch added

attachment:builders.rb.patch without a patch fails:

    Failure:
    Redmine::ApiTest::ApiTest#test_accept_header_on_error:
    Expected response to be a <422: Unprocessable Entity>, but was a <500: Internal Server Error>.
    Expected: 422
    Actual: 500

    Failure:
    Redmine::ApiTest::ApiTest#test_accept_header_on_show:
    Expected response to be a <200: ok>, but was a <500: Internal Server Error>.
    Expected: 200
    Actual: 500

attachment:application_controller.rb.patch this isn't worth fixing, it affects only logs so I can't detect it in tests anyway

#3 - 2017-10-13 03:59 - Toshi MARUYAMA
- Target version set to 4.1.0

#4 - 2019-06-20 15:45 - Jean-Philippe Lang
- Target version changed from 4.1.0 to Candidate for next major release

Fixing status codes and changing the behaviour of the API regarding Accept header are different topics. I think these patches need some deeper review.

#5 - 2019-06-20 16:35 - Pavel Rosický
only http://www.redmine.org/attachments/19034/builders.rb.patch is relevant.

this is the redmine way how to access an api, the format is determined as an extension

    curl -v -H http://demo.redmine.org/issues.json

but I think that Accept header should be also supported


---

this is how rails determines the format

What that says is, “if the client wants HTML or JS in response to this action, just respond as we would have before, but if the client wants XML, return them the list of people in XML format.” (Rails determines the desired response format from the HTTP Accept header submitted by the client.)

source https://api.rubyonrails.org/v5.1/classes/ActionController/MimeResponds.html

right now


raises an internal server error

if this patch isn’t accepted I would propose to change the status to
instead of 500, what do you think?


### Files

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<th>File</th>
<th>Size</th>
<th>Date</th>
<th>Author</th>
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<td>builders.rb.patch</td>
<td>501 Bytes</td>
<td>2017-08-16</td>
<td>Pavel Rosický</td>
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<tr>
<td>application_controller.rb.patch</td>
<td>1.11 KB</td>
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<td>api_test.rb.patch</td>
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