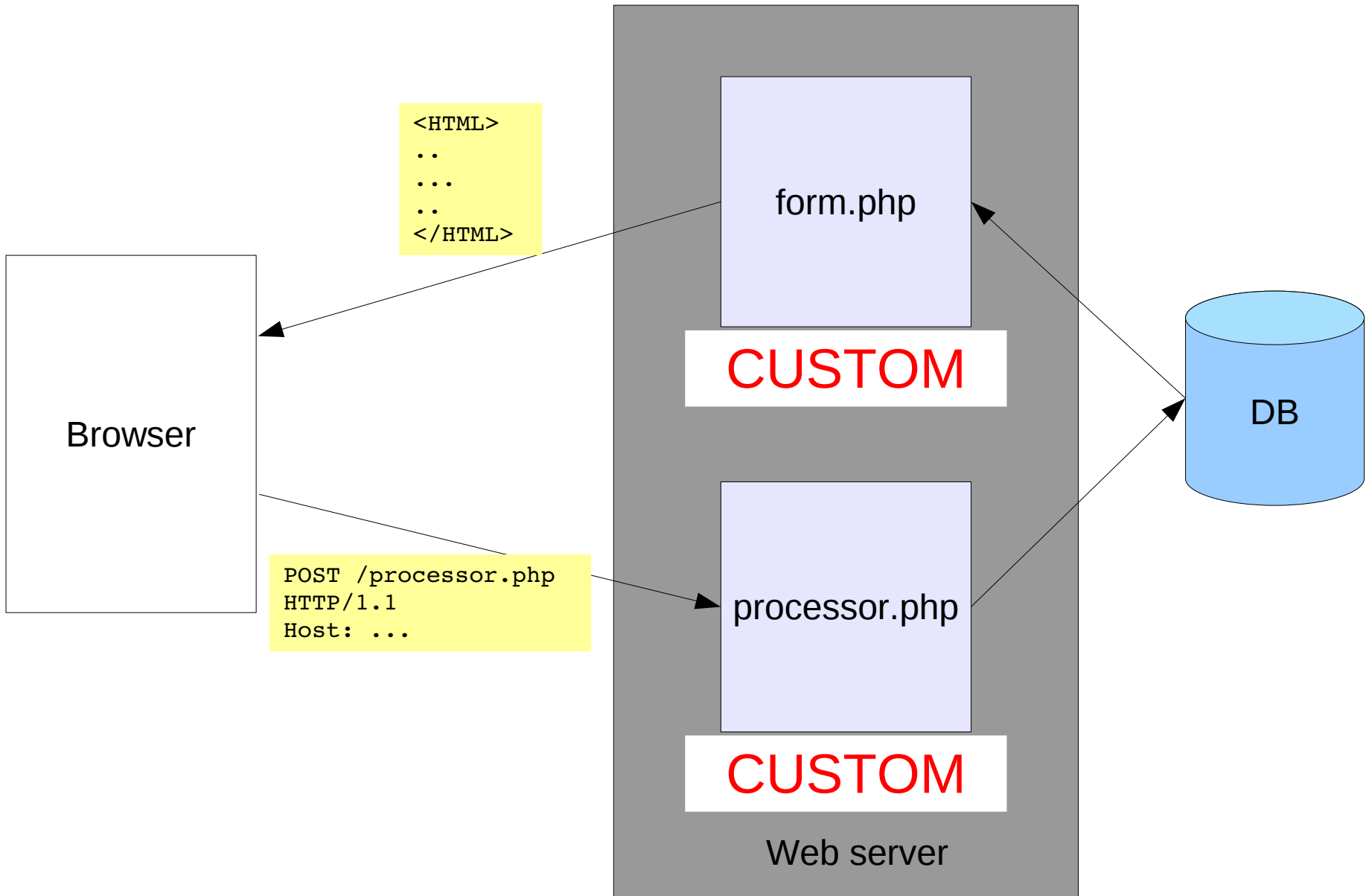


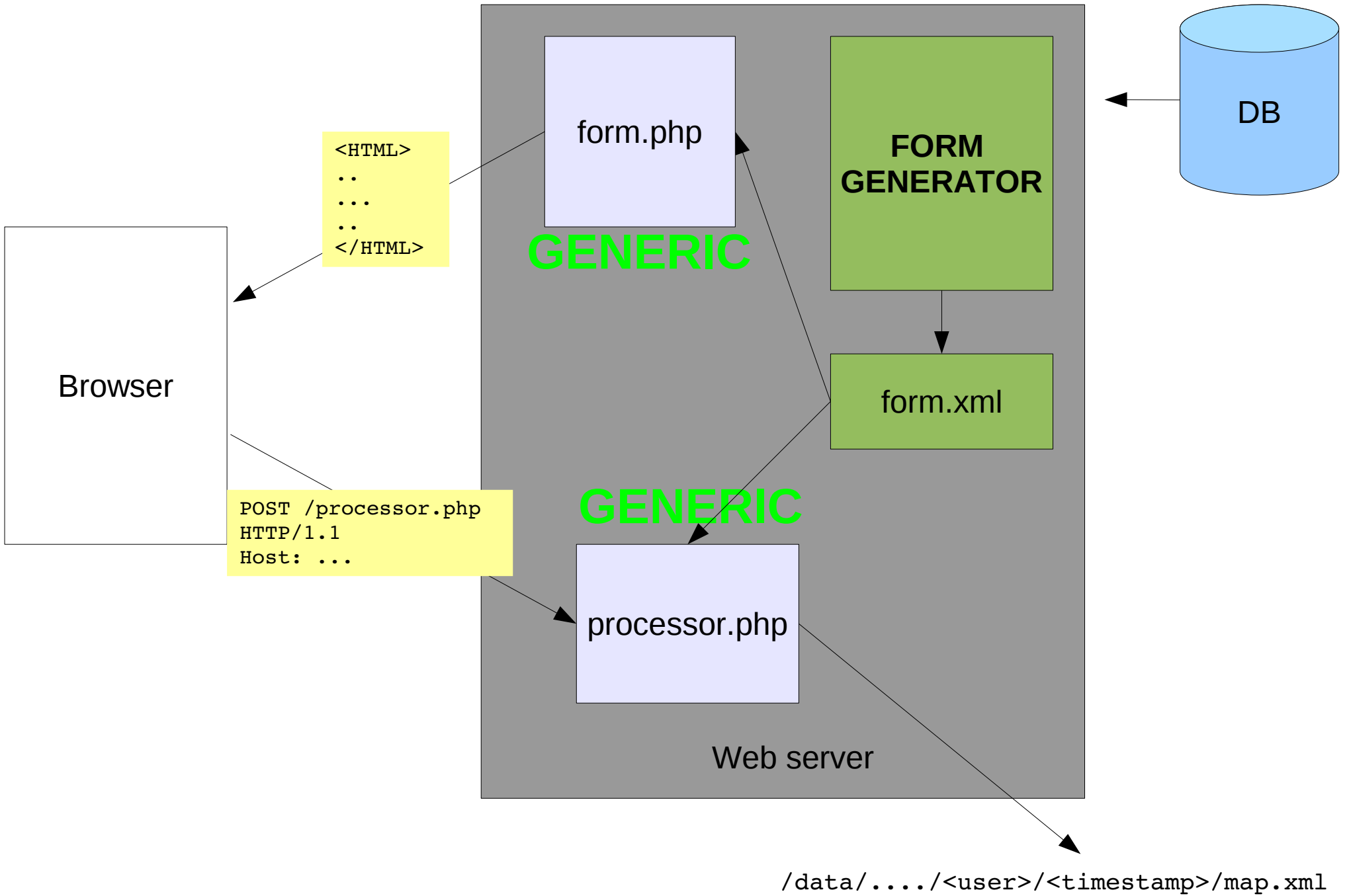
Metadata-based Forms

Traditional Approach



Our Approach

Describe the form in a standard way



form.xml

form.xml : Layout

Patient Diagnosis Information

Patient

Patient Selection

Select Patient:

Diagnosis

Patient Diagnosis Information

Diagnosis Date:

Diagnosis:

Comment (optional):

April, 2009						
wk	Mon	Tue	Wed	Thu	Fri	Sat
13			1	2	3	4
14	5	6	7	8	9	10
15	12	13	14	15	16	17
16	19	20	21	22	23	24
17	26	27	28	29	30	

Select a date

Surgery

Patient Surgery Information

Will the patient have surgery?:

Surgery Date:

Surgery Type:

TNM Staging

Tumor-Node-Metastasis Staging

Tumor:

```
<input>
  <tabbedpage>
    <page>
```



```
</page>
</page>
```

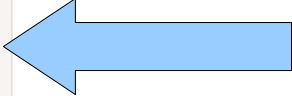


```
</page>
```



```
<page>
```

```
</page>
```



```
<page>
</page>
```


```
</tabbedpage>
</input>
```


form.xml – Dependency Rules


Data Uploader Initialization


Laboratory Analysis Tracking Information

Laboratory Analysis Tracking Information


Identify your laboratory: 

Jiri Adamec Laboratory at Purdue University 


Identify your instrument: 

LECO Pegasus 4D GCxGC-TOF: Metabolite Profiling Facility 

Identify your omics analysis: 

metabolomics 

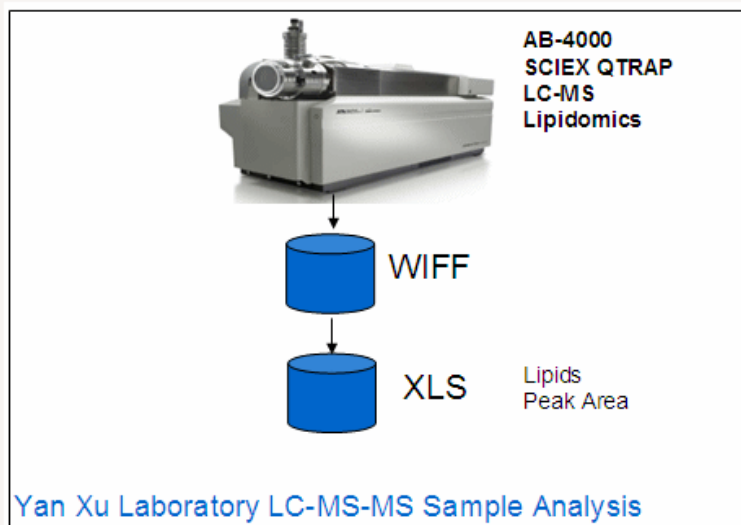
Identify your omics analysis: 

GCxGC-MS 

Identify your analysis workflow: 

Xu Lab AB-4000 LC-MS Sample Analysis 

Dataset workflow:



This shows the datasets generated by the sample analysis for your selected workflow

Data Uploader Initialization

Laboratory Analysis Tracking Information

Laboratory Analysis Tracking Information

Identify your laboratory: [?](#)

Jiri Adamec Laboratory at Purdue University

Identify your instrument: [?](#)

LECO Pegasus 4D GCxGC-TOF: Metabolite Profiling Facility

Identify your omics analysis: [?](#)

metabolomics

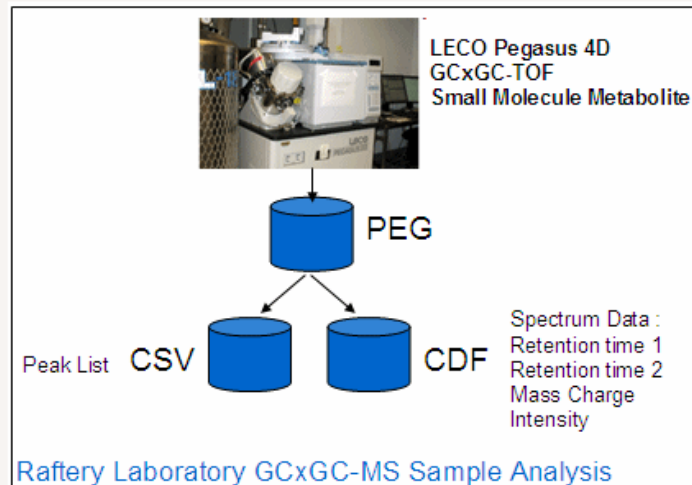
Identify your omics analysis: [?](#)

GCxGC-MS

Identify your analysis workflow: [?](#)

Raftery Lab LECO GCxGC-MS Sample Analysis

Dataset workflow:



This shows the datasets generated by the sample analysis for your selected workflow

```
<image id="img-W0000000001-GCGCMS-PCA" type="document">
  <about>
    <label>Dataset workflow</label>
    <enable>input.tabbedpage(select).page(1).choice(workflowlist)=="W0000000001-GCGCMS-PCA"</enable>
    <description>This shows the datasets generated by ... </description>
  </about>
  <current>http://ccehub.org/site/documents/DOC0000000011.gif</current>
</image>
```

```
<image id="img-W0000000002-LCMS-PCA" type="document">
  <about>
    <label>Dataset workflow</label>
    <enable>input.tabbedpage(select).page(1).choice(workflowlist)=="W0000000002-LCMS-PCA"</enable>
    <description>This shows the datasets generated by ... </description>
  </about>
  <current>http://ccehub.org/site/documents/DOC0000000012.gif</current>
</image>
```

Types API

- PHP5 Classes to define the form.xml
- types.xml.php
 - String (Documents, Date ..)
 - Boolean
 - Choice
 - ...
- Each type
 - Constructor with variable parameters
 - Serialize method to generate representation

When the form is submitted ...

map.xml

Processed by the Metadata
Processor

```
<database>
  <object>customized_patient_information</object>
  <type>tag</type>
  <tags>
    <tag>
      <label>PatientID</label>
      <value>CCECRC017</value>
    </tag>
  </tags>
</database>
```

```
<database>
  <type>link</type>
  <object>dataset</object>
  <link>laboratory</link>
  <id>L0000000001-RAFTERY</id>
</database>
```

When creating a new form ...

- formgen.php

Generates the form.xml using types

- xxxx.html.php [Standard]

Renders the form.xml

- processor.php [Standard]

Processes the form post and creates the map.xml

Different users?
Multiple form submissions?

- On form load create the form.xml for a given user at a timestamped directory

/data/.../bob/2009.03.26.13.19.57/form.xml

- All data related to that instance in this directory

Journal of form activity

Questions