

Online Survey

NAMO Workshop

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Abstract

1. How does it work? – A short background
 - Hypertext Transfer Protocol HTTP
 - HTML Forms
2. Online questionnaires
 - Differences to paper questionnaires
 - Our design principles
3. QTAFI – The underlying application

Hypertext Transfer Protocol

RFC 1945
1996

Request – Response

Request from a browser (simplified)

GET www.uefiscsu.ro HTTP/1.1

Request-Method
GET / POST

Response from the server (simplified)

HTTP/1.1 **200** OK

Content-Type: text/html

...html web-page...

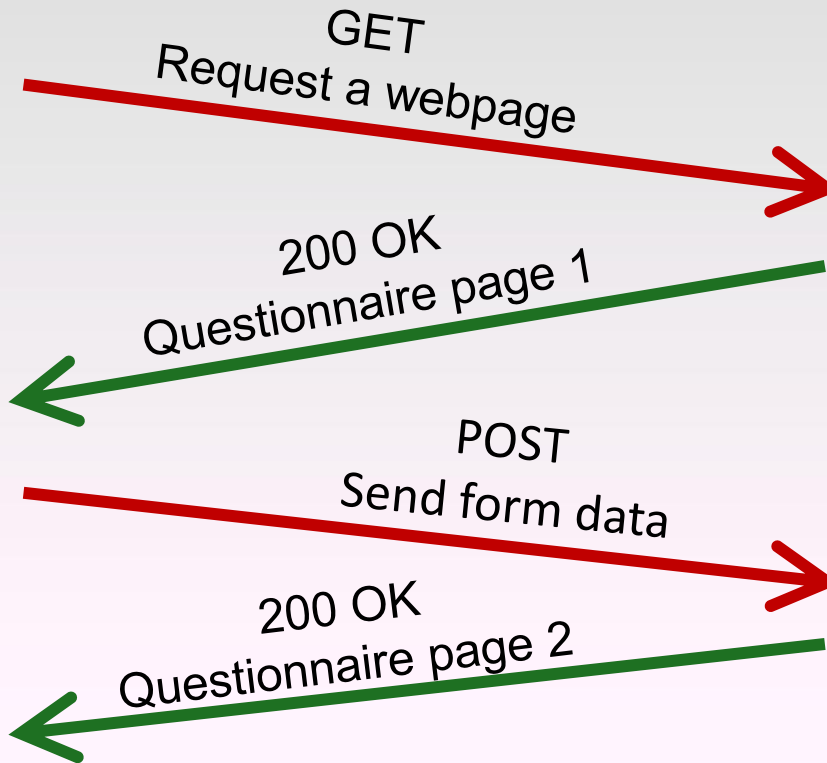
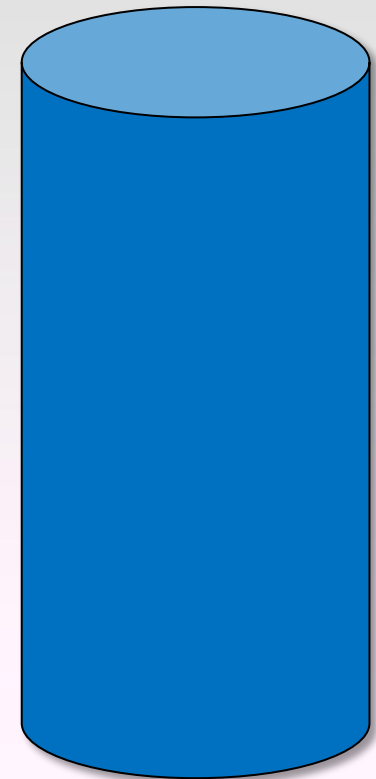
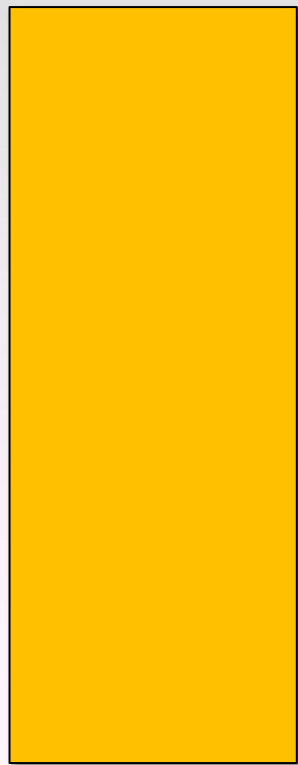
Status-Code
200 OK
404 Not found
500 Internal server error
...

Hypertext Transfer Protocol

— Request — Response

Client (Browser)

Server








Hypertext markup language (HTML)

Simple sample questionnaire in HTML:

```
<html>  
  <body>  
    <form method="post">  
      <input type="text" name="var_name">  
      <input type="submit" value="Send">  
    </form>  
  </body>  
</html>
```

Hypertext markup language form

HTML has an inbuilt mechanism for forms

<i>Name</i>	<i>Code</i>
Radio box	<code><input type="radio"></code> 
Selection	<code><select></code> 
Checkbox	<code><input type="checkbox"></code> 
Input field	<code><input type="text"></code> 
Text area	<code><textarea></code> 

Paper vs. online questionnaires (1)

Criteria	Paper	Online
User specific questionnaire	Different questionnaires or filter instructions	Questions can be skipped on user input (shortens the questionnaire)
Layout	Constraint to pages	Dynamic layout
Interactive question	Not possible	Possible (flash movie,...)
Selection list	Problem of huge selection lists	Popup list, pull-down lists,...
Availability	Always and everywhere	Need of internet access
Accepting	Highly accepted	Ascending privacy issues

Paper vs. online questionnaires (2)

Criteria	Paper	Online
Latency of data	Shipping time + handling time	At once available
Data errors	Interpretation, verification error; can be corrected	Quality of the questionnaire; irreversible
Data security	Manageable	Server attacks, transfer attacks,...
Data quality Response rate	High	Lurker, Dropout,...
Staff skills	Office programs, Scanning software	Administrator, IT-engineer
Costs	Layouting, Printing, Shipping, Data collection, Software,...	Hardware, Software, qualified staff,...

Our design principles

- Clear questionnaire structure (Section headlines, Question numbers,...)
- Paper questionnaire compatible
- Predefined question types
- Input elements left side oriented
- Clear type face

User interface style guide (online)

- Standard HTML input if possible
 - Radio buttons for single selection
 - Checkboxes for multiple selection
- Every answer resettable (also radio buttons)
- Minimum of input restriction
- No constraint to fill a question
 - No popup message if a question is not completed
- Minimum of mouse movement

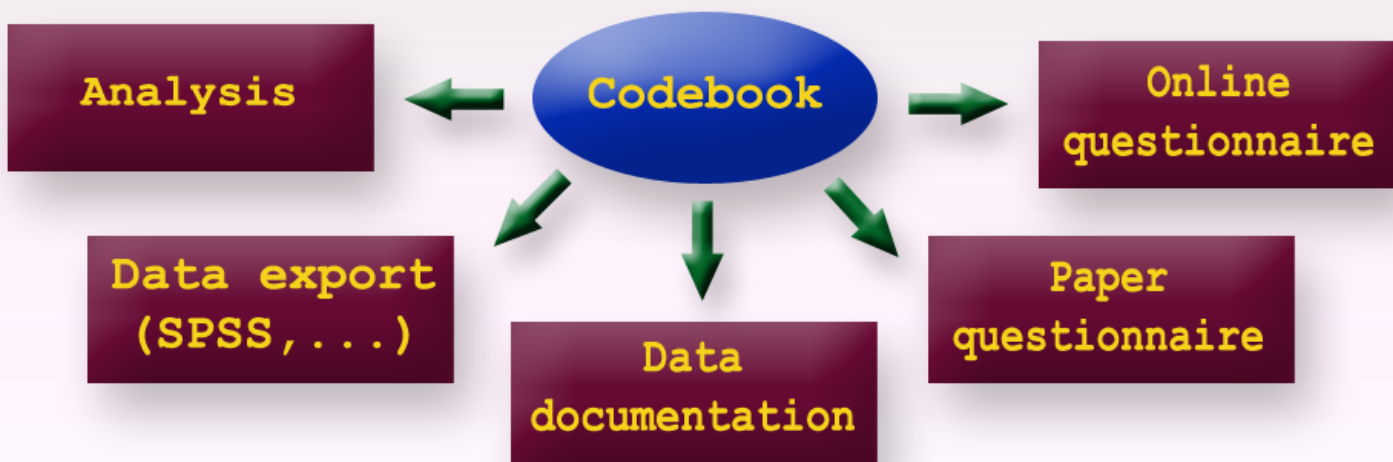
QTAFI – Concept

QTAFI **Q**uestion **t**ables and **f**igures

- Codebook for questionnaire definition
- Predefined question types
- online.QTAFI3
 - Java web application (Tomcat servlet engine)
 - MySQL database
 - Administration-Backend
 - QMS – Question Management System

Codebook

- Technical document to describe a questionnaire
- Contains variables, values,...
- Independent to medium (paper/online)
- Transformable into different formats



Question types

Five main question types (all others can be built out of these):

- **CV** Categorical variable (Single Choice)
- **MD** Multiple dichotomous variable (Multiple choice)
- **OR** Ordinal variable (Rating input)
- **ME** Metric variable (Numeric input)
- **TE** Text variable (Text input)

Thank you for your attention!