

## Survey Tool

- ApplicationController
  - \$helpers
    - Bootstrap HTML helpers are set here.
  - beginFilter()
    - Pages perform this function before loading to check whether the user is logged in.
- ChartsController
  - Uses the HighCharts API to display a set of charts. Follow the [Highcharts Plugin](#) to modify existing charts or create new charts.
- LogsController
  - Logs server actions in the database.
- PagesController
  - display()
    - Shows the front page of the app.
  - Protected static fields at top
    - Relative filenames (from the root of the CakePHP installation) for the HTML files that are to be displayed as instructions on the front page.
- Change the HTML text in these files to change the instructions on the front page.
  - loadInstructions()
    - Loads the html text that will be displayed on the tabbed views on the front page.
- SetDisplayCountController
  - index()
    - Reads the first extra parameter on pages that extend this controller and sets the paginator to show the number of items per page indicated by the extra parameter.
- SurveyGroupsController
  - extends SetDisplayCountController for optional extra pagination parameter
  - pdfgen(\$id)
    - A function to generate a PDF for the given SurveyGroup \$id. First it reads the QueXML template file pointed to by \$XML\_TEMPLATE\_PARTIALPATH, then it inserts the SurveyGroup-specific information into the template, and creates the QueXMLPDF object using the resulting QueXML text. The QueXMLPDF object is then used to create the printable PDF survey and the QueXML banding file. The PDF and the banding file are copied to the QueXF directory to register a new QueXF survey, and the PDF is delivered to the user as a downloadable.
  - upload\_zip(\$id)
    - A function to upload a zip of scanned PDF surveys for a SurveyGroup with the given \$id into the system.
  - upload(\$id)
    - A function for uploading a csv file of survey results for a SurveyGroup with the given \$id that was obtained from QueXF. This has been hard-coded for our specific QueXML template and should be changed if the template is changed significantly.
  - extends SetDisplayCountController for optional extra pagination parameter
  - analyze()
    - Takes form data specifying queries for graphs
- UsersController
  - login()
    - Function that is called when the user attempts to login (by clicking login or accessing any non-home pages). It is configured to pass the authentications through Google OpenID for use with Gmail accounts. When OpenID returns

- successfully, it creates a new user in the database if necessary and saves the OpenID token, and authorizes the user to use the site.
    - handleOpenIdResponse()
      - takes an openID response and checks if the authenticated user exists in the table, and logs in if so. If not, creates a new account if the account is allowed to access the survey tool
  - SurveyPDF folder
    - Contains the surveys that are generated for each SurveyGroup during the pdfgen() function.
  - SurveyXML folder
    - Contains the QueXML files which are filled-in with SurveyGroup-specific data during the pdfgen() functions.
    - Contains the xmltemplate.xml file which determines what generated survey PDFs will look like.
  - Instructions folder
    - Contains HTML files for instructions which are displayed on the tabs on the front page.

## Data Dashboard

- ChartsController
  - Same as above
- PagesController
  - Same as above
- UsersController
  - add()
    - in addition to the standard add functions, this sends an email to all administrators notifying them of the account creation so they can then activate it
  - activate()
    - Users in the Data Dashboard app cannot view data until they have been activated by an administrator
- Instructions folder
  - Same as above

## Modifying the Survey

Modifying the survey (beyond the standard metadata changes and 3 free response questions) is not recommended. Doing so requires changing both the xml file defining the PDF and the "banding" file that denotes where the questions are. The files are located in the "surveyxml" folder. View the [QueXF Documentation](#) for more details on how to do this.