

# ADT: Survey Version 1.0

## Requirements Specification

<b>Author</b>	Janet
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## Document Revisions

Revisions on this document should be recorded in the table below:

	<b>Date</b>	<b>Description</b>	<b>Author</b>
1	2001-10-22	First Draft	Janet
2	10 September 2001	First Edit	Josh
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4	16 October 2001	Screenshots, Params, Views, Editing	Josh

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# 1 Introduction

## 1.1 Purpose of this document

The purpose of this document is to specify the functional and system specification of the Survey application. This document provides a road-map through which the implementation of the application will be developed and where applicable, will also contain information detailing technical design constraints and assumptions.

## 1.2 Scope of this document

The specification covers the functional specifications of the Survey application. This specification does not extend to third party or infrastructure components.

## 1.3 Overview

The basic requirements summary for the Survey application:

- To provide any user with the ability to answer a basic survey form.

## 1.4 Business Context

Survey is an application designed for users to answer the basic survey form. Businesses and individuals may wish to use this program to gather data about a particular topic from their website users. The generic version is open source for distribution. Anyone may take advantage of the powerful eXtropa Perl ADT. Improvements will be made incrementally as bug reports come in and suggestions are made. The generic Survey will ultimately benefit both the company and our users.

# 2 General Description

## 2.1 Product Functions

The general functionality of the Survey application is to allow users to answer the survey. The administrator may view the records.

## 2.2 General Constraints

The application will be written in Perl and the data files are stored in a common flatfile system (ASCII File). This will slow down in terms of searching for information if there is a presence of huge database.

The application is also able to interface with relational databases should the administrator desire it.

**Bold Params** indicate Section Headings. *Italic Params* are objects.

Indented Params are configurable variables.

Grayed out or missing items are not required or not available in the default configuration.

Param	Default configuration	Notes
<b>Language</b>	Perl	
<b>Session Setup</b>		
Type	File	Note that flatfile data sources are slow. We recommend upgrading to a database based data source
Max Modify Time	1 hour	
Fatal Timeout	Off	
Fatal if session not found	Off	
<i>Session Manager Setup</i>		
Type	FormVar	
Cgi Object	\$CGI	
Session Params	Session Config Params	
<b>Authentication Setup</b>		For the datasource
Type	File	
Field Delimiter	(pipe)	
Create a file if none exists	On	
Field Names	From Auth User Datasource	
File	Scriptname.users.dat	Path is set at start of script
Default Authentication Fields	Username, password, groups, firstname, lastname, email	
<b>Authentication Manager Setup</b>		How requests are processed
Color for even rows	E5E5E5	
Color for Odd Rows	FFFFFF	
CSS View URL	\$CSS_VIEW_URL	
Application Logo	logo.gif	
Application Logo Height	40	
Application Logo Width	353	
Application Logo ALT	WebDB Demo	
HTTP Header Params	[-EXPIRES => '-1d']	
Document Root URL	'/' or web root directory	
Image Root URL	/Images/Extropa	
Script Display Name	'Address Book'	
Script Name	\$CGI->script_name()	
Page Top View	PageTopView	
Page Bottom View	PageBottomView	
Link Target	'_self' or current window	
<i>User_Fields</i>	Auth_username, auth_password, auth_groups, auth_firstname, auth_lastname, auth_email	
<i>Mail Params</i>		
Type	Sendmail	Default on most systems
<i>User Mail Send Params</i>		
From	you@yourdomain.com	

Subject	Password Generated	
<i>Admin Mail Send Params</i>		
From	you@yourdomain.com	
To	you@yourdomain.com	
Subject	Registration Notification	
<i>Auth Manager Config Params</i>		
Type	CGI	
Allow Registration	On	
Allow User Search	On	Allow anyone to checkfor an old account.
Generate Password	Off	
Default Groups	Normal	
Email Registration to Admin	Off	
Display Registration After Failure	On	
<b>Data Handler Setup</b>		How data is handled
<i>Add Form DHM Config</i>		
Type	CGI	
CGI Object	\$CGI	
Data Handlers	Email, Exists, HTML, String, Number	
Field Mappings	Number_of_swing_albums_owned, email,name	
<b>Datasource Setup</b>		Configure the database and fields displayed
Field Names	record_id, name, email, gender, favorite_band_leaders, favorite_modern_group, own_two_tones, number_of_swing_albums_owned, styles_known, comments, date_time_posted,	Corresponds to default extropia database
<i>Sample Default Widget Definitions</i>		
Display Name	Country	Name that appears in the browser
Type	Textfield, textarea, scrolling_list, checkbox_group, radio_group, checkbox, popup_menu	
Name	Fname	Internal field name
Size	30	Display size in characters
Maxlength	80	Maximum number of characters permitted
Rows	6	Initial height of textarea
Cols	30	Initial width of textarea
Linebreak	1	
Multiple	1	
Values	Count Basie, Duke Ellington, Bill Elliot	
Wrap	VIRTUAL	Wrapping of text in textarea
<i>Basic Datasource Config Params</i>		
Type	File	Configure datasource
File	\$APP_DATAFILES_DIRECTORY/\$APP_NAME.dat	
Field Delimiter	(pipe)	
Comment Prefix	#	Ignore lines starting with

		#
Create File if None Exists	On	
Field Names	\@DATASOURCE_FIELD_NAMES	
Key Fields	['record_id']	Not required if key is not used
Field Types	Record_id => 'Autoincrement'	Specify a specific kind of field
<b>Mailer Setup</b>		Required for regular email. Not the same as Auth Mailer
<i>Mail Config Params</i>		
Type	Sendmail	
<i>Email Display Fields</i>	name, email, gender, favorite_band_leaders, favorite_modern_group, own_two_tones, number_of_swing_albums_owned, comments, styles_known,	Email these fields.
<i>Delete Event Mail Send</i>		Warns Someone of Deletions to the database
From	you@yourdomain.com	
To	you@yourdomain.com	
Reply To	you@yourdomain.com	
Subject	Address Book Delete	
<i>Add Event Mail Send</i>		Tells user of additions
From	you@yourdomain.com	
To	you@yourdomain.com	
Reply To	you@yourdomain.com	
Subject	Survey Addition	
<i>Modify Event Mail Send</i>		Tells user of modifications to records
From	you@yourdomain.com	
To	you@yourdomain.com	
Reply To	you@yourdomain.com	
Subject	Address Book Modification	
<b>Logging Setup</b>		
Type	File	
Log File	\$APP_DATAFILES_DIRECTORY/\$APP_NAME.log	
Log Entry Suffix	' ' . _generateEnvVarsString() . ' ',	
Log Entry Prefix	'Survey '	
<b>View Setup</b>		Views to use, display, and defaults
<i>Valid Views</i>	CSSView AddAcknowledgementView AddRecordConfirmationView AddRecordView	The program cannot display views that are not available here.
<i>View Display Params</i>		Defaults for Views
Application Logo	logo.gif	
Application Logo Height	40	
Application Logo Width	353	
Application Logo ALT	WebDB Demo	
Color for Even Rows	E5E5E5	
Color for Odd Rows	FFFFFF	

Display Fields		
Table BG Color 1	6699CC	
Table BG Color 2	E5E5E5	
Table BG Font Color1	BLACK	
Table BG Font Color2	BLACK	
<b>Filter Setup</b>		
<i>HTMLIZE Filter</i>		
Type	HTMLize	
Convert Double Linebreak to P	On	
Convert Linebreak to BR	On	
<i>Charset Filter</i>		
Type	CharSet	
<i>Embed Filter</i>		
Type	Embed	
Enable	Off	
<b>Action/Workflow Setup</b>		
<i>Action Handler List</i>	Defaults	User should not need to modify
<i>Action Handler Action Params</i>		
Action Handler List	\@ACTION_HANDLER_LIST	
Add Acknowledgment View Name	AddAcknowledgementView	
Add Email Body View	AddEventEmailView	
Add Form View Name	AddRecordView	
Allow Additions Flag	On	
Allow Duplicate Entries	Off	
Display Acknowledgement on Add	On	
Display Confirmation on Add	On	
Send Email on Add	Off	
Basic Input Widget Display COLSPAN	2	

## 3 Functional Requirements

### 3.1 Survey Application

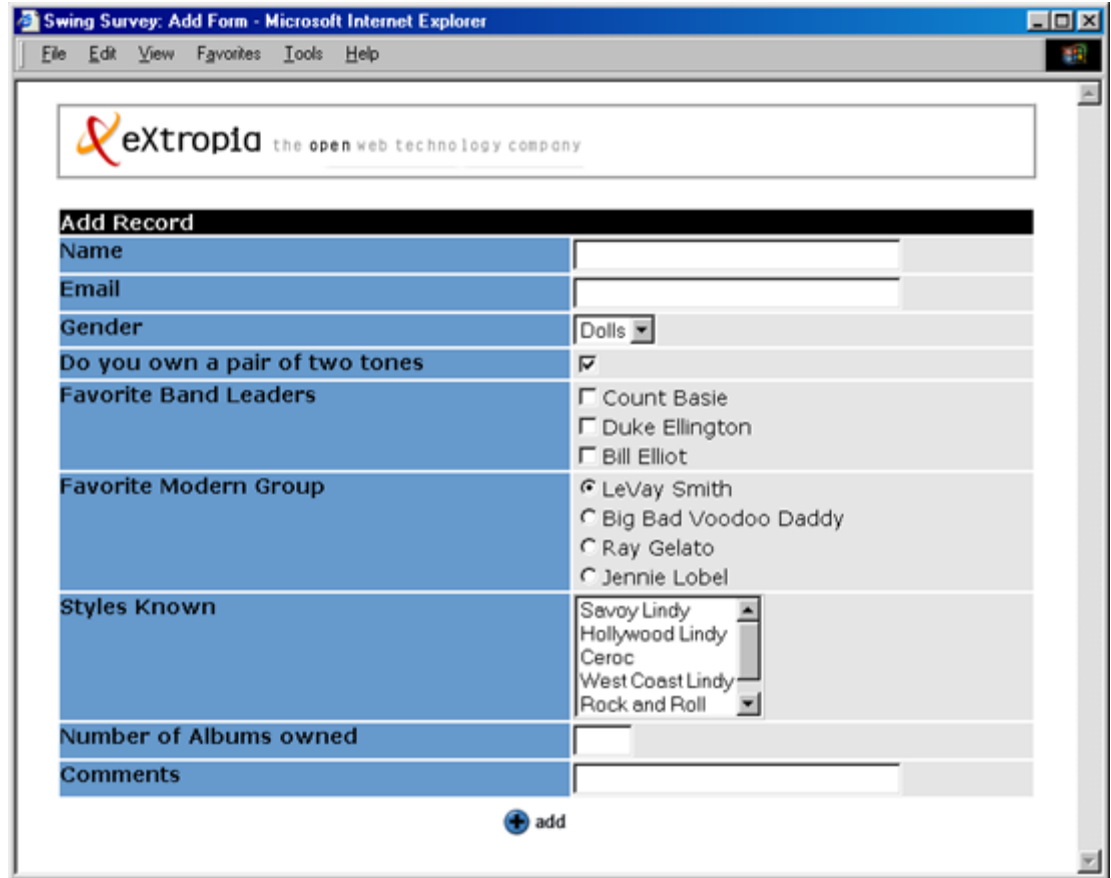
#### 3.1.1 Description

##### Authentication Definition Views

Please see Survey Admin Specifications for login abilities. The public Survey has no authentication rights.

**Application Specific View Definitions**

- **Home Default View** displays the public entry form. Fields available are: Name, Email, Gender, TwoTones, Favorite Band Leaders, Favorite Modern Group, Styles Known, Albums Owned, and Comments.

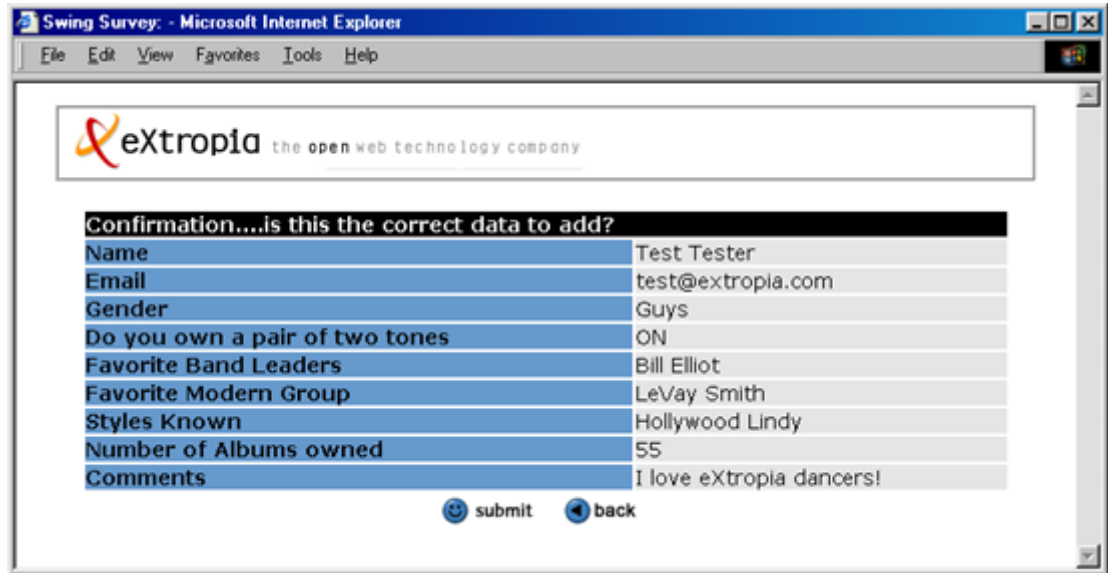


The screenshot shows a web browser window titled "Swing Survey: Add Form - Microsoft Internet Explorer". The page header features the eXtropa logo and the text "the open web technology company". Below the header is a form titled "Add Record" with the following fields:

- Name:** A text input field.
- Email:** A text input field.
- Gender:** A dropdown menu with "Dolls" selected.
- Do you own a pair of two tones:** A checkbox that is checked.
- Favorite Band Leaders:** A list of checkboxes with options: Count Basie, Duke Ellington, and Bill Elliot.
- Favorite Modern Group:** A list of radio buttons with options: LeVay Smith (selected), Big Bad Voodoo Daddy, Ray Gelato, and Jennie Lobel.
- Styles Known:** A dropdown menu with a scrollable list of options: Savoy Lindy, Hollywood Lindy, CeroC, West Coast Lindy, and Rock and Roll.
- Number of Albums owned:** A text input field.
- Comments:** A text area.

At the bottom of the form is a blue button with a plus sign and the text "add".

- **Confirmation View** displays the user's answers to confirm. The user may continue or return to edit his answers.



- **Acknowledgement View** reports the success of the entry.



**Common Features Definitions**

There are no features available. See Survey Admin.

**3.1.2 Risks and Dependencies**

There is a risk that the Administrator will delete records he wants to keep. The design of survey also makes it difficult to tally results in a meaningful fashion.

## 4 Database Design

### 4.1 Description

The data of the application will be stored in a flat file. Each data fields of a record will be separated by '|'.

Field Name	Description	Field Types
record_id	Record Value (Auto Incremental)	Auto
name	Name	char
email	Email	char
gender	Gender	Char
favorite_band_leaders	Question 1	Char
favorite_modern_group	Question 2	Char
own_two_tones	Question 3	Char
number_of_swing_albums_owned	Question 4	char
styles_known	Question 5	Char
comments	Comments	Char
date_time_posted	Date and Time Posted	date

### 4.2 Communications Interfaces

## 5 Other non-functional attributes

### 5.1 Reliability

Highly reliable in a properly secured environment.

### 5.2 Maintainability

Requires little maintenance. Owners will want to clear out a large flat file now and then as well as ensure their installation is secure from hackers. Users of relational databases will probably not need to clear out their database.

### 5.3 Portability

Portability is limited by the choice of database.

### 5.4 Extensibility

Information entered is portable to any relational database. The program can easily be switched to a new database with just a few lines of code. The program relies on the eXtropa ADT that divorces form and function.

### 5.5 Reusability

Survey is highly reusable. The application can be modified for just about anything!

## 5.6 Serviceability