

Covering Note / Technologies Used

Server Side Technologies

To implement the server side handling of the form I have used PHP in conjunction with the CodeIgniter framework.

The reasons for choosing PHP are

- It is widely available across many hosting platforms.
- It has a large user base.
- It is well suited to writing server side form handling functionality such as this sort of application.

The reasons for choosing CodeIgniter are:

- It is easy to use, has a large user base and is easy to understand even for users that are not familiar with it.
- It is lightweight - in fact here it is really just used for routing and to provide a familiar MVC structure.

Client Side Technologies

On the client side I have used Twitter Bootstrap as a front end framework. I have used jQuery to add some dynamic functionality to the form and have used underscore.js as a templating engine.

The reasons for choosing Twitter Bootstrap are:

- It makes it very easy to quickly create a reasonable looking interface which scales responsively onto different sized screens.
- Again it has a large user base, it is well documented and is generally accepted as one of the leading front end frameworks.

The reasons for using jQuery are:

- It makes basic dynamic functionality such as is used in this project very quick to implement and easy to understand.

The reasons for using underscore are:

- It provides a simple templating engine so that the html for a new table row can be written out clearly as a template rather than writing the html from within javascript and we can embed javascript code into the template so the `array_index` can be passed into the html.
- It is very small and lightweight.

Installation

The application is configured to run in the root folder of a virtual host under the Apache web server. It should run irrelevant of the virtual host name but the `base_url` and sub folder, if required, can be set in `/application/config/config.php`.

```
Eg. $config['base_url'] = 'http://tech-test/sky/';
```

By default the application is set to use the full url including the filename of the front controller. Eg urls such as `http://tech-test/index.php/people` are used. However, if Apache is configured to allow `.htaccess` overrides (eg. `AllowOverride All` is set), then the file `/application/config/config.php` can be edited as follows in order to allow clean urls of the type `http://tech-test/people`:

```
$config['index_page'] = 'index.php';  
to  
$config['index_page'] = '';
```

Data is saved to the file `/data/data.csv` this must be writable to allow the system to write data to it.

A full working copy of the system is available at <http://www.jmware.co.uk/sky>.

A git repo is available at <https://github.com/jx12345/tech-test>

BTW... Let me know if you want me to take these down.