

Writing Your First App

Requires

- *phpFox version >= 4.5.1*
- *Techie mode has already been enabled*

What is app?

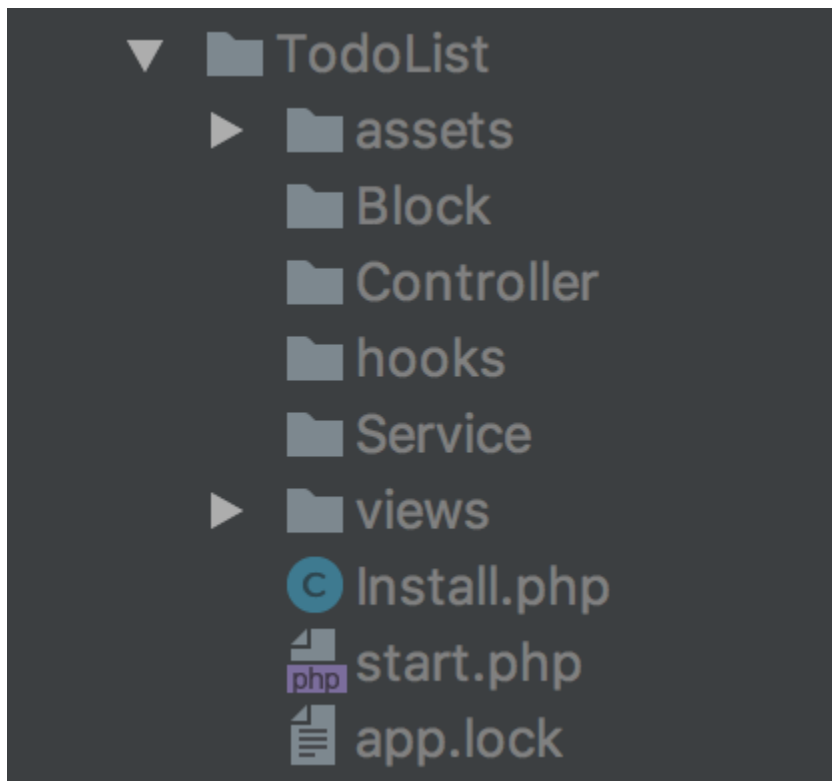
phpFox separates application structure to **App**. App provides new functions, gives new **blocks** that administrators put into template, integrate phpFox with external platforms etc Amazon S3, and even modify the way phpFox platform works.

Creating a New App

The best way to get things started is to create a small app showing the most common API functions we use. Our example is creating a **ToDoList**, it's a simple **todolist** application, allow members share to do lists.

To create an app, go to AdminCP -> Apps -> Installed -> Actions dropdown -> New App -> put **YOUR_APP_ID** on the popup -> Click submit. Then check the folder `/PF.Site/Apps/YOUR_APP_ID/`, you will see some default files and folders there.

APP_ID is the name of your application



Describe App Structure

- **Ajax**: This directory contains Ajax handler classes
- **assets**: This directory contains raw assets such as the images, css, javascript, ...
- **Block**: This directory contains **block** classes
- **Controller**: This directory contains **controller** classes
- **Service**: This directory contains **service** classes
- **hooks**: This directory contains **plugin** scripts
- **views**: This directory contain template scripts
- **phrase.json**: This file declares language phrases
- **icon.png**: This is icon of your app
- **Install.php**: This file contains installation script of your app
- **start.php**: This file contains bootstrap scripts.

In some cases, you will have to modify permissions of these folder to be able to put your code in them.

Write Your First Controller

Add new **IndexController.php** file under directory **/PF.Site/Apps/ToDoList/Controller/** paste example code.

```
<?php

namespace Apps\ToDoList\Controller;

// Index controller must be child of \Phpfox_Component class.

class IndexController extends \Phpfox_Component
{
    public function process()
    {
        // Get phpFox core template service
        $template = $this->template();

        // set view title
        $template->setTitle('To Do List');

        // set view breadcrumb

        // get url
        $url = $this->url()->makeUrl('to-do-list');

        $template->setBreadCrumb('To Do List',$url);

        // add your section menus
        $template->buildSectionMenu('to-do-list', [
            'Browse' => $this->url()->makeUrl('/to-do-list'),
            'Create' => $this->url()->makeUrl('/to-do-list/add'),
        ]);
    }
}
```

Add new template file **index.html.php** under **/PF.Site/Apps/ToDoList/views/controller,** paste following code

```
<p>Hello, to do list home page</p>
```

Now we define **route** to define configurations, edit **start.php**, paste following code.

```

<?php

namespace Apps\ToDoList;

// Load phpFox module service instance, this is core of phpFox service,
// module service contains your app configuration.
$module = \Phpfox_Module::instance();

// Instead of \Apps\FirstApp every where. Let register an alias first_app that map to our app.
$module->addAliasNames('todo', 'ToDoList');

// Register your controller here
$module->addComponentNames('controller', [
    'todo.index' => Controller\IndexController::class,
]);

// Register template directory
$module->addTemplateDirs([
    'todo' => PHPFOX_DIR_SITE_APPS . 'ToDoList/views',
]);

route('to-do-list',function (){
    \Phpfox_Module::instance()->dispatch('todo.index');
    return 'controller';
});

```

*All your php classes must have namespace **Apps\ToDoList**, This help the autoloader knows where to load scripts.*

*There is a rule of naming things: if you want to create a controller named **Index**, you should name the php file as **IndexController.php**; in **Start.php**, the route should be **book.index** the template file should be **index.html.php** (the first part of template file's name must be the same as the last part of the route - index)*

Open browse, in address bar append **/index.php/to-do-list/**, then see the result.

Browse Create

To Do List

Hello, to do list home page

Add Main Menu

Main menu will be added automatically by phpFox, edit Install.php,

update function setAlias

```
<?php
protected function setAlias()
{
    $this->alias = 'todo';
}
```

update function setOthers

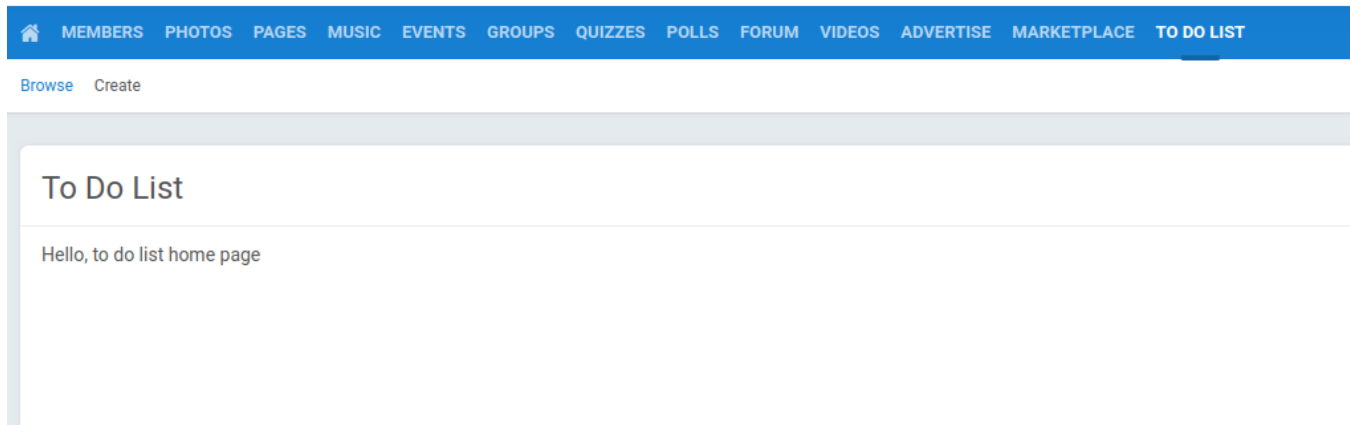
```
<?php
protected function setOthers()
{
    //add the menu for your app
    $this->menu = [
        "name" => "To Do List", // Menu label
        "url" => "/to-do-list", // Menu Url
        "icon" => "tasks" // Menu icons, see http://fontawesome.io/icons/
    ];
}
```

In case you want to use a defined phrase for menu label, you can use the below script:

```
<?php
$this->menu = [
    "phrase_var_name" => "menu_to_do_list", // Var name for the phrase of menu
    "url" => "/to-do-list", // Menu Url
    "icon" => "tasks" // Menu icons, see http://fontawesome.io/icons/
];
```

*Another way to use defined phrases is using **phrase.json** file, see detailed document [here](#)*

Then update your app to apply your modification. ([how to update app configurations](#))
Open browser again, see result:



Add Buttons

Buttons menu is handled by **Template** service, you can get template service from anywhere by using **Phpfox::getLib('template')**, within controller, service you can invoke method `template()` to get the Template service.

pasted code into `IndexController.php`

```
$template->menu('Add To Do', $this->url()->makeUrl('/to-do-list/add'));
```



To Do List

Hello, to do list home page

Click on **ADD TO DO**, a not found page will be shown, The next chapter will guide you how to create new controller to handle **Add** process, show input form about to do list task, store item to database.

[Next Chapter](#)