



Images Processor Bot

The goal of task is to test your php skills. Please write your “best code” to get the best contract.

Introduction

The task is to write a command line script - Bot. It downloads images from the Internet.

The workflow should be divided into the following independent steps:

- Schedule list of images to be downloaded.
- Download image and save to local storage.

Each step works with its own queue, e.g. `scheduler` adds new URLs to `download` queue, `downloader` takes URL from `download` queue and saves files.

After all there are the following queues:

- `download` - URLs ready to be downloaded.
- `done` - completed URLs.
- `failed` - failed URLs.

If step fails it should move URL to `failed` queue. For example, if image could not be downloaded right now (e.g. due to network problems) corresponding task should be moved to `failed` queue.

Requirements

- Code should be uploaded to public github or bitbucket repository.
- Code format should conform [PSR-2](#).
- There should be `composer.json` file with list of external dependencies and autoloading rules.
- Bot should work under any Linux operation system.
- Feel free to choose any storage for queues, e.g. RabbitMQ, beanstalkd or any relational database. It should be easy to install it on test machine.



CLI Script

Bot should be implemented as a PHP command line script named `bot`.

```
$ bot
```

Description of commands are listed below in this section.

Scheduler

Accepts a file with list of URLs to download and schedule them for download, i.e. adds to `download` queue. Only `http` and `https` protocols are supported. If URL is malformed then add it to `failed` queue instead.

```
$ bot schedule images.txt
```

File `images.txt` contains list of links, one per line:

```
http://www.example.com/image1.jpg
https://example.net/image2.png
http://example.org/image.php?id=123&size=small
```

Downloader

Downloads images from the `download` queue to local temporary folder. If image is not available moves URL to `failed` queue. May rename downloaded image if necessary.

```
$ bot download
```