

Micro-Web-Framework Challenge

There is no time limit but we recommend **not to spend more than a working day (8 hours)** on it.
However, in the past, this test took about 4 hours and above to complete.

Build a REST service (the "Service") that fulfills these few things:

Story 1

In order to store and use my pictures online (or through a "Service"),
As an Anonymous user,

I want to attach a picture to the Service,
And I want to have a permanent link to this picture,
Otherwise, I want to be rejected and informed if the file is not a picture.

Please remember to:

1. **Use other but your best language** to build the Service. Unless stated otherwise.
 - a. Extra points for using something new that you are unfamiliar with.
2. Use (but not limited to) one of these micro web frameworks:
 - a. Spark for Java
 - b. ExpressJS or Geddy for JavaScript
 - c. Silex for PHP
 - d. Flask or Bottle for Python
 - e. Camping or Sinatra for Ruby
 - f. Nancy for .NET
3. Create a GitHub **private** repository, share it with the following GitHub users:
 - a. kaifung.chong@servicerocket.com
 - b. pakwai.choong@servicerocket.com
 - c. yijack.yau@servicerocket.com
4. Read the definition of micro web framework here:
<http://stackoverflow.com/q/6784007/36397>.
5. Push your code once completed Story 1.
6. Write some tests. You could write unit and integration tests, or both. Optionally, you could move on to the next (either #2.1 or #2.2) story, but it is very much well-advised to have tests for any code you write.
7. Push your code once completed Story 2.
8. Please describe in the README the difference for the solution to handle average daily call count 5, 5K and 100K.
9. End the interview by giving a demonstration to the team and explaining the journey and code.

Enhance the service with the following capability:

Story 2.1

In order to save my time from uploading my pictures multiple times via the Service:

As an Anonymous user,

I want to attach a zip file containing images,

And I want each of these uploaded images to have a permanent link.

Enhance the service with the following capability:

Story 2.2

In order to use my uploaded images at different sizes (thumbnails):

As an Anonymous user,

As an Anonymous user, I want to have thumbnails returned for any uploaded images which sizes are equal to or larger than 128px by 128px

- If the uploaded image is smaller than 128px by 128px, no thumbnails should be generated. Just return the original image as the thumbnail.
- If the uploaded image is equal to or larger than 128px by 128px, two thumbnails should be generated - one 32px wide and the other 64px wide. Thumbnails must retain the original aspect ratio. For example, an uploaded image of 128 px by 160px should generate thumbnails 32 px by 40px and 64px by 80px.
- Thumbnails must respect the uploaded image's aspect ratio.