

Take Home Challenge: API

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1 Task

Please design and implement a web based API that steps through the Fibonacci sequence.

The API must expose 3 endpoints that can be called via HTTP requests:

- current - returns the current number in the sequence
- next - returns the next number in the sequence
- previous - returns the previous number in the sequence

1.1 Example

```
current  -> 0
next     -> 1
next     -> 1
next     -> 2
previous -> 1
```

1.2 Requirements

- The API must be able to handle high throughput (1k requests per second).
- The API should also be able to recover and restart if it unexpectedly crashes.
- Assume that the API will be running on a small machine with 1 CPU and 512MB of RAM.
- You may use any programming language/framework of your choice.