# Encryption API

**Time: 3h**

## Requirements

Create an application that will expose REST APIs that allow encrypting and decrypting the content passed a payload. The API end points are:

## Encryption

- Request:
  - POST /encrypt
- Payload:
  - data: [{
    text: “Message to encrypt.”
    }, {
    text: “Second message to encrypt.”
    }]
- Response:
  - data: [{
    encrypted: “…”
    }, {
    encrypted: “…”
    }]

You can chose the encryption algorythm of your choice. Some popular ones are:

- AES
- DES
- Blowfish

The encrypted data should be of type String. If the encryption generates an array of bytes, you can convert them using Base-64 encoding.

## Decryption

- Request:
  - POST /decrypt
- Payload:
  - data: [{
    encrypted: “…”
    }, {
    encrypted: “…”
    }]
- Response:
  - data: [{
    text: “Message to encrypt.”
    }, {
    text: “Second message to encrypt.”
    }]

## Acceptance criteria

These are the items you have to deliver:

1. Source code uploaded to GitHub
2. Unit Test with 80% test coverage
3. Integration Test coverage
4. README document explaining how to compile and run your code

## Marking criteria

What you'll be evaluated on:

- Functionality: the code compiles, runs, and satisfies the given requirements
- SOLID principles
- Code cleanliness and readability
- Unit test coverage
- Integration test coverage
- Documentation:
  - Useful comments in the code
  - README file that explains how to run your code

## Tools and language

You can use your own laptop or use the provided ones.

You can use internet (Google, StackOverflow, technet...) but be mindful to not copy code as-is. Create your own structure.

You can ask for help to the Agoda staff, in particular if you are stuck in getting started.

## Tips

- Focus on the class design, interfaces of functionality first.
- Once it's done then work on implementation, input parsing, serving result
- Try using meaningful names for classes, variables, methods, etc.
- Edge cases handling is a plus.
- If in doubt, please ask for clarification.