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# System Requirements Specification Index

For

**FastAPI**

Version 1.0

**Problem Statement** : CRUD operations using FastAPI.

**Description** : This assessment contains various methods to test FastAPI.

The solution contains the following folder structure.

```
fastAPI |  
        |--main.py  
        |--tests – contains unit testcases for the solution  
        |-- requirements.txt
```

### main.py:

Create an app where you can add recipes to the database of your choice, the structure of the database is as simple as:

id: int

recipe: string

Create following CRUD APIs.

### CREATE

define your create recipe function at API `"/recipe"`, given a recipe string create the recipe in any persistent storage and return the created recipe json `{"id": id, "recipe": recipe}`

### READ

define your get recipe function at API `"/recipe/{id}"`, given a recipe id return a recipe json `{"id": id, "recipe": recipe}`

### UPDATE

define your update recipe function at API `"/recipe/{id}"`, given a recipe id and a new recipe string(recipe\_update), update the recipe string of recipe(id) and return new updated recipe json `{"id": id, "recipe": recipe}`

return a recipe json `{"id": id, "recipe": recipe}`

### DELETE

define your delete recipe function at API `"/recipe/{id}"`, given a recipe id delete the recipe with id=id.

**PS:** Return HTTP status\_code 410 in case of any exceptions or failures.

## Execution Steps to Follow:

1. Open python terminal from Terminal option, make sure you are running with python>=3.6 and have the latest **pip** installed.

2. To run application for use case use following command(please install other python packages as you need)

a) cd into project folder<fastAPI>

b) pip install -r requirements.txt --user

c) uvicorn main:app --reload

you can debug your APIs in Swagger UI.

d) (optional)install any required libraries by – pip install pymodule --user

3. Once you implement all methods, do

a) pip-chill --no-version >> requirements.txt

4. On command prompt, cd into your project folder (cd <fastAPI>), before running unit tests, do

pip install -r requirements.txt --user

5. **Mandatory:** Before final submission run the following command:

a) cd into project folder<fastAPI>

b) python -m pytest tests

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