

# Developer Application Test Python API

Create a RESTful microservice to create TODO lists and entries.

## Acceptance Criteria

- HTTP endpoint to create a new Todo list
- HTTP endpoint to fetch one existing Todo list
- HTTP endpoint to fetch a list of all existing Todo lists
- HTTP endpoint to modify an existing Todo list
- HTTP endpoint to delete an existing Todo list
- HTTP endpoint to create a new Todo item in a Todo list
- HTTP endpoint to delete a Todo item from a Todo list
- HTTP endpoint to update a Todo item in a Todo list
- JSON requests and responses
- Documentation for initializing the runtime environment, a list of shell commands is sufficient
- Documentation for starting the service, a list of shell commands is sufficient
- Documentation for required configuration, naming the file and configuration variables is sufficient
- Basic Python package structure, including requirements
- Expressive, self documenting code
- Consistent naming of variables, functions, classes, URLs
- Todo lists have a name
- Todo items have: text, due date, finished status
- Todo items never exist without a corresponding Todo list
- MongoDB as storage

## Evaluation Criteria

- Code structure and expression.  
How readable is the code to an experienced Python developer unfamiliar with the problem?  
How pragmatic is the code, is it overengineered/too simplistic?
- Use of third-party libraries.  
Have common libraries been used in a manner sufficient to solve the issue?
- Basic Python skills.  
Does this person have working Python skills?
- Grasp of basic concepts of RESTful, JSON, MongoDB.  
Does this person have basic knowledge of these concepts and can apply them to solve problems?
- Documentation  
Can this person communicate the essentials to other developers?

## Timeframe

This is more a guideline to indicate the scope of the expected solution. IT IS NOT PART OF THE EVALUATION CRITERIA.  
A fulltime experienced Python developer should not need more than 10 man-hours total to fulfill these criteria in their basic form.