**You are given a project to demonstrate RESTful with Spring Boot.**

**package** com.example.demo.model;

**public** **class** Todo {

**private** Long id;

**private** String title;

**private** **boolean** completed;

**public** Long getId() {

**return** id;

}

**public** **void** setId(Long id) {

**this**.id = id;

}

**public** String getTitle() {

**return** title;

}

**public** **void** setTitle(String title) {

**this**.title = title;

}

**public** **boolean** isCompleted() {

**return** completed;

}

**public** **void** setCompleted(**boolean** completed) {

**this**.completed = completed;

}

}

**public** Todo() {

}

**public** Todo(Long id, String title, **boolean** completed) {

**this**.id = id;

**this**.title = title;

**this**.completed = completed;

}

**package** com.example.demo.controller;

**import** com.example.demo.model.Todo;

**import** org.springframework.web.bind.annotation.\*;

**import** java.util.ArrayList;

**import** java.util.List;

@RestController

@RequestMapping("/api/todos")

**public** **class** TodoController {

**private** List<Todo> todos = **new** ArrayList<>();

**private** **long** nextId = 1;

@GetMapping

**public** List<Todo> getAllTodos() {

**return** todos;

}

@PostMapping

**public** Todo createTodo(@RequestBody Todo todo) {

todo.setId(nextId++);

todos.add(todo);

**return** todo;

}

@GetMapping("/{id}")

**public** Todo getTodoById(@PathVariable Long id) {

**return** todos.stream()

.filter(todo -> todo.getId().equals(id))

.findFirst()

.orElse(**null**);

}

@PutMapping("/{id}")

**public** Todo updateTodo(@PathVariable Long id, @RequestBody Todo updatedTodo) {

**for** (**int** i = 0; i < todos.size(); i++) {

Todo todo = todos.get(i);

**if** (todo.getId().equals(id)) {

updatedTodo.setId(todo.getId());

todos.set(i, updatedTodo);

**return** updatedTodo;

}

}

**return** **null**;

}

@DeleteMapping("/{id}")

**public** **void** deleteTodo(@PathVariable Long id) {

todos.removeIf(todo -> todo.getId().equals(id));

}

}