



## Build a smart elevator control panel in React & API in Python

The control panel is outside a bank of elevators.

Build an interface to complete the following user journey

As a user looking at the control panel

I see a list of buttons with available floor numbers

When I press a floor number.

Then the number elevator to take is displayed and an arrow pointing in the direction of the elevator displayed.

### Requirements:

The control panel must be useable in sequence (i.e. multiple passengers choosing different destinations shortly after each other)

The user must be able to select any destination.

The previously requested destinations and elevators should be displayed until the elevator has arrived and left.

Must be designed to work with the API shown below. There may be multiple control panels per bank of elevators There will be multiple Elevators per floor.

Not all elevators will service all floors.

### Design:

The design of the panel is up to you.

### Smart Elevator API

Request elevator destination.

POST /api/lift/request/

Example Payload {"from\_floor": 0, "to\_floor": 5} Example Response

```
{"lift":4}
```

Request Elevator status's

GET /api/lift/status/

Example Response

```
{ "lifts": { 0: {  
  "floor": 0, "destinations": [1, 5, 10]  
}, 1: {  
  "floor": 0, "destinations": [1, 10]  
}, }  
}  
Request Elevator configuration
```

GET /api/lift/config/

```
{ "lifts": { 0: {  
  "serviced_floors": [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]  
}, 1: {  
  "serviced_floors": [0, 7, 8, 9, 10]  
}, }  
}
```

## Smart Elevator Movement

The optimisation of the elevator movement is not important, but should be simulated in some way.

## Configuration

Configuration of the elevators can be done in any way you choose.

Any questions email me [chris.delaney@digitalis.com](mailto:chris.delaney@digitalis.com)