

Midnite Take Home

At Midnite, we aim to provide safety nets for our users to ensure they are using our platform responsibly, one such system notifies us of any unusual activity. For this reason, you've been tasked with creating an endpoint which will receive a payload representing a user's action.

This endpoint should be called `/event` and can expect the following payload:

```
{
  "type": "deposit",
  "amount": "42.00",
  "user_id": 1,
  "t": 10
}
```

- `type` is either `deposit` or `withdraw`.
- `user_id` represents a unique user.
- `t` denotes the second we receive the payload, this will always be increasing and unique.

The endpoint should respond as follows:

```
{
  "alert": true,
  "alert_codes": [30, 123],
  "user_id": 1
}
```

Given the following set of rules, if the user meets these criteria, add the code to the `alert_codes`. If `alert_codes` is empty, `alert` should be `false`, otherwise `true`. `alert_codes` can be provided in any order. Always provide the `user_id` in the response payload.

- Code: `1100` : A withdraw amount over 100
- Code: `30` : 3 consecutive withdrawals
- Code: `300` : 3 consecutive increasing deposits (ignoring withdrawals)
- Code: `123` : Accumulative deposit amount over a window of 30 seconds is over 200

Submission

Please provide a file and README containing instructions on how to run your server.

You are welcome to include a description of any issues you encounter.

Curl Example

```
curl -XPOST http://127.0.0.1:5000/event -H 'Content-Type: application/json' \
  -d '{"type": "deposit", "amount": "42.00", "user_id": 1, "t": 0}'
```