

Notification scheduling system

Your task is to develop a system that creates a schedule of notifications based on the criteria described below. Expected development time: half of a day.

General requirements for the system:

- Schedule should be created using web API
- Given company information, create notification schedule (see below for details)
- Each company should have its own notification schedule, which is created based on the general rules listed below. Schedule must be saved in the database.
- Create an endpoint that returns company information with its list of notifications based on the company entity ID.
 - Only notification sending date should be provided. It should be formatted as “DD/MM/YYYY”.
 - Do not return any company information except the entity ID

Business requirements:

- Company information consists of the following parts: entity ID, company name, company number (10 numeric-only symbols), *company type*, *market*.
 - *Company type*: small, medium, large
 - *Market*: Denmark, Norway, Sweden, Finland
- Company *may* have a notification schedule – a list of notifications
- For the sake of simplicity, notification has only a sending date. Sending date is calculated by the rules below, starting from the day of creating the schedule
- Schedule requirements:
 - Denmark: 5 notifications (sent on days: 1, 5, 10, 15, 20), **all** company types
 - Norway: 4 notifications (sent on days: 1, 5, 10, 20), **all** company types
 - Sweden: 4 notifications (sent on days: 1, 7, 14, 28), only for **small and medium companies**
 - Finland: 5 notifications (sent on days: 1, 5, 10, 15, 20), only for **large companies**
- Given a company, whose type is not supported by the rules above, its information should still be saved in the database, however, no schedule should be created.

Example:

Given the company data: Denmark, small company, company number “0123456789”, Id “aad7a630-af1c-4952-9cb4-44b8b847853b”. Creation/call date: 2021-01-01

The following schedule should be created:

Notification	Send date
1	2021-01-02
2	2021-01-06
3	2021-01-11
4	2021-01-16
5	2021-01-21

Data returned from endpoint:

```
{
  "companyId": "aad7a630-af1c-4952-9cb4-44b8b847853b",
  "notifications": [
    "02/01/2021",
    "06/01/2021",
    "11/01/2021",
    "16/01/2021",
    "21/01/2021"
  ]
}
```