

Permission Dependency Resolver

Your task is to write a class that will resolve dependencies for user permissions. For example, if you wish to grant a user the `edit` permission, they need to already have the `view` permission. In this challenge, that would be encoded as follows:

```
{
  "view" => [],
  "edit" => ["view"]
}
```

This means that the `view` permission has no dependencies (hence the empty array), whereas the `edit` permission is dependent on the `view` permission, and can't be added to a user unless `view` is present.

The class you write must take an object like the one shown above as the only argument in its constructor. The class must implement the following three functions:

`can_grant?(existing, perm_to_be_granted)`

This function determines whether a permission can be granted, given that a user already has existing permissions. The parameter `existing` will be an array of strings representing permissions already granted, and `perm_to_be_granted` is a string representing the permission we wish to grant. It should return `true` if the permission can be granted and `false` if not.

`can_deny?(existing, perm_to_be_denied)`

This function whether a permission can be denied (removed), and still satisfy all dependencies of the other permissions. For example if a user has `view` and `edit` permissions, it should not be possible to remove the `view` permission since `edit` depends on it. The parameter `existing` will be an array of strings representing permissions already granted, and `perm_to_be_denied` is a string representing the permission we wish to deny. It should return `true` if the permission can be denied and `false` if not.

`sort(permissions)`

This function should sort a given list of permissions into the order that they should be granted to satisfy dependencies. For example, if we sort `view` and `edit` permissions, `view` must come before `edit`, since `edit` depends on `view` already being granted. The parameter `permissions` is an array of strings representing the permissions to sort. The function should return an array of the given permissions in dependency order.

To run the specs, run `bundle install`, and then run `rspec` in the project directory.