

Application Plan Sketch

1. Name of the application

MUBIA – Multi Business Access

2. Goals of the application

- ⑩ Providing access to a building with multiple offices
- ⑩ Achieving greater security
- ⑩ Providing useful information for employers
- ⑩ Facilitate accounting

3. Target audience

- ⑩ Employers
- ⑩ Employees
- ⑩ Building administrator
- ⑩ Security staff

4. User interactions



Employee

- ⑩ access the building (check in)
- ⑩ exit the building (check out)
- ⑩ go on vacation
- ⑩ ask for assistance



Employer

- ⑩ manage a company (update)
- ⑩ manage the companies employees (add/update/remove)
- ⑩ get information (charts , notifications) about employees



Security staff

- ⑩ grant/revoke access from users
- ⑩ get information about users (check in/out timestamps)
- ⑩ get notifications (when users ask for assistance)
- ⑩ open/lock the system



Building administrator

- ⑩ manage companies (add/remove)
- ⑩ manage employers (add/remove)
- ⑩ manage security staff (add/remove)
- ⑩ get information (charts, notifications) about companies

5. Back-end technologies

1. PHP
2. Laravel 7.x framework
3. MySQL
4. ??
5. ??

6. Front-end technologies

1. HTML
2. CSS
3. JavaScript
4. ??
5. ??

7. Database tables

Employees

- id
- name
- password
- company_id
- has_access
- checked_in
- checked_out
- on_vacation

Employers

- id
- name
- password
- company_id
- admin_id
- has_access

Administrators

- id
- name
- password

Securitymembers

- id

- name
- password
- admin_id
- system_opened
- system_locked

Companies

- id
- name
- admin_id

8. Database relations (Eloquent)

- ⑩ an employee **belongsTo** a company
- ⑩ a company **hasMany** employees
- ⑩ an employer **hasOne** company
- ⑩ a company **hasMany** employers
- ⑩ an employee **hasMany** employers Through company
- ⑩ a company **hasOne** administrator
- ⑩ an employer **hasOne** administrator
- ⑩ a security member **hasOne** administrator
- ⑩ an administrator **belongsToMany** companies
- ⑩ an administrator **belongsToMany** employers
- ⑩ an administrator **belongsToMany** security members

9. Database Schema Design

