



UNIVERZITET U SARAJEVU
ELEKTROTEHNIČKI FAKULTET U SARAJEVU
ODSJEK ZA RAČUNARSTVO I INFORMATIKU
NAPREDNE WEB TEHNOLOGIJE



PROJEKTNA DOKUMENTACIJA

Out Of Office

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Grupa:

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Dalila Ćorović

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Nudžejma Pozder

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ZADATAK 1

Kratak opis aplikacije

Out Of Office je softversko rješenje koje realizuje ideju jednostavnijeg praćenja zahtjeva za odsustvom uposlenika neke kompanije. Aplikacija će u inicijalnoj implementaciji imati dvije role: admin i uposlenik. Admin će imati mogućnosti manuelnog upravljanja listom uposlenika, pregleda zahtjeva te odobravanja, odnosno poništavanja zahtjeva za odsustvom. Sa druge strane, uposlenik može da kreira zahtjev za odsustvom, otkáže ili edituje isti.

Suštinska prednost za obje role će biti mogućnost praćenja svih iskorištenih i preostalih slobodnih dana. Ovo softversko rješenje će biti funkcionalno i efikasno sa aspekta lakše i bolje organizacije godišnjih odmora, odsustva sa projekata, bolovanja, porodijskih, smrtnih slučajeva i slično.

Specifikacija funkcionalnih zahtjeva

Prioriteti: 0 - core prioritet

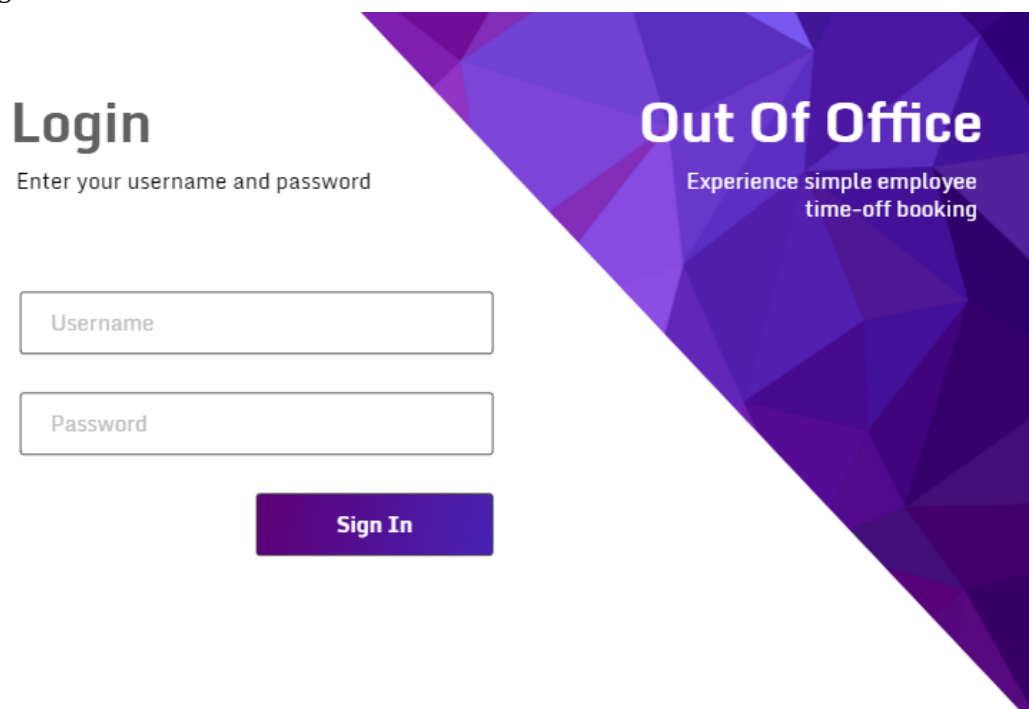
1 - side prioritet

	FUNKCIONALNI ZAHTJEV - ADMIN	OPIS FUNKCIONALNIH ZAHTJEVA	Prioritet
1.	Login	Za pristup aplikaciji Out Of Office neophodno je unijeti validne Admin podatke.	0
2.	Pregled svih zaposlenika	Mogućnost pregleda liste zaposlenika, te filtriranje iste pretragom (eng. search).	0
3.	Pregled profila zaposlenika	Mogućnost pregleda profila zaposlenika klikom na zaposlenika iz liste zaposlenika. Profil zaposlenika sadrži sve informacije o iskorištenim i preostalim slobodnim danima.	1
4.	Pregled aktivnih zahtjeva	Pregleda aktivne liste zahtjeva za odsustvom. Admin ima mogućnosti dopuštanja ili odbijanja podnesenih zahtjeva.	0
5.	Dodavanje uposlenika u sistem	Dodavanje novih zaposlenika u sistem i kreiranje inicijalnog username-a i pw za novog zaposlenika.	1
6.	Brisanje uposlenika iz sistema	Brisanje uposlenika koji napuštaju kompaniju iz liste uposlenika.	1
7.	Odobranje/poništanje zahtjeva	Mogućnost prihvatanja zahtjeva određenog zaposlenika iz liste zahtjeva, odnosno poništavanja istog. U slučaju poništavanja zahtjeva adminu je omogućeno da ostavi komentar.	0
8.	Notifikacija o novom zahtjevu	Mogućnost pristizanja notifikacije pri kreiranju novog zahtjeva od strane zaposlenika.	1
9.	Unos praznika	Admin unosi u sistem sve godišnje praznike	1
10.	Ograničenje odsustva po departmentu	Unos ograničenja odsutnih zaposlenika po departmentu.	1
11.	Logout	Odjava sa profila	1

	FUNKCIONALNI ZAHTEJ - ZAPOSLENI	OPIS FUNKCIONALNIH ZAHTEJEVA	Prioritet
1.	Login	Za pristup aplikaciji Out Of Office neophodno je unijeti validne podatke Zaposlenika.	0
2.	Pregled iskorištenih slobodnih dana tekuće godine	Pregled iskorištenih dana, te broja preostalih slobodnih dana iz tekuće godine.	1
3.	Odabir vjerskih praznika	Obzirom da svi zaposleni ne slave sve iste praznike, bit će mogućnost odabira praznika koje zaposlenici slave.	1
4.	Zahtjev za odsustvo	Mogućnost podnošenja zahtjeva za odsustvom u formatu željenog datuma početka i kraja, unošenja vrste odsustva i komentara uz zahtjev.	0
5.	Notifikacija o obradi zahtjeva od strane admina	Mogućnost pristizanja notifikacije pri odobravanju/poništanju istog od strane admina.	1
6.	Notifikacija članovima departmana o odobrenom odsustvu nekog člana departmana	Kada je jednom članu departmana odobreno odsustvo u određenom periodu, svim ostalim članovima istog departmana stiže notifikacija.	1
7.	Notifikacija o nadolazećem prazniku	Nekoliko dana prije praznika zaposlenik dobija obavještenje o nadolazećem prazniku.	1
8.	Pregled obrađenog zahtjeva	U slučaju odbijenog zahtjeva moguće je vidjeti ostavljene komentare od strane admina. Kao i eventualne komentare u slučaju odobravanja istog.	1
9.	Pregled podnesenih zahtjeva/pending	Mogućnost editovanja zahtjeva dok je još uvijek neobrađen (odnosno na čekanju) ili otkazivanje istog (eng. cancel). Status zahtjeva ima tri stanja: odobreno, odbijeno ili na čekanju.	0
10.	Editovanje korisničkih podataka	Korisnik može promijeniti svoj password jer mu inicijalni kreira admin.	1
11.	Logout	Odjava sa profila	1

Korisnički interfejsi

1. Login forma



The login form is titled "Login" and includes the instruction "Enter your username and password". It features two input fields: "Username" and "Password". Below these fields is a purple "Sign In" button. To the right of the form is a large purple graphic with the text "Out Of Office" and "Experience simple employee time-off booking".

Login

Enter your username and password

Username

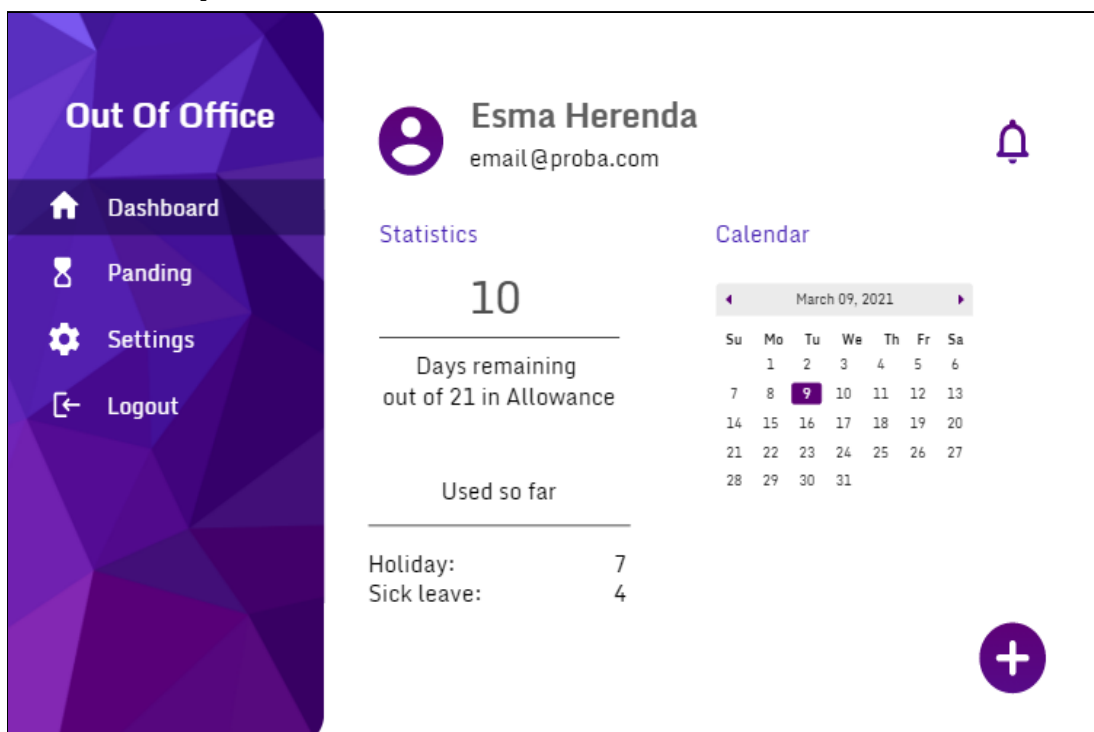
Password

Sign In

Out Of Office

Experience simple employee time-off booking

2. Dashboard zaposlenika



The dashboard for Esma Herenda (email@proba.com) features a sidebar with navigation links: Dashboard, Pending, Settings, and Logout. The main content area displays statistics for "Days remaining out of 21 in Allowance", showing 10 days remaining and 7 days used so far. It also includes a calendar for March 09, 2021, and a section for "Holiday" and "Sick leave".

Out Of Office

Dashboard

Pending

Settings

Logout

Esma Herenda
email@proba.com

Statistics

10

Days remaining
out of 21 in Allowance

Used so far

Holiday: 7
Sick leave: 4

Calendar

March 09, 2021

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

+

3. Zahtjev za odsustvo forma

The screenshot shows a modal window titled "Create new leave request" overlaid on the "Out of Office" application interface. The modal contains the following fields and controls:

- Start date:** A date input field with the value "03/09/2021" and a calendar icon.
- End date:** A date input field with the value "13/09/2021" and a calendar icon.
- Leave type:** A dropdown menu with "Holiday" selected.
- Comment:** A large text area for entering a comment.
- Buttons:** "Cancel" (grey) and "Submit" (purple) buttons at the bottom.

The background application interface includes a sidebar with icons for Home, Pending, Settings, and Logout, and a main header area with the text "Out of Office". A purple plus icon is visible in the bottom right corner of the application area.

4. Editovanje korisničkih podataka

The screenshot shows the "Change your password" form within the "Out of Office" application. The interface includes a sidebar with navigation options: Dashboard, Pending, Settings, and Logout. The main content area displays the user's profile information and the password change form:

- User Profile:** A circular profile icon, the name "Esma Herenda", and the email address "email@proba.com".
- Notification:** A bell icon in the top right corner.
- Form Fields:** Four input fields labeled "Username", "Old password", "New password", and "Confirm new password".
- Buttons:** "Cancel" (grey) and "Change" (purple) buttons at the bottom.

A purple plus icon is located in the bottom right corner of the application area.

5. Pregled podnesenog zahtjeva/panding

Out Of Office

Dashboard

Panding

Settings

Logout

Esma Herenda

email@proba.com

Leave request

Type	Dates	Status	Action
Sick leave	From 2021-04-13 to 2021-04-15	Panding	<a>Edit <a>Cancel <a>Comment
Holiday	From 2021-01-01 to 2021-01-15	Approved	<a>Edit <a>Cancel <a>Comment

6. Pregled obrađenog zahtjeva

Out Of Office

Dashboard

Panding

Settings

Logout

Esma Herenda

Approved by: Belmin Divjan

It would be great if you could just send me your final report before you leave on vacation. Have a nice time and send us some good pictures.

7. Notifikacija o obradi zahtjeva

The screenshot shows the 'Out Of Office' dashboard for user Esma Herenda (email@proba.com). The left sidebar contains links to Dashboard, Pending, Settings, and Logout. The main content area displays 'Statistics' with a large number '10' and the text 'Days remaining out of 21 in Allowance'. Below this, it shows 'Used so far' with 'Holiday: 7' and 'Sick leave: 4'. A notification pop-up from Belmin Divjan states 'Leave request canceled. See comment'. A calendar snippet shows dates 28, 29, 30, and 31. A purple plus icon is at the bottom right.

8. Dashboard admina


The screenshot shows the 'Out Of Office' dashboard for user Dalila Ćorović (email@proba.com). The left sidebar includes links to Dashboard, Employees, Add employee, Requests, and Logout. The main content area is titled 'Employees leave records' and features two date range selectors: '01/02/2021' and '05/02/2021'. Below these is a table with columns for Employee name, Leave type, and Department.

Employee name	Leave type	Department
Dalila Ćorović	Holiday	Development
Nudžejma Pozder	Holiday	HR
Esma Herenda	Holiday	QA


9. Pregled liste zaposlenika

Out Of Office

- Dashboard
- Employees
- Add employee
- Requests
- Logout



Dalila Ćorović
email@proba.com




Employees list

Name	Department	Action
Mujo	Human resource	View Delete
Mujo	iOS	View Delete
Mujo Nekić	Quality assurance	View Delete

10. Pregled profila zaposlenika

Out Of Office

- Dashboard
- Employees
- Add employee
- Requests
- Logout



Esma Herenda
email@proba.com

[< Back](#)

Statistics

10

Days remaining
out of 21 in Allowance

Used so far

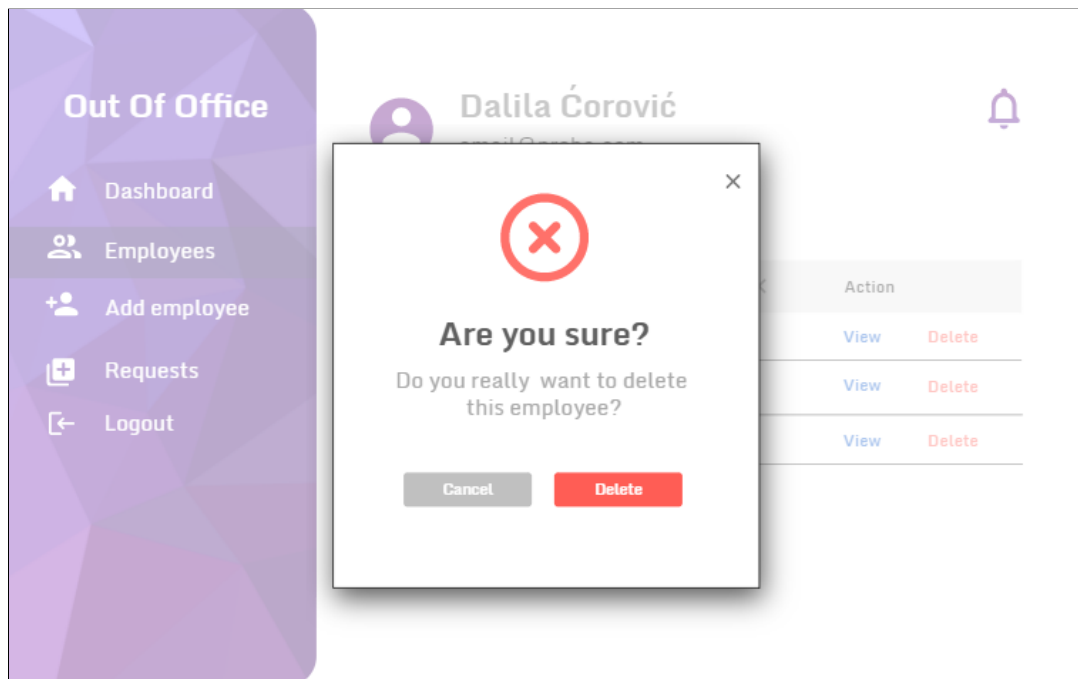
Holiday: 7
Sick leave: 4

Calendar

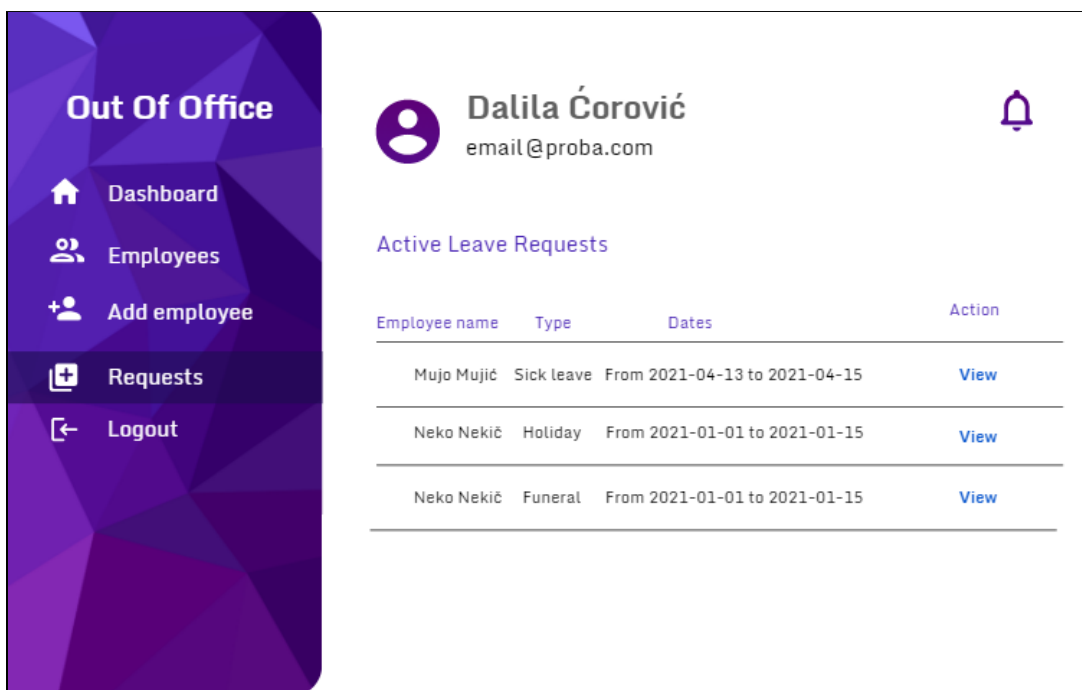
March 09, 2021

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

11. Brisanje zaposlenika



12. Pregled liste aktivnih zahtjeva - uradjeno



13. Pregled pojedinačnog zahtjeva

The screenshot shows the 'Out Of Office' application interface. A modal window is open for reviewing a leave request. The modal header displays the employee's name 'Nudžejma Pozder' and email 'email@proba.ba'. The request details are as follows:

Type	Dates
Sick leave	From 2021-04-13 to 2021-04-15

The 'Reason' section contains the text: 'It would be great if I could arrange my holiday on these dates. I will finish all tasks until then and send you my report regarding generator resolves.' Below the reason is a text input field labeled 'Leave comment'. At the bottom of the modal are two buttons: 'Reject' and 'Accept'. In the background, the application's sidebar is visible with options: Dashboard, Employees, Add employee, Requests, and Logout. A notification bell icon is in the top right corner.

14. Dodavanje novog zaposlenika u sistem

The screenshot shows the 'Out Of Office' application interface with the 'Add new employee' form. The header displays the user's name 'Dalila Ćorović' and email 'email@proba.com'. The form is titled 'Add new employee' and contains the following input fields:

First and last name	Telephone number
E-mail	Allowance
Personal ID number	Enter username
Job role	Enter password
Department	Confirm password

At the bottom of the form are two buttons: 'Cancel' and 'Add'. The sidebar on the left shows the navigation menu: Dashboard, Employees, Add employee, Requests, and Logout. A notification bell icon is in the top right corner.

15. Notifikacija o novom zahtjevu

Out Of Office

Dashboard

Employees

Add employee

Requests

Logout

Dalila Ćorović

email@proba.com

Employees leave records

01/02/2021

Employee name	Leave type	
Dalila Ćorović	Holiday	Development
Nudžejma Pozder	Holiday	HR
Esma Herenda	Holiday	QA

Nudžejma Pozder

New leave request.

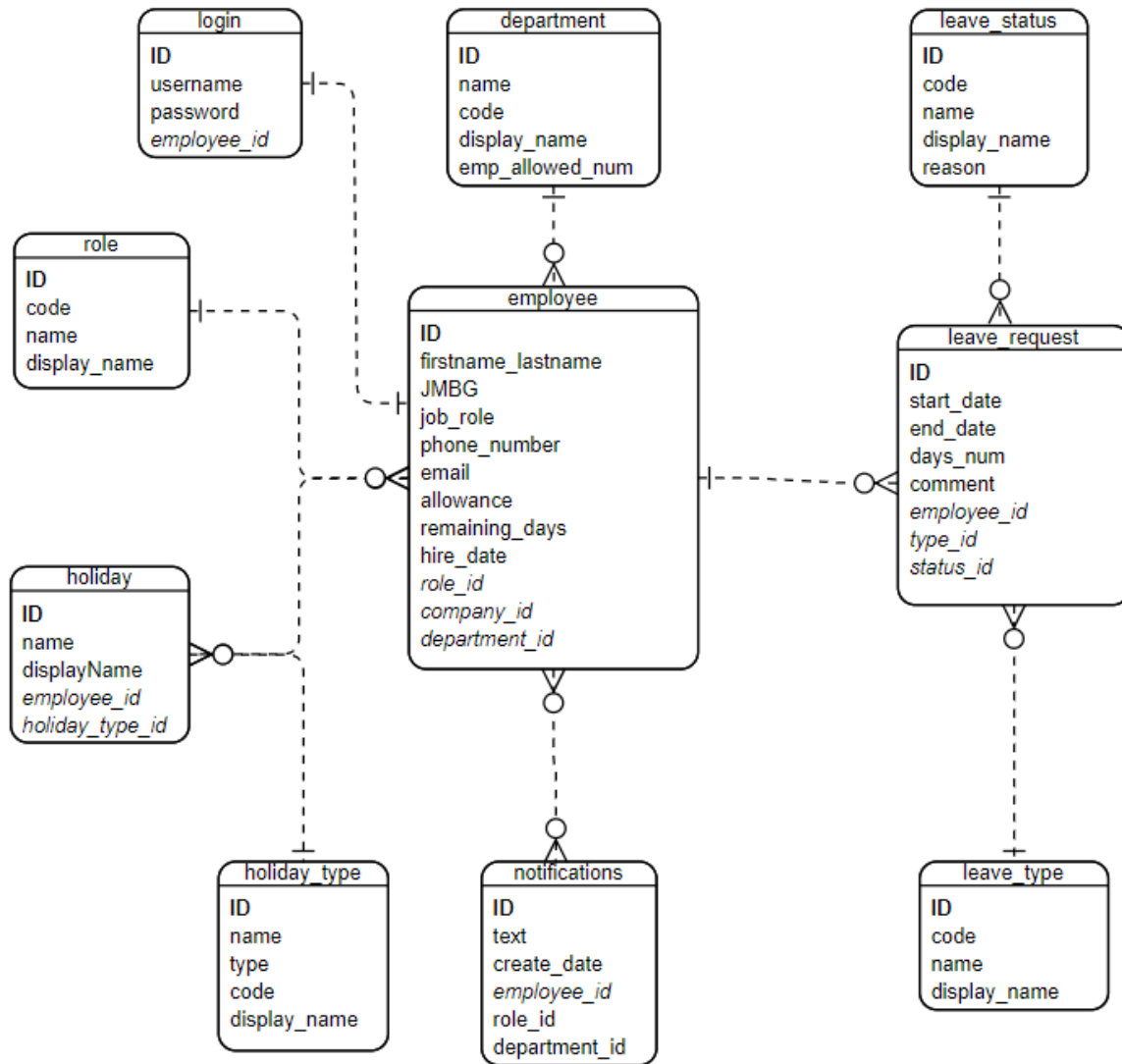
See details

Nudžejma Pozder

New leave request.

See details

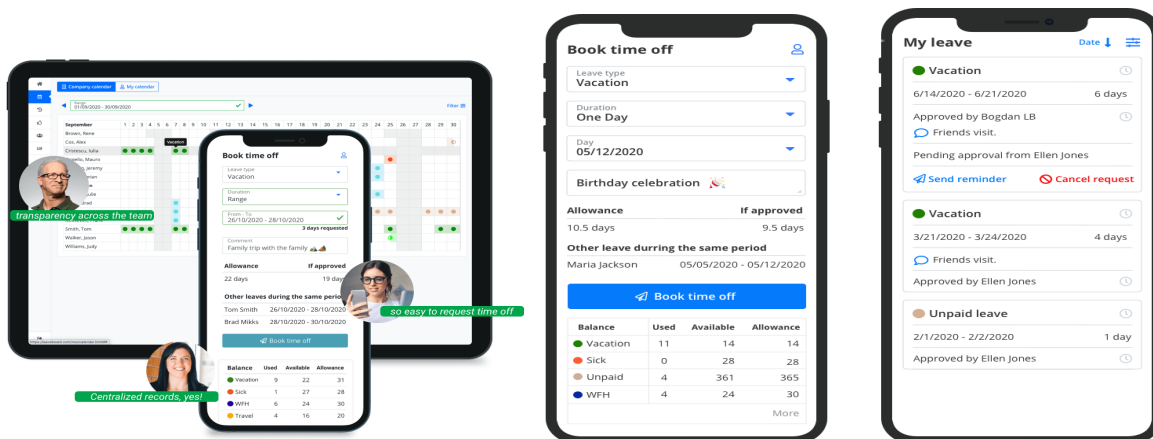
ERD diagram



Pregled sličnih rješenja

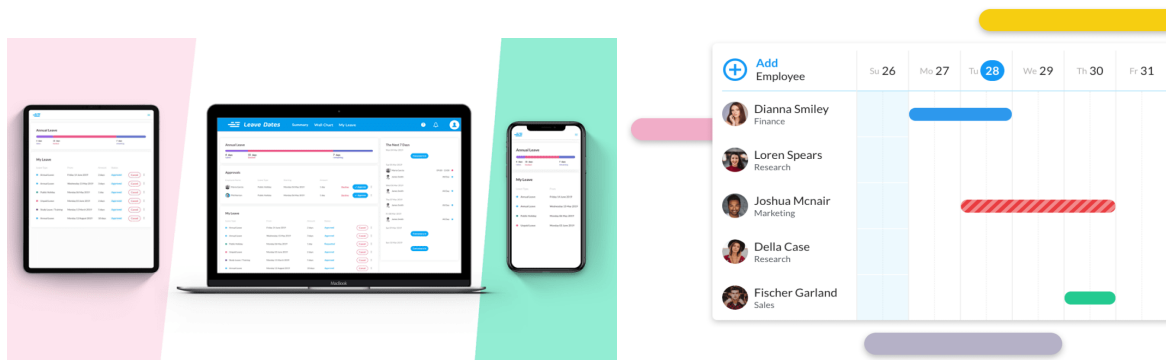
1. Aplikacija "LeaveBoard" (<https://leaveboard.com/>)

Aplikacija "LeaveBoard" automatizira i integrira postupak upravljanja odsustvom u sistemu koji omogućava kompanijama da učinkovito primjenjuju politike odsustva i smanjuju vrijeme i troškove povezane s produktivnošću radne snage.



2. Aplikacija "LeaveDates" (<https://www.leavedates.com/>)

Aplikacija koja osigurava da kompanija može nastaviti raditi bez problema kada neko od zaposlenika ima slobodne dane. Datumi odmora pomažu u planiranju i praćenju odsustva osoblja, a istovremeno smanjuju obaveze administratora.



Pored navedenih postoji još mnogo sličnih aplikacija, neke od njih su:

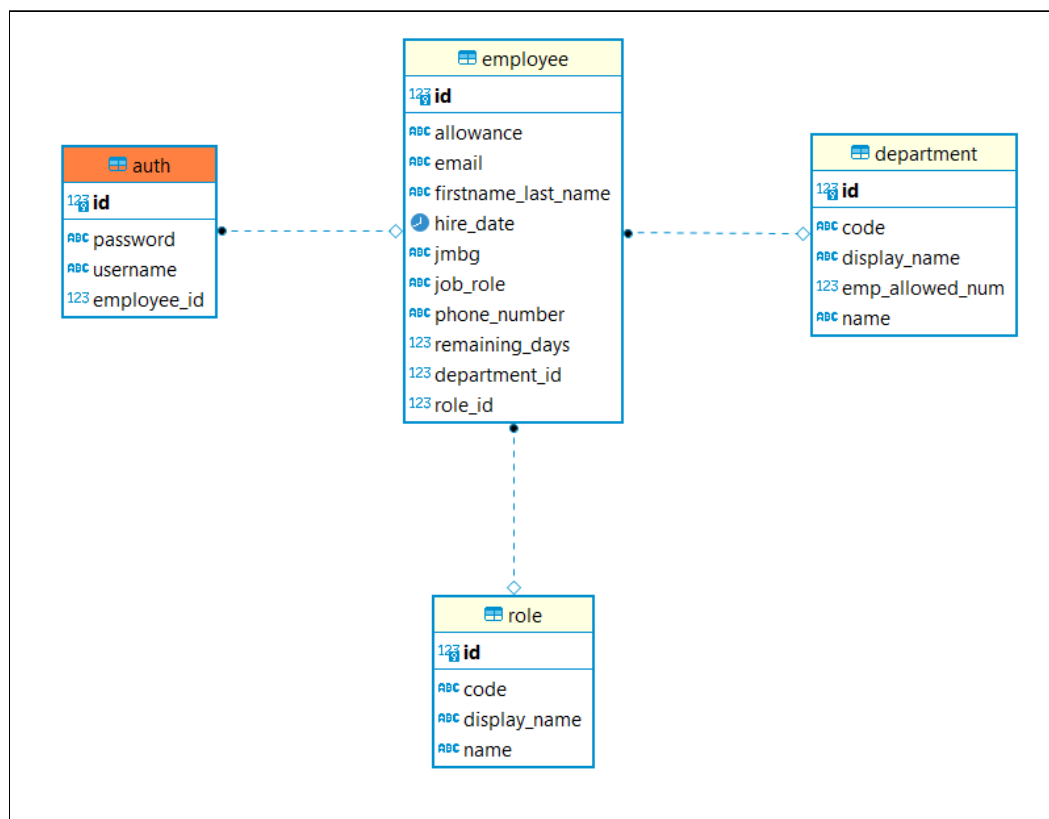
3. VacationTracker: <https://vacationtracker.io/>
4. Timeneye: <https://www.timeneye.com/>
5. Day off: <https://day-off.app/>

ZADATAK 2

Podjela funkcionalnosti na mikroservise i ERD

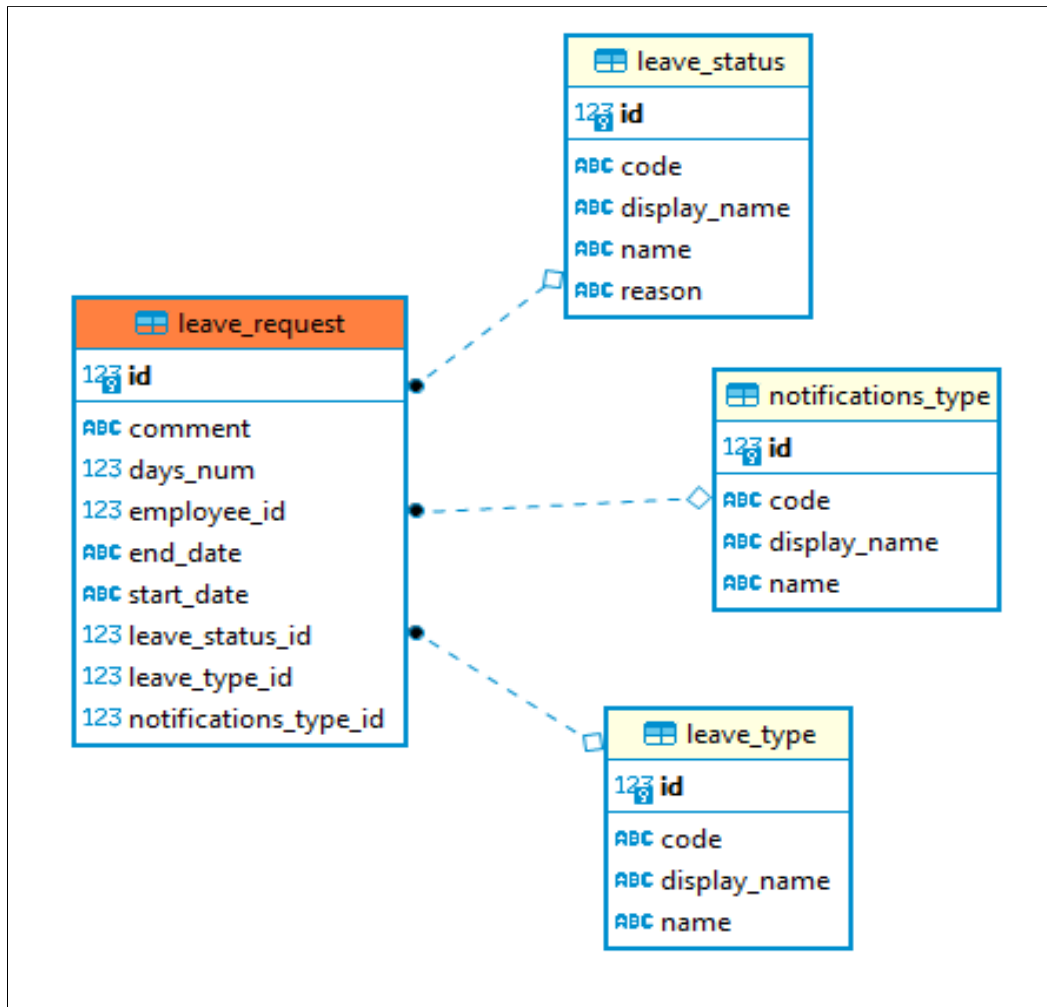
1. User MS

1.	Login i Logout
2.	Pregled svih zaposlenika - ADMIN (READ)
3.	Pregled profila zaposlenika - ADMIN (READ)
4.	Dodavanje uposlenika u sistem - ADMIN (CREATE)
5.	Brisanje uposlenika iz sistema - ADMIN (DELETE)
6.	Pregled iskorištenih slobodnih dana tekuće godine - USER (READ)
7.	Editovanje korisničkih podataka (UPDATE)



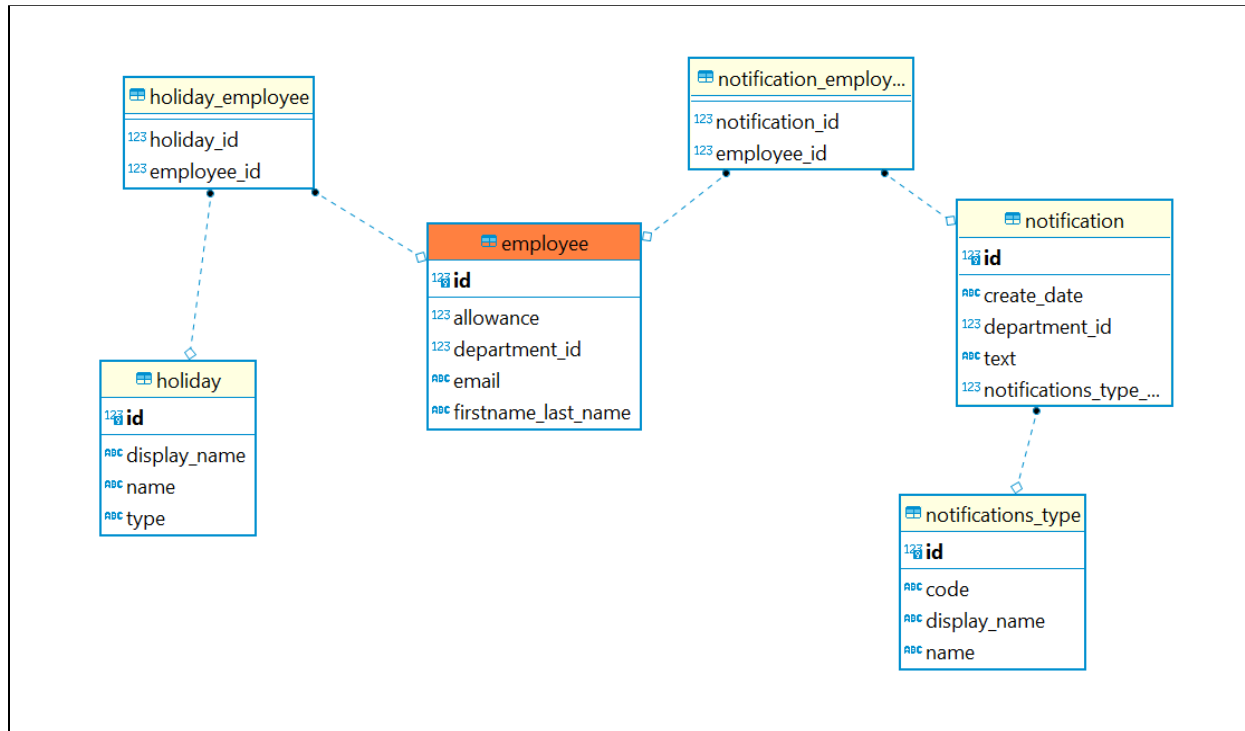
2. Leave Request MS

1.	Pregled aktivnih zahtjeva - ADMIN (READ)
2.	Odobranje/poništanje zahtjeva - ADMIN (UPDATE)
3.	Ograničenje odsustva po departmentu - ADMIN (CREATE)
4.	Zahtjev za odsustvom - USER (CREATE)
5.	Pregled obrađenog zahtjeva - USER (READ)
6.	Pregled /Edit/Delete podnesenih zahtjeva /pending - USER (READ, UPDATE, DELETE)



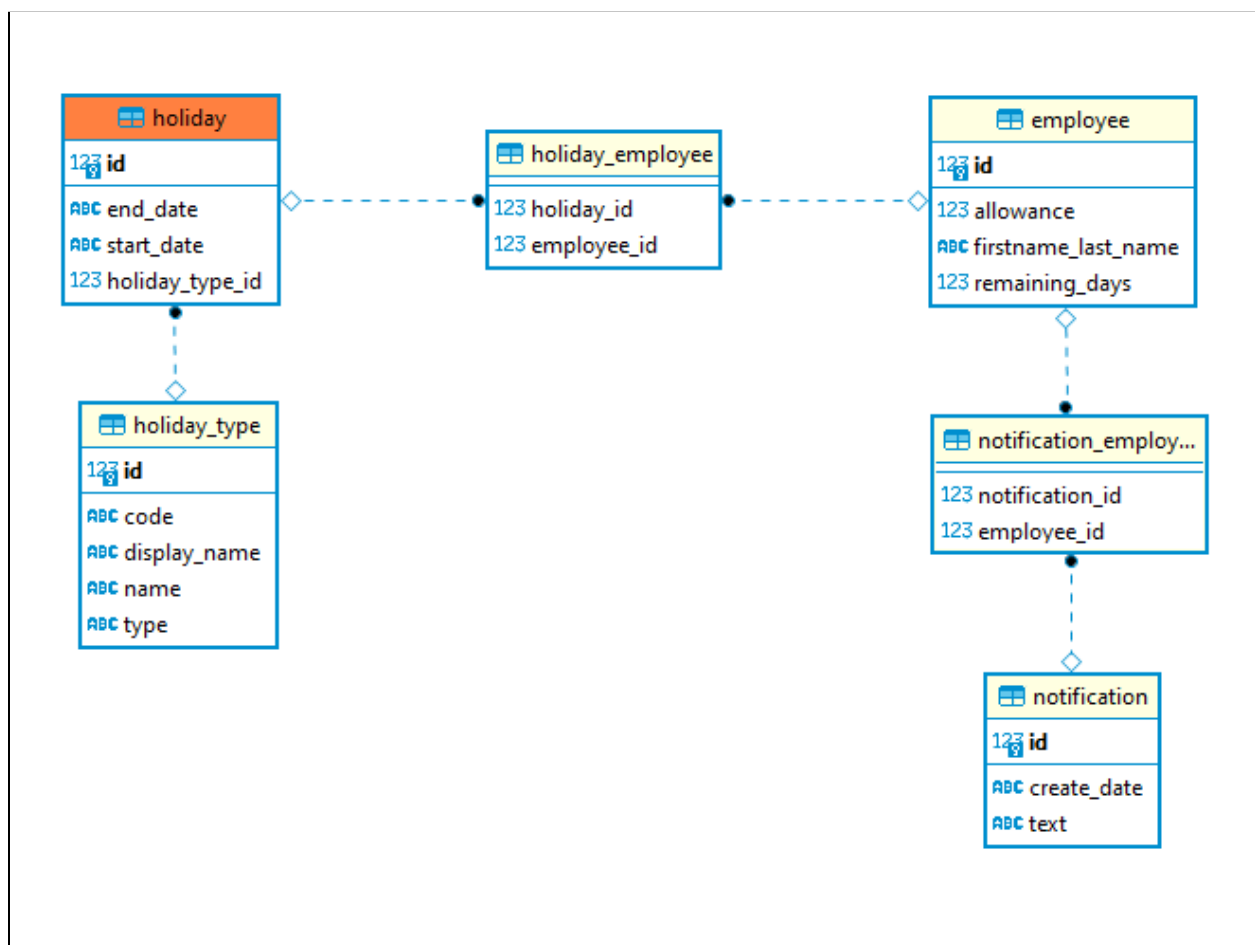
3. Notifications MS

1.	Notifikacija o novom zahtjevu - ADMIN (READ)
2.	Notifikacija o obradi zahtjeva od strane admina - USER (READ)
3.	Notifikacija o nalodazećem prazniku - USER (READ)
4.	Notifikacija članovima departmenta o odobrenom odsustvu nekog člana departmenta USER (READ)
5.	Dismiss notifikacije na button cancel da se ne prikazuje na profilu!
6.	Update dismiss-a ukoliko user uradi cancel na notifikaciju



4. Holiday MS

1.	Unos praznika - ADMIN (CREATE)
2.	Odabir vjerskih praznika - USER (CREATE)
3.	Prikaz datuma praznika - USER (READ)
4.	Editovanje praznika - ADMIN (UPDATE)



ZADATAK 3

Employee MS - Employee Entity

localhost:8080/swagger-ui.html#

swagger default (v2/api-docs) Explore

Api Documentation

Api Documentation

[Apache 2.0](#)

department-controller : Department Controller [Show/Hide](#) [List Operations](#) [Expand Operations](#)

employee-controller : Employee Controller [Show/Hide](#) [List Operations](#) [Expand Operations](#)

GET	/allemployees	Get All Employees
POST	/bulkEmployeeCreate	Insert multiple employees
DELETE	/employee	Delete Employee
GET	/employee	Find Employee by Jmbg
PATCH	/employee	Delete Employee
POST	/employee	Insert one employee
PUT	/employee/{id}	Change Employee data based on id

login-controller : Login Controller [Show/Hide](#) [List Operations](#) [Expand Operations](#)

Naslov	Dobavljanje svih uposlenika <i>Dobavljanje svih uposlenika iz baze</i>
URL	/allemployees
Method	GET
URL params	/
Data params	/

Success response	<div> <div>Response Body</div> <pre>[{ "id": 1, "allowance": "21", "email": "email", "firstNameLastName": "ime prezime", "hireDate": "2021-03-24T21:09:42.002536+01:00", "jmbg": "jmbg1", "jobRole": "jobRole1", "phoneNumber": "phoneNumber1", "remainingDays": 21, "department": { "id": 1, "code": "SALES", "displayName": "Sales", "empAllowedNum": 5, "name": "sales" }, "role": { "id": 2,</pre> <div>Response Code</div> <div>200</div> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 00:10:21 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre> </div>
Error response	<div> <div>Response Body</div> <pre>{ "status": "NOT_FOUND", "message": "No Data Found", "error": "No data in DB", "timestamp": "2021-03-27T21:21:39.4298122+01:00", "errors": [] }</pre> <div>Response Code</div> <div>404</div> </div>

Naslov	Brisanje <i>Brisanje uposlenika po idu</i>
URL	/employee
Method	DELETE
URL params	/
Data params	id

Success response	<div>Request URL</div> <div>http://localhost:8080/employee?id=3</div> <div>Request Headers</div> <div>{ "Accept": "application/json" }</div> <div>Response Body</div> <div>3</div> <div>Response Code</div> <div>200</div> <div>Response Headers</div> <div>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 00:13:07 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</div>
Error response	<div>Response Body</div> <div>{ "status": "NOT_FOUND", "message": "Employee with id 100 not found", "error": "The is no data for given input", "timestamp": "2021-03-25T01:13:30.1487762+01:00" }</div> <div>Response Code</div> <div>404</div> <div>Response Headers</div> <div>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 00:13:30 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</div>

Naslov	Dobavljanje jednog uposlenika <i>Dobavljanje uposlenika po jmbg</i>
URL	/employee
Method	GET
URL params	/
Data params	jmbg

Success response	<div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <pre>{ "id": 6, "allowance": "21", "email": "email6", "firstNameLastName": "Dallila Ćorović", "hireDate": "2021-03-24T21:09:42.003536+01:00", "jmbg": "jmbg6", "jobRole": "jobRole6", "phoneNumber": "phoneNumber6", "remainingDays": 21, "department": { "id": 3, "code": "HR", "displayName": "Human Resources", "empAllowedNum": 5, "name": "human resources" }, "role": { "id": 2, "code": "EMPLOYEE", } }</pre> <div>Response Code</div> <pre>200</pre> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 00:15:44 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>
Error response	<div>Response Body</div> <pre>{ "status": "NOT_FOUND", "message": "Employee with jmbg 6 not found", "error": "The is no data for given input", "timestamp": "2021-03-25T01:14:38.2788628+01:00" }</pre> <div>Response Code</div> <pre>404</pre> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 00:14:38 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>

Naslov	Promjena departamenta uposlenika <i>Promjena departamenta uposlenika po jmbg</i>
URL	<i>/employee</i>
Method	PATCH

URL params	/
Data params	<pre>{ "department_code": "string", "employee_jmbg": "string" }</pre>
Success response	<div> <div>Response Body</div> <pre>{ "id": 4, "allowance": "21", "email": "email4", "firstNameLastName": "Nudzejma Pozder", "hireDate": "2021-03-24T21:09:42.003536+01:00", "jmbg": "jmbg4", "jobRole": "jobRole4", "phoneNumber": "phoneNumber4", "remainingDays": 21, "department": { "id": 1, "code": "SALES", "displayName": "Sales", "empAllowedNum": 5, "name": "sales" }, "role": { "id": 2, "code": "EMPLOYEE", } }</pre> <div>Response Code</div> <div>200</div> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 00:18:26 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre> </div>
Error response	<div> <div>Response Body</div> <pre>{ "status": "NOT_FOUND", "message": "Request was not successfull", "error": "Something went wrong", "timestamp": "2021-03-25T01:18:47.0746256+01:00" }</pre> <div>Response Code</div> <div>404</div> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 00:18:47 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre> </div>

Naslov	Kreiranje uposlenika <i>Kreiranje novog uposlenika</i>
URL	/employee

Method	POST
URL params	/
Data params	<pre>{ "allowance": "string", "departmentId": 0, "email": "string", "firstNameLastName": "string", "hireDate": "2021-03-25T00:10:18.230Z", "jmbg": "string", "jobRole": "string", "phoneNumber": "string", "remainingDays": 0, "roleId": 0 }</pre>
Success response	<div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <pre>{ "id": 55, "allowance": "21", "email": "email", "firstNameLastName": "stringname", "hireDate": "2021-03-25T00:10:18.23Z", "jmbg": "7418529632145", "jobRole": "stringrole", "phoneNumber": "stringnum", "remainingDays": 21, "department": { "id": 2, "code": "MARKETING", "displayName": "Marketing", "empAllowedNum": 6, "name": "marketing" }, "role": { "id": 2, "code": "EMPLOYEE" } }</pre> <div>Response Code</div> <pre>201</pre> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:36:53 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>

Error response	<div>Request URL</div> <div>http://localhost:8080/employee</div> <div>Request Headers</div> <div>{ "Accept": "application/json" }</div> <div>Response Body</div> <div> <pre>{ "status": "BAD_REQUEST", "message": "Employee jmbg param is not valid. It should be string.", "error": "Validation", "timestamp": "2021-03-25T08:39:02.6705701+01:00" }</pre> </div> <div>Response Code</div> <div>404</div> <div>Response Headers</div> <div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:39:02 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre> </div>
-----------------------	--

Naslov	Promjena podataka o uposleniku <i>Promjena podataka o uposleniku</i>
URL	/employee/{id}
Method	PUT
URL params	id
Data params	<pre>{ "allowance": "string", "departmentId": 0, "email": "string", "firstNameLastName": "string", "hireDate": "2021-03-25T00:10:18.236Z", "jmbg": "string", "jobRole": "string", "phoneNumber": "string", "remainingDays": 0, "roleId": 0 }</pre>

Success response

```
{
  "Accept": "application/json"
}
```

Response Body

```
{
  "id": 55,
  "allowance": "string",
  "email": "string",
  "firstNameLastName": "string",
  "hireDate": "2021-03-25T00:10:18.236Z",
  "jmbg": "7412589632514",
  "jobRole": "string",
  "phoneNumber": "string",
  "remainingDays": 0,
  "department": {
    "id": 2,
    "code": "MARKETING",
    "displayName": "Marketing",
    "empAllowedNum": 6,
    "name": "marketing"
  },
  "role": {
    "id": 2,
    "code": "EMPLOYEE",
  }
}
```

Response Code

```
200
```

Response Headers

```
{
  "connection": "keep-alive",
  "content-type": "application/json",
  "date": "Thu, 25 Mar 2021 07:40:16 GMT",
  "keep-alive": "timeout=60",
  "transfer-encoding": "chunked"
}
```

Error response

Curl

```
curl -X PUT --header 'Content-Type: application/json' --header 'Accept: application/json' -d '{ \
  "allowance": "string", \
  "departmentId": 2, \
  "email": "string", \
  "firstNameLastName": "lala", \
  "hireDate": "2021-03-25T00:10:18.236Z", \
  "jmbg": "741214", \
  "jobRole": "string", \
  "phoneNumber": "string", \
  "remainingDays": 0, \
  "roleId": 0 \
}' 'http://localhost:8080/employee/4'
```

Request URL

```
http://localhost:8080/employee/4
```

Request Headers

```
{
  "Accept": "application/json"
}
```

Response Body

```
{
  "status": "NOT_FOUND",
  "message": "Request was not successfull",
  "error": "Something went wrong",
  "timestamp": "2021-03-25T08:42:43.856539+01:00"
}
```

Response Code

```
404
```

Response Headers

```
{
  "connection": "keep-alive",
  "content-type": "application/json",
  "date": "Thu, 25 Mar 2021 07:42:43 GMT",
  "keep-alive": "timeout=60",
  "transfer-encoding": "chunked"
}
```

Employee MS - Department entity

department-controller : Department Controller

Show/Hide | List Operations | Expand Operations

POST	/bulkDepartmentCreate	Insert multiple departments
PUT	/changeDepartment/{id}	Change Department data based on id
DELETE	/deleteDepartment	Delete Department
POST	/department	Insert One Department
GET	/getDepartment	Get all departments

Naslov	Kreiranje novog departmenta <i>Kreiranje podataka o departmentu</i>
URL	/department
Method	POST
URL params	/
Data params	<pre>{ "code": "string", "displayName": "string", "empAllowedNum": 0, "name": "string" }</pre>
Success response	<div><div>Request URL</div><div>http://localhost:8080/department</div><div>Request Headers</div><div>{ "Accept": "application/json" }</div><div>Response Body</div><div>{ "id": 7, "code": "NOVIDDD", "displayName": "Noviddd", "empAllowedNum": 2, "name": "Novid" }</div><div>Response Code</div><div>201</div><div>Response Headers</div><div>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:44:39 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</div></div>

Error response	<p>Curl</p> <pre>curl -X POST --header 'Content-Type: application/json' --header 'Accept: application/json' -d '{ \ "code": "string", \ "displayName": "string", \ "empAllowedNum": 0, \ "id": 1, \ "name": "string" \ }' 'http://localhost:8080/department'</pre> <p>Request URL</p> <p>http://localhost:8080/department</p> <p>Request Headers</p> <pre>{ "Accept": "application/json" }</pre> <p>Response Body</p> <pre>{ "timestamp": "2021-03-25T07:46:01.038+00:00", "status": 400, "error": "Bad Request", "message": "", "path": "/department" }</pre> <p>Response Code</p> <p>400</p> <p>Response Headers</p> <pre>{ "connection": "close", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:46:01 GMT", "transfer-encoding": "chunked" }</pre>
-----------------------	--

Naslov	Brisanje departmenta <i>Brisanje podataka o departmentu</i>
URL	/department
Method	DELETE
URL params	/
Data params	department_id
Success response	<p>Request Headers</p> <pre>{ "Accept": "application/json" }</pre> <p>Response Body</p> <pre>7</pre> <p>Response Code</p> <p>200</p> <p>Response Headers</p> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:47:38 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>

Error response

Parameter	Value	Description	Parameter type	Data type
department_id	8	department_id	query	long

Response Messages

HTTP Status Code	Reason	Response Model	Headers
204	No Content		
401	Unauthorized		
403	Forbidden		

[Try it out!](#) [Hide Response](#)

Curl

```
curl -X DELETE --header 'Accept: application/json' 'http://localhost:8080/deleteDepartment?department_id=8'
```

Request URL

```
http://localhost:8080/deleteDepartment?department_id=8
```

Request Headers

```
{
  "Accept": "application/json"
}
```

Response Body

```
no content
```

Response Code

```
0
```

Response Headers

```
{
  "error": "no response from server"
}
```

Naslov	Dobavljanje departmenta <i>Dobavljanje svih departmenta</i>
URL	/department
Method	GET
URL params	/
Data params	/

Success response	<div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <pre>[{ "id": 1, "code": "SALES", "displayName": "Sales", "empAllowedNum": 5, "name": "sales" }, { "id": 2, "code": "MARKETING", "displayName": "Marketing", "empAllowedNum": 6, "name": "marketing" }, { "id": 3, "code": "HR", "displayName": "Human Resources", "empAllowedNum": 5, }]</pre> <div>Response Code</div> <pre>201</pre> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:49:37 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>
Error response	<div>Request URL</div> <pre>http://localhost:8080/allemployees</pre> <div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <pre>{ "status": "NOT_FOUND", "message": "No Data Found", "error": "No data in DB", "timestamp": "2021-03-27T20:52:51.8813529+01:00", "errors": [] }</pre>

Naslov	Promjena podataka o departmenu <i>Promjena postojećih podataka</i>
URL	/department/{id}
Method	PUT
URL params	id
Data params	{

	<pre> "code": "string", "displayName": "string", "empAllowedNum": 0, "id": 0, "name": "string" } </pre>
Success response	<div>Request Headers</div> <pre> { "Accept": "application/json" } </pre> <div>Response Body</div> <pre> { "id": 5, "code": "string", "displayName": "string", "empAllowedNum": 0, "name": "string" } </pre> <div>Response Code</div> <p>200</p> <div>Response Headers</div> <pre> { "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:53:35 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" } </pre>
Error response	<div>Request URL</div> <p>http://localhost:8080/changeDepartment/8</p> <div>Request Headers</div> <pre> { "Accept": "application/json" } </pre> <div>Response Body</div> <pre> { "timestamp": "2021-03-25T07:53:59.446+00:00", "status": 500, "error": "Internal Server Error", "message": "", "path": "/changeDepartment/8" } </pre> <div>Response Code</div> <p>500</p> <div>Response Headers</div> <pre> { "connection": "close", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:53:59 GMT", "transfer-encoding": "chunked" } </pre>

Employee MS - Auth Entity

login-controller : Login Controller

[Show/Hide](#) | [List Operations](#) | [Expand Operations](#)

PUT	/changeAuth/{id}	Change Employee auth data based on id
DELETE	/deleteAuth	Delete Auth Data
GET	/getAuthData	Get All Auth Data
POST	/login	Insert New Auth Data

Naslov	Kreiranje novih podataka <i>Kreiranje novih auth podataka</i>
URL	/login
Method	POST
URL params	/
Data params	<pre>{ "employee_id": 0, "password": "string", "username": "string" }</pre>
Success response	<div><div>Response Body</div><pre>{ "id": 10, "username": "string", "password": "string", "employee": { "id": 12, "allowance": "21", "email": "email", "firstNameLastName": "ime prezime", "hireDate": "2021-03-24T23:35:35.369699+01:00", "jmbg": "1234567891223", "jobRole": "jobRole1", "phoneNumber": "phoneNumber1", "remainingDays": 21, "department": { "id": 1, "code": "SALES", "displayName": "Sales", "empAllowedNum": 5, "name": "sales" } } }</pre></div> <div><div>Response Code</div><div>201</div></div> <div><div>Response Headers</div><pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:56:36 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre></div>

Error response	<div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <pre>{ "timestamp": "2021-03-25T07:56:58.001+00:00", "status": 400, "error": "Bad Request", "message": "", "path": "/login" }</pre> <div>Response Code</div> <p>400</p> <div>Response Headers</div> <pre>{ "connection": "close", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:56:58 GMT", "transfer-encoding": "chunked" }</pre>
-----------------------	---

Naslov	Brisanje podataka <i>Brisanje auth podataka</i>
URL	/deleteAuth
Method	DELETE
URL params	/
Data params	employee_id
Success response	<div>Request URL</div> <p>http://localhost:8080/deleteAuth?employee_id=12</p> <div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <p>10</p> <div>Response Code</div> <p>200</p> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 07:58:23 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>

Error response	<div>Request URL</div> <pre>http://localhost:8080/deleteAuth?employee_id=5</pre> <div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <pre>{ "status": "NOT_FOUND", "message": "Auth data with employee_id 5 not found", "error": "There is no data for given input", "timestamp": "2021-03-27T21:20:36.905256+01:00", "errors": [] }</pre>
-----------------------	--


Naslov	Dobavljanje podataka <i>Dobavljanje svih auth podataka</i>
URL	/getAuthData
Method	GET
URL params	/
Data params	/
Success response	<div>Response Body</div> <pre>[{ "id": 1, "username": "username1", "password": "pass1", "employee": { "id": 1, "allowance": "21", "email": "email", "firstNameLastName": "ime prezime", "hireDate": "2021-03-24T21:09:42.002536+01:00", "jmbg": "jmbg1", "jobRole": "jobRole1", "phoneNumber": "phoneNumber1", "remainingDays": 21, "department": { "id": 1, "code": "SALES", "displayName": "Sales", "empAllowedNum": 5, </pre> <div>Response Code</div> <pre>201</pre> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 08:00:00 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>


Error response	<div>Request URL</div> <div>http://localhost:8080/getAuthData</div> <div>Request Headers</div> <div>{ "Accept": "application/json" }</div> <div>Response Body</div> <div> <pre>{ "status": "NOT_FOUND", "message": "No Data Found", "error": "No data in DB", "timestamp": "2021-03-27T21:18:27.0772767+01:00", "errors": [] }</pre> </div>
-----------------------	---

Naslov	Izmjena postojećih podataka <i>Izmjena auth podataka</i>
URL	/changeAuth/{id}
Method	PUT
URL params	id
Data params	<pre>{ "employee_id": 0, "password": "string", "username": "string" }</pre>

Success response	<div>Response Body</div> <pre>{ "id": 2, "username": "string", "password": "string", "employee": { "id": 2, "allowance": "21", "email": "email2", "firstNameLastName": "ime prezime2", "hireDate": "2021-03-24T21:09:42.003536+01:00", "jmbg": "jmbg2", "jobRole": "jobRole2", "phoneNumber": "phoneNumber2", "remainingDays": 21, "department": { "id": 2, "code": "MARKETING", "displayName": "Marketing", "empAllowedNum": 6, "name": "marketing" } } }</pre> <div>Response Code</div> <p>200</p> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Thu, 25 Mar 2021 08:04:40 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>
Error response	<div>Request URL</div> <p>http://localhost:8080/changeAuth/5</p> <div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <pre>{ "status": "NOT_FOUND", "message": "Auth data with id 5 not found", "error": "There is no data for given input", "timestamp": "2021-03-27T21:19:18.1765348+01:00", "errors": [] }</pre>

Leave Request MS

 **swagger**

default (/v2/api-docs) 

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Api Documentation

Api Documentation

[Apache 2.0](#)

leave-request-controller : Leave Request Controller

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POST	/request/create	insertRequest
DELETE	/request/delete	Delete Request
PATCH	/request/update	updateRequest
PATCH	/request/update/{id}	updateRequestStatus
GET	/request/{id}	getRequestById
GET	/requests	getRequestsByStatus

[BASE URL: / , API VERSION: 1.0]

Naslov	Kreiranje zahtjeva <i>Kreiranje novog zahtjeva za odsustvom</i>
URL	/request/create
Method	POST
URL params	/
Data params	{ "comment": "string", "daysNum": 0, "employeeId": 0, "startDate": "2021-03-24T18:33:52.387Z", "typeId": 0 }

Success response	<div> <div>Response Body</div> <pre> { "id": 4, "comment": "Test", "employeeId": 1, "daysNum": 21, "startDate": "2021-03-24T19:07:23.251Z", "endDate": "2021-04-14T19:07:23.251Z", "leave_type": { "id": 1, "code": "tip1", "displayName": "display1", "name": "name1" }, "leave_status": { "id": 1, "code": "P", "displayName": "Pending", "name": "Pending", "reason": "New request" } }, </pre> <div>Response Code</div> <div>200</div> </div>
Error response	<div> <div>Response Body</div> <pre> { "errorMessage": "Type does not exist!" } </pre> <div>Response Code</div> <div>404</div> </div>

Naslov	Brisanje zahtjeva <i>Brisanje zahtjeva prema id-u</i>
URL	/request/delete
Method	DELETE
URL params	/
Data params	/

Success response	<p>Curl</p> <pre>curl -X DELETE --header 'Accept: application/json' 'http://localhost:8080/request/delete?id=1'</pre> <p>Request URL</p> <pre>http://localhost:8080/request/delete?id=1</pre> <p>Request Headers</p> <pre>{ "Accept": "application/json" }</pre> <p>Response Body</p> <pre>1</pre> <p>Response Code</p> <pre>200</pre> <p>Response Headers</p> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Wed, 24 Mar 2021 19:12:09 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>
Error response	<p>Response Body</p> <pre>{ "errorMessage": "Request does not exist!" }</pre> <p>Response Code</p> <pre>404</pre>


Naslov	Promjena statusa zahtjeva <i>Promjena statusa zahtjeva prema id-u</i>
URL	/request/update/{id}
Method	PATCH
URL params	Required: leave_request_id= [long] Example: leave_request_id= 2
Data params	{ "notificationsId": 0, "statusId": 0 }

Success response	<div>Response Body</div> <pre>{ "id": 2, "comment": "comment2", "employeeId": 4, "daysNum": 20, "startDate": "2021-03-24T20:07:06.08733+01:00", "endDate": "2021-04-13T21:07:06.08733+02:00", "leave_type": { "id": 1, "code": "tip1", "displayName": "display1", "name": "name1" }, "leave_status": { "id": 2, "code": "A", "displayName": "Status: Approved", "name": "Approve", "reason": "Approved Request" }, }</pre> <div>Response Code</div> <div>200</div>
Error response	<div>Response Body</div> <pre>{ "errorMessage": "Request does not exist!" }</pre> <div>Response Code</div> <div>404</div>

Naslov	Dobavljanje jednog zahtjeva <i>Dobavljanje zahtjeva prema id-u</i>
URL	/request/{id}
Method	GET
URL params	Required: leave_request_id= [long] Example: leave_request_id= 2
Data params	/

Success response	<div>Response Body</div> <pre> { "id": 3, "comment": "comment3", "employeeId": 6, "daysNum": 14, "startDate": "2021-03-24T20:07:00.00733+01:00", "endDate": "2021-04-07T21:07:00.00733+02:00", "leave_type": { "id": 1, "code": "tip1", "displayName": "display1", "name": "name1" }, "leave_status": { "id": 1, "code": "P", "displayName": "Pending", "name": "Pending", "reason": "New request" } }, </pre> <div>Response Code</div> <div>200</div>
Error response	<div>Response Body</div> <pre> { "errorMessage": "No request found!" } </pre> <div>Response Code</div> <div>404</div>

Notifications MS → Notification Entity

 **swagger**
default (/v2/api-docs) ▾
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Api Documentation

Api Documentation

[Apache 2.0](#)

employee-controller : Employee Controller
Show/Hide | List Operations | Expand Operations

holiday-controller : Holiday Controller
Show/Hide | List Operations | Expand Operations

notifications-controller : Notifications Controller
Show/Hide | List Operations | Expand Operations

GET /all_notifications getNotifications

POST /notification/create/{employeeId}/{notificationTypeId} insertNotification

GET /notification/{notificationId} getNotificationById

DELETE /notifications/delete/{notificationsId} Delete Notification

PATCH /notifications/update/{notificationId} updateNotification

notifications-type-controller : Notifications Type Controller
Show/Hide | List Operations | Expand Operations

Naslov	Kreiranje notifikacije <i>Pri kreiranju notifikacije neophodno je u URL proslijediti ID uposlenika i notification type ID.</i>
URL	/notification/create/{employeeId}/{notificationTypeId}
Method	POST
URL params	Required: notificationTypeId= [long] employeeId= [long] Example: notificationTypeId= 1 employeeID = 2
Data params	<pre>{ "createDate": "string", "departmentId": 0, "text": "string" }</pre>

Success response	<div>Response Body</div> <pre>{ "id": 3, "createDate": "2021-03 20T12:04:30.445Z", "departmentId": 5, "text": "Notifikacija za kreiran leave request", "employees": [{ "id": 1, "allowance": 20, "departmentId": 5, "email": "test@gmail.com", "firstNameLastName": "Neko Nekić" }], "notifications_type": { "id": 1, "code": "kod1", "displayName": "Nudza", "name": "displayNudza" } }</pre> <div>Response Code</div> <p>200</p>
Error response	<div>Example 1:</div> <div>Request URL</div> <p>http://localhost:8080/notification/create/1/32445</p> <div>Request Headers</div> <pre>{ "Accept": "*/*" }</pre> <div>Response Body</div> <pre>{ "errorMessage": "Notification Type with given id does not exist!" }</pre> <div>Response Code</div> <p>404</p> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Tue, 23 Mar 2021 20:37:32 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre> <div>Example 2:</div>

	<div>Request URL</div> <div>http://localhost:8080/notification/create/12323/1</div> <div>Request Headers</div> <div>{ "Accept": "*/*" }</div> <div>Response Body</div> <div>{ "errorMessage": "Employee with given id does not exist" }</div> <div>Response Code</div> <div>404</div> <div>Response Headers</div> <div>{ "connection": "keep-alive", "content-type": "application/json", "date": "Tue, 23 Mar 2021 20:43:43 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</div> <div>Example 3:</div> <div>Request URL</div> <div>http://localhost:8080/notification/create/12323/1asfa</div> <div>Request Headers</div> <div>{ "Accept": "*/*" }</div> <div>Response Body</div> <div>{ "timestamp": "2021-03-23T20:44:58.034+00:00", "status": 400, "error": "Bad Request", "message": "", "path": "/notification/create/12323/1asfa" }</div> <div>Response Code</div> <div>400</div>
--	---

Naslov	Brisanje notifikacije <i>Brisanje određene notifikacije, tako što se u URL-u pošalje ID notifikacije za brisanje!</i>
URL	/notifications/delete/{notificationsId}
Method	DELETE
URL params	Required: notificationTypeId= [long] Example: notificationTypeId= 2

Data params	/
Success response	<div>Request URL</div> <div>http://localhost:8080/notifications/delete/1</div> <div>Request Headers</div> <div>{ "Accept": "application/json" }</div> <div>Response Body</div> <div>1</div> <div>Response Code</div> <div>200</div> <div>Response Headers</div> <div>{ "connection": "keep-alive", "content-type": "application/json", "date": "Tue, 23 Mar 2021 20:52:11 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</div>
Error response	<div>Request URL</div> <div>http://localhost:8080/notifications/delete/143</div> <div>Request Headers</div> <div>{ "Accept": "application/json" }</div> <div>Response Body</div> <div>{ "errorMessage": "Notification with given id does not exist!" }</div> <div>Response Code</div> <div>404</div> <div>Response Headers</div> <div>{ "connection": "keep-alive", "content-type": "application/json", "date": "Tue, 23 Mar 2021 21:07:38 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</div>


Naslov	Update notifikacije <i>Ukoliko postoji notifikacija u bazi PATCH ce da uradi update, ukoliko ne postoji on ce dodati novu notifikaciju.</i>
URL	/notifications/update/{notificationId}
Method	PATCH
URL params	Required: notificationTypeId= [long]


	Example: notificationTypeId= 2
Data params	<pre>{ "createDate": "string", "departmentId": 0, "text": "string" }</pre>
Success response	<div> <div>Response Body</div> <pre>{ "id": 2, "createDate": "test", "departmentId": 0, "text": "test", "employees": [{ "id": 4, "allowance": 15, "departmentId": 5, "email": "dcorovic@gmail.com", "firstNameLastName": "Dalila Ćorović" }], "notifications_type": { "id": 1, "code": "kod1", "displayName": "Nudza", "name": "displayNudza" } }</pre> </div> <div> <div>Response Code</div> <pre>200</pre> </div>
Error response	<div> <div>Request URL</div> <pre>http://localhost:8080/notifications/update/2213213</pre> </div> <div> <div>Request Headers</div> <pre>{ "Accept": "*/*" }</pre> </div> <div> <div>Response Body</div> <pre>No value present</pre> </div> <div> <div>Response Code</div> <pre>500</pre> </div> <div> <div>Response Headers</div> <pre>{ "connection": "close", "content-length": "16", "content-type": "text/plain; charset=UTF-8", "date": "Tue, 23 Mar 2021 21:29:43 GMT" }</pre> </div>

Naslov	Dodavanje Notifikacija
URL	/notification/{notificationId}
Method	GET

URL params	Required: notificationId= [long] Example: notificationId= 2
Data params	/
Success response	<div>Response Body</div> <pre> { "id": 1, "createDate": "2021-03-24", "departmentId": 1, "text": "test1", "employees": [{ "id": 1, "allowance": 20, "departmentId": 5, "email": "test@gmail.com", "firstNameLastName": "Neko Nekić" }], "notifications_type": { "id": 2, "code": "kod2", "displayName": "Dalila", "name": "displayDalila" } } </pre> <div>Response Code</div> <p>200</p>
Error response	<div>Request URL</div> <p>http://localhost:8080/notification/1213</p> <div>Request Headers</div> <pre> { "Accept": "*/*" } </pre> <div>Response Body</div> <p>No notification found!</p> <div>Response Code</div> <p>500</p> <div>Response Headers</div> <pre> { "connection": "close", "content-length": "22", "content-type": "text/plain; charset=UTF-8", "date": "Wed, 24 Mar 2021 19:06:57 GMT" } </pre>

Notifications MS → NotificationType Entity

 **swagger**

default (/v2/api-docs) 

Explore

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employee-controller : Employee Controller Show/Hide List Operations Expand Operations

holiday-controller : Holiday Controller Show/Hide List Operations Expand Operations

notifications-controller : Notifications Controller Show/Hide List Operations Expand Operations

notifications-type-controller : Notifications Type Controller Show/Hide List Operations Expand Operations

GET

/all_notification_types

getNotifications

DELETE

/notification_type/{notification_typeId}

Delete Notification

PATCH

/notification_type/{notification_typeId}

updateNotification_type

POST

/notificationsType

insertNotificationsType

[BASE URL: / , API VERSION: 1.0]

Naslov	Kreiranje tipa notifikacije
URL	/notificationsType
Method	POST
URL params	/
Data params	{ "code": "Approved", "displayName": "Leave Request is approved", "name": "Holiday" }

Success response	<div>Request Headers</div> <pre>{ "Accept": "*/*" }</pre> <div>Response Body</div> <pre>{ "id": 3, "code": "Approved", "displayName": "Leave Request is approved", "name": "Holiday" }</pre> <div>Response Code</div> <pre>200</pre> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Wed, 24 Mar 2021 09:51:38 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>
Error response	

Naslov	Dobavljanje svih tipova notifikacija
URL	/all_notification_types
Method	GET
URL params	/
Data params	/
Success response	<div>Response Body</div> <pre>[{ "id": 2, "code": "kod2", "displayName": "Dalila", "name": "displayDalila" }, { "id": 3, "code": "1", "displayName": "string", "name": "string" }, { "id": 4, "code": "string", "displayName": "string", "name": "1" }]</pre> <div>Response Code</div> <pre>200</pre>

Error response	<div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <pre>{ "errorMessage": "Notification type with given id does not exist!" }</pre> <div>Response Code</div> <pre>404</pre> <div>Response Headers</div> <pre>{ "connection": "keep-alive", "content-type": "application/json", "date": "Wed, 24 Mar 2021 10:30:24 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</pre>
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Naslov	Update tipova notifikacija
URL	/notification_type/update/{notification_typeId}
Method	PATCH
URL params	Required: notificationTypeId= [long] Example: notificationTypeId= 1
Data params	<pre>{ "code": "string", "displayName": "string", "name": "string" }</pre>
Success response	<div>Request URL</div> <pre>http://localhost:8080/notification_type/update/1</pre> <div>Request Headers</div> <pre>{ "Accept": "*/*" }</pre> <div>Response Body</div> <pre>{ "id": 1, "code": "string", "displayName": "string", "name": "string" }</pre> <div>Response Code</div> <pre>200</pre>

Error response	<div>Request URL</div> <div>http://localhost:8080/notification_type/update/765</div> <div>Request Headers</div> <div>{ "Accept": "*/*" }</div> <div>Response Body</div> <div>No value present</div> <div>Response Code</div> <div>500</div>
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Naslov	Brisanje tipa notifikacije
URL	/notification_type/delete/{notification_typeId}
Method	DELETE
URL params	Required: notificationTypeId= [long] Example: notificationTypeId= 1
Data params	/
Success response	<div>Request URL</div> <div>http://localhost:8080/notification_type/3</div> <div>Request Headers</div> <div>{ "Accept": "application/json" }</div> <div>Response Body</div> <div>3</div> <div>Response Code</div> <div>200</div> <div>Response Headers</div> <div>{ "connection": "keep-alive", "content-type": "application/json", "date": "Wed, 24 Mar 2021 10:59:12 GMT", "keep-alive": "timeout=60", "transfer-encoding": "chunked" }</div>

Error response	Request URL
	http://localhost:8080/notification_type/3231
	Request Headers
	{ "Accept": "application/json" }
	Response Body
	{ "errorMessage": "Notification type with given id does not exist!" }
	Response Code
	404

Holiday MS

Api Documentation		
Api Documentation		
Apache 2.0		
employee-controller : Employee Controller		Show/Hide List Operations Expand Operations
holiday-controller : Holiday Controller		Show/Hide List Operations Expand Operations
DELETE	/holiday/{holidayId}	Delete Holiday
PATCH	/holiday/{holidayId}	updateHoliday
GET	/holiday/{holidayName}	Find Holiday
POST	/holiday/{holidayTypeID}/{employeeID}	insertHoliday
holiday-type-controller : Holiday Type Controller		Show/Hide List Operations Expand Operations
notification-controller : Notification Controller		Show/Hide List Operations Expand Operations
[BASE URL: / , API VERSION: 1.0]		

Naslov	Add holiday <i>Kreiranje holiday-a, uz zahtjev da se u URL-u unese ID zaposlenika koji kreira taj godišnji odmor, zajedno sa ID tipa holiday-a.</i>
URL	/holiday/{holidayTypeID}/{employeeID}
Method	POST
URL params	Required: holidayTypeID= [long]

	<p>employeeID = [long]</p> <p>Example:</p> <p>holidayTypeID = 1</p> <p>employeeID = 1</p>
Data params	<p>Post body request:</p> <pre>{ "endDate": "string", "startDate": "string" }</pre> <p>Example:</p> <pre>{ "endDate": "10.10.2020", "startDate": "11.11.2020" }</pre>
Success response	<p>Response Body</p> <pre>{ "id": 2, "startDate": "11.11.2020", "endDate": "10.10.2020", "employees": [{ "id": 1, "allowance": 20, "firstNameLastName": "Dalila Corovic", "remainingDays": 10 }], "holidayType": { "id": 1, "code": "code1", "displayName": "Godisnji odmor", "name": "godisnji", "type": "Godisnji odmor" } }</pre> <p>Response Code</p> <p>200</p>
Error response	<p>Example 1:</p> <p>Request URL</p> <p>http://localhost:8080/holiday/11/1</p> <p>Request Headers</p> <pre>{ "Accept": "*/*" }</pre> <p>Response Body</p> <pre>{ "errorMessage": "Holiday type with given id does not exist" }</pre> <p>Response Code</p> <p>404</p> <p>Example 2:</p>

	<div>Request URL</div> <div>http://localhost:8080/holiday/1/32</div> <div>Request Headers</div> <div>{ "Accept": "*/*" }</div> <div>Response Body</div> <div>{ "errorMessage": "Employee with given id does not exist" }</div> <div>Response Code</div> <div>404</div>
	Example 3: <div>Request URL</div> <div>http://localhost:8080/holiday/string/1</div> <div>Request Headers</div> <div>{ "Accept": "*/*" }</div> <div>Response Body</div> <div>{ "timestamp": "2021-03-23T20:42:26.803+00:00", "status": 400, "error": "Bad Request", "message": "", "path": "/holiday/string/1" }</div> <div>Response Code</div> <div>400</div>

Naslov	Update holiday <i>Parcijalno editovanje određenog reda u bazi podataka sa holiday-em koji već postoji</i>
URL	/holiday/{holidayTypeID}/{employeeID}
Method	PATCH
URL params	Required: holidayId= [long] Example: holidayId= 1
Data params	Patch body request: <pre>{ "endDate": "string", "startDate": "string" }</pre>

	<p>Example:</p> <pre>{ "endDate": "10.10.2020", "startDate": "12.10.2020" }</pre>
Success response	<p>Response Body</p> <pre>{ "id": 2, "startDate": "12.10.2020", "endDate": "10.10.2020", "employees": [{ "id": 1, "allowance": 20, "firstNameLastName": "Dolila Corovic", "remainingDays": 10 }], "holidayType": { "id": 1, "code": "code1", "displayName": "Godisnji odmor", "name": "godisnji", "type": "Godisnji odmor" } }</pre> <p>Response Code</p> <p>200</p>
Error response	<p>Request URL</p> <p>http://localhost:8080/holiday/12</p> <p>Request Headers</p> <pre>{ "Accept": "*//*" }</pre> <p>Response Body</p> <p>No value present</p> <p>Response Code</p> <p>500</p>

Naslov	Delete holiday <i>Brisanje holiday-a po datom ID-u ukoliko isti postoji.</i>
URL	/holiday/{holidayId}
Method	DELETE
URL params	Required: holidayId= [long] Example: holidayId= 1

Data params	/
Success response	<div>Request URL</div> <div>http://localhost:8080/holiday/1</div> <div>Request Headers</div> <div>{ "Accept": "application/json" }</div> <div>Response Body</div> <div>1</div> <div>Response Code</div> <div>200</div>
Error response	<div>Request URL</div> <div>http://localhost:8080/holiday/1235</div> <div>Request Headers</div> <div>{ "Accept": "application/json" }</div> <div>Response Body</div> <div>{ "errorMessage": "Holiday with given id does not exist" }</div> <div>Response Code</div> <div>404</div>

Naslov	Get holiday <i>Get sve holiday-a jednog odredjenog employee-a</i>
URL	/holiday/{employeeId}
Method	GET
URL params	Required: employeeId = [long] Example: employeeId = 1
Data params	/

Success response	<div>Response Body</div> <pre>[{ "id": 1, "startDate": "2020-10-08", "endDate": "2020-10-20", "employees": [{ "id": 1, "allowance": 20, "firstNameLastName": "Dalila Corovic", "remainingDays": 10 }], "holidayType": { "id": 1, "code": "code1", "displayName": "Godisnji odmor", "name": "godisnji", "type": "Godisnji odmor" } }]</pre> <div>Response Code</div> <div>200</div>
Error response	<div>Request URL</div> <div>http://localhost:8080/holiday/5</div> <div>Request Headers</div> <pre>{ "Accept": "*/*" }</pre> <div>Response Body</div> <pre>{ "errorMessage": "Holiday for given employee id does not exist" }</pre> <div>Response Code</div> <div>404</div>

Api Documentation

Api Documentation

[Apache 2.0](#)

employee-controller : Employee Controller

[Show/Hide](#) | [List Operations](#) | [Expand Operations](#)

holiday-controller : Holiday Controller

[Show/Hide](#) | [List Operations](#) | [Expand Operations](#)

holiday-type-controller : Holiday Type Controller

[Show/Hide](#) | [List Operations](#) | [Expand Operations](#)

DELETE	/holidayType	Delete Holiday Type
GET	/holidayType	Find list of holiday types
POST	/holidayType	insertHolidayType
PATCH	/holidayType/{id}	updateHolidayType
GET	/listOfAllHolidayTypes	List of holiday types

notification-controller : Notification Controller

[Show/Hide](#) | [List Operations](#) | [Expand Operations](#)

[BASE URL: / , API VERSION: 1.0]

Naslov	Add holiday type <i>Dodavanje tipova odmora od strane admina</i>
URL	/holidayType
Method	POST
URL params	/
Data params	Post body request: { "code": "string", "displayName": "string", "name": "string", "type": "string" } Example: { "code": "123", "displayName": "Godisnji odmor", "name": "Godisnji", "type": "Godisnji odmor" }

Success response	<div>Response Body</div> <pre>{ "id": 2, "code": "123", "displayName": "Godisnji odmor", "name": "Godisnji", "type": "Godisnji odmor" }</pre> <div>Response Code</div> <pre>200</pre>
Error response	<div>Request URL</div> <pre>http://localhost:8080/holidayType?displayName=Drzavni%20praznik&name=Drzavni&type=Drzavni%20praznik</pre> <div>Request Headers</div> <pre>{ "Accept": "*/*" }</pre> <div>Response Body</div> <pre>{ "errorMessage": "Invalid data input" }</pre> <div>Response Code</div> <pre>400</pre>

Naslov	Delete holiday type <i>Obrisati holiday type po odredjenom ID-u ukoliko isti postoji.</i>
URL	/holiday/{holidayId}
Method	DELETE
URL params	Required: Id = [long] Example: Id = 1
Data params	/

Success response	<div>Request URL</div> <pre>http://localhost:8080/holidayType/2</pre> <div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <pre>2</pre> <div>Response Code</div> <pre>200</pre>
Error response	<div>Request URL</div> <pre>http://localhost:8080/holidayType/34</pre> <div>Request Headers</div> <pre>{ "Accept": "application/json" }</pre> <div>Response Body</div> <pre>{ "errorMessage": "Holiday type with given id does not exist" }</pre> <div>Response Code</div> <pre>404</pre>

Naslov	Update holiday type <i>Parcijalno editovanje određenog reda u bazi podataka sa holiday type koji već postoji</i>
URL	/holiday/{holidayId}
Method	PATCH
URL params	Required: Id = [long] Example: Id = 1
Data params	Patch body request: <pre>{ "code": "string", "displayName": "string", "name": "string", "type": "string" }</pre> Example: <pre>{ "code": "1234",</pre>

	<pre>"displayName": "Godisnji odmor", "name": "godisnji", "type": "Godisnji odmor" }</pre>
Success response	<div>Response Body</div> <pre>{ "id": 1, "code": "1234", "displayName": "Godisnji odmor", "name": "godisnji", "type": "Godisnji odmor" }</pre> <div>Response Code</div> <pre>200</pre>
Error response	<div>Request URL</div> <pre>http://localhost:8080/holidayType/12</pre> <div>Request Headers</div> <pre>{ "Accept": "*/*" }</pre> <div>Response Body</div> <pre>No value present</pre> <div>Response Code</div> <pre>500</pre>

Naslov	Get holiday type <i>Lista svih dostupnih tipova holiday-a. Ukoliko ne postoji kreirana lista status errora ce biti NO_CONTENT.</i>
URL	/listHolidayTypes
Method	GET
URL params	/
Data params	/

Success response	<div>Request URL</div> <div>http://localhost:8080/listHolidayTypes</div> <div>Request Headers</div> <div>{ "Accept": "*/*" }</div> <div>Response Body</div> <div>[{ "id": 1, "code": "1234", "displayname": "Godisnji odmor", "name": "godisnji", "type": "Godisnji odmor" }]</div> <div>Response Code</div> <div>200</div>
Error response	<div>Request URL</div> <div>http://localhost:8080/listHolidayTypes</div> <div>Request Headers</div> <div>{ "Accept": "*/*" }</div> <div>Response Body</div> <div>no content</div> <div>Response Code</div> <div>204</div>

TABLE: NOTIFICATION TYPE → CODE

A	Approved
R	Rejected
P	Pending
H	Holiday

TABLE: LEAVE STATUS → CODE

A	Approved
R	Rejected
P	Pending

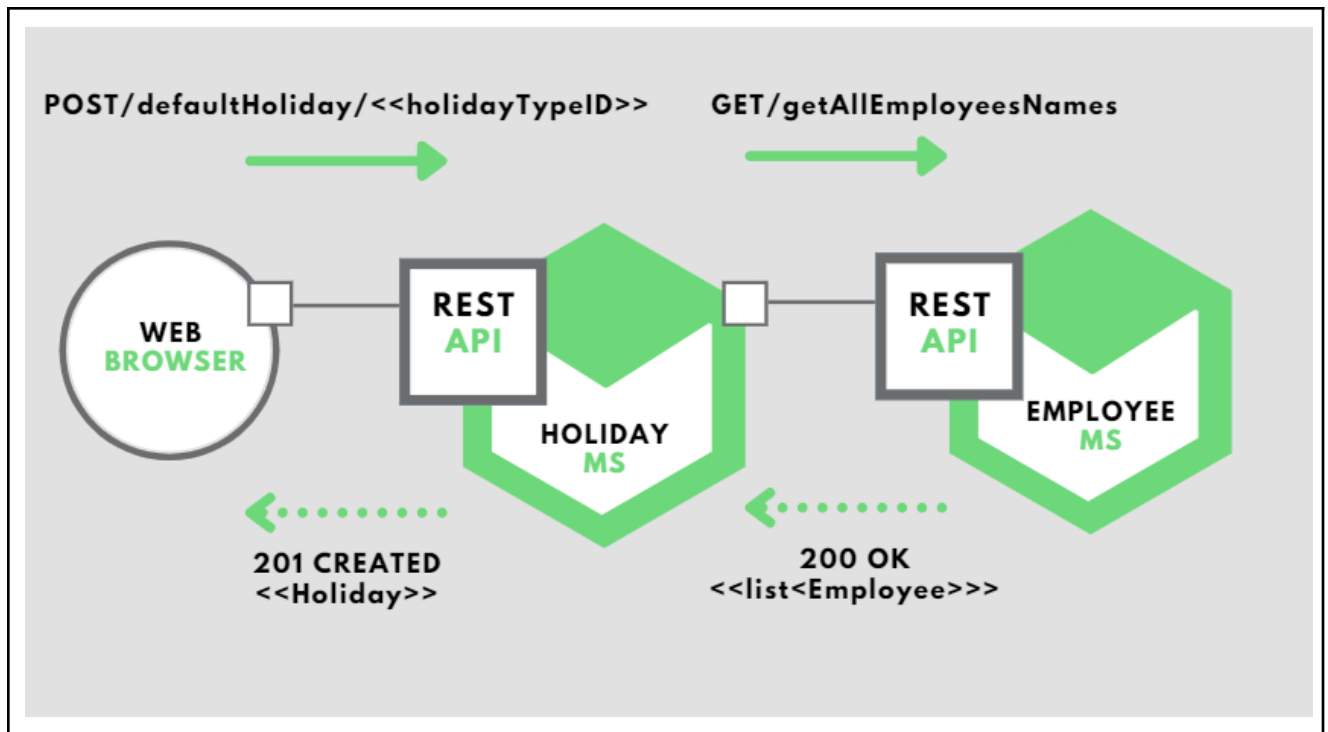
TABLE: LEAVE TYPE → CODE

H	Holiday
F	Funeral
P	Parental Leave
S	Sick Leave
M	Marriage leave

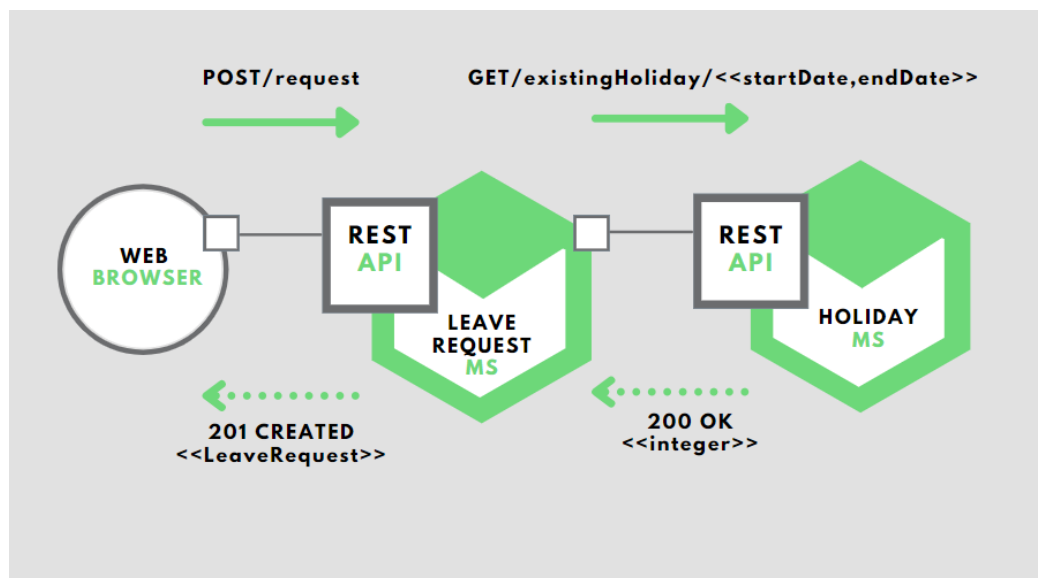
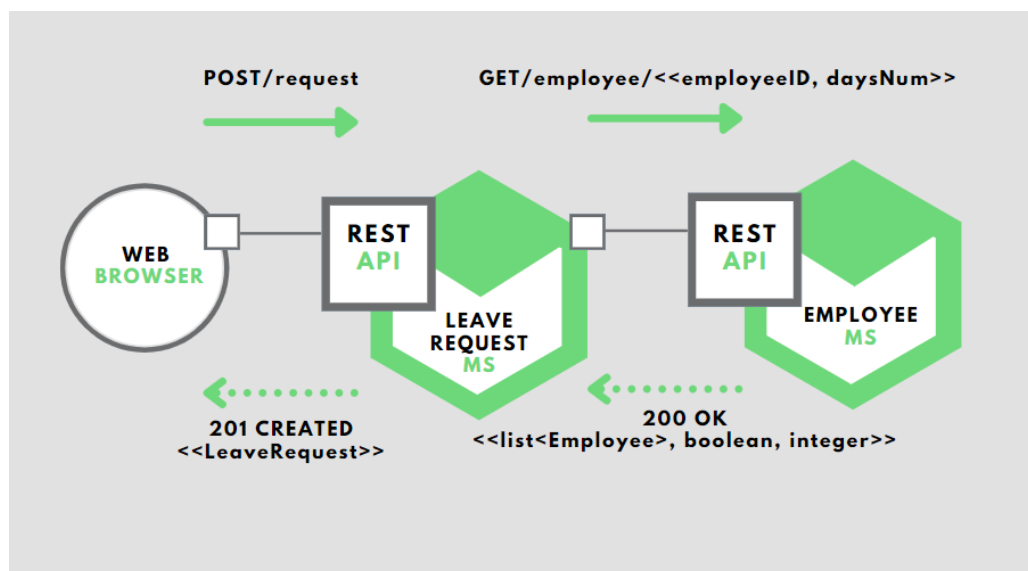
ZADATAK 5

5.1 Funkcionalnosti koje zahtijevaju komunikaciju između dva ili više mikroservisa!

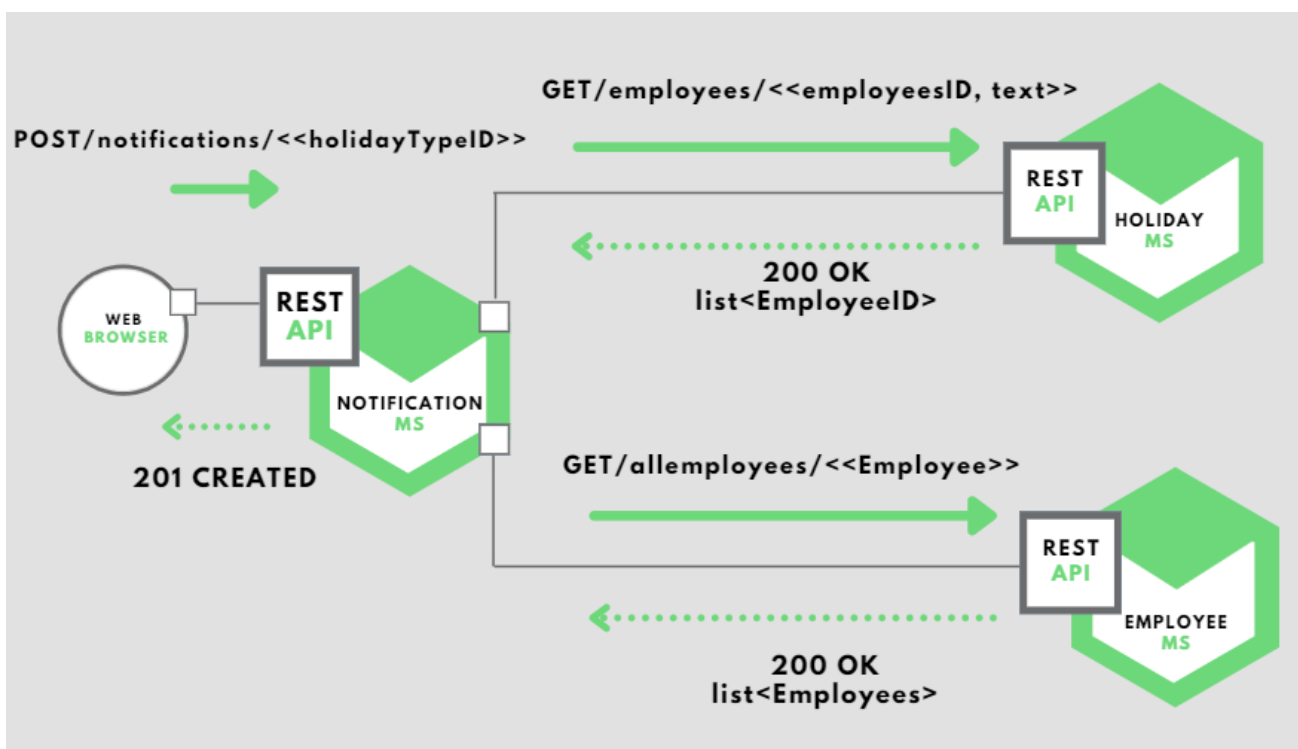
	FUNKCIONALNI ZAHTJEV - ADMIN	OPIS FUNKCIONALNIH ZAHTJEVA	Komunikacija
1.	Dodavanje uposlenika u sistem	Dodavanje novih zaposlenika u sistem i kreiranje inicijalnog username-a i pw za novog zaposlenika. <i>Poslati employee-a Notification MS kako bi se pohranio u istoimenu tabelu → radi obavještenja svih radnika o nadolazećem prazniku → defaultn-a notifikacija ("Dobrodošli u kompaniju");</i>	Employee service → Notification service ASINHRONA
2.	Brisanje uposlenika iz sistema	Brisanje uposlenika koji napuštaju kompaniju iz liste uposlenika.	Employee → Holiday i Notification ASINHRONA
3.	Odobranje/poništanje zahtjeva	Mogućnost prihvatanja zahtjeva određenog zaposlenika iz liste zahtjeva, odnosno poništavanja istog. U slučaju poništavanja zahtjeva adminu je omogućeno da ostavi komentar. <i>Salje se Employee MS radi azuriranja broja neiskoristenih dana i Notification MS.</i>	Leave Request → Employee ASINHRONA → Notification ASINHRONA
4.	Notifikacija o novom zahtjevu	Mogućnost pristizanja notifikacije pri kreiranju novog zahtjeva od strane zaposlenika.	Leave request → Notification ASINHRONA
5.	Kreiranje defaultnog holiday-a	Admin kreira novi holiday koji je vezan za sve employee	Holiday → Employee SINHRONA



	FUNKCIONALNI ZAHTEJ - ZAPOSLANI	OPIS FUNKCIONALNIH ZAHTEJEVA	Komunikacija
1.	Zahtjev za odsustvo	Mogućnost podnošenja zahtjeva za odsustvom u formatu željenog datuma početka i kraja, unošenja vrste odsustva i komentara uz zahtjev.	Leave Request → Employee SINHRONA → Holiday SINHRONA → Notification ASINHRONA



2.	Notifikacija o nadolazećem prazniku	Nekoliko dana prije praznika uposlenik dobija obavještenje o nadolazećem prazniku.	Notification→ Holiday SINHRONA



ZADATAK 7

Dva glavna koncepta za sigurnost: autentifikacija i autorizacija.

Autentifikacija: *who you are*

Provjera validnosti kredencijala (username i password) na osnovu kojih se utvrđuje identiteta user-a.

Za autentifikaciju će se koristiti **Protocol OpenID Connect - JWT (JSON Web Token)**.

JWT ne koriste sesije i prilagođene su načinu rada mikroservisnih arhitektura. Umjesto kreiranja sesije i postavljanja cookie-a, server dodijeli user-u JSON web token.

Neke od prednosti JWT su:

1. Stateless → ne kreira se sesija, JWT u sebi sadrži sve kredencijale, informacije o vremenu isteka i sve druge neophodne podatke.
2. Portable → Jedan token se može koristiti u više različitih mikroservisa.
3. Nisu potrebni cookies
4. Decentralizacija: Token može da bude generisan bilo gdje. Autentifikacija može da se generiše i na klijentu i na serveru.

Autorizacija: *what you can do*

Autorizacija je dodjela prava pristupa resursima koji se odnose na bezbjednost informacija i računarsku bezbjednost, naročito kontrolu pristupa.

Za autorizaciju će se koristiti **OAuth 2.0 Access token**.

Da li će API gateway voditi računa o autentifikaciji?

DA.

Kako ćete realizovati role za korisnike?

U sistemu postoje dvije role: **admin** i **uposlenik**. Koristiti će se OAuth 2.0 Access token i JWT. Unutar JSON tokena će biti pohranjena rola. Vršit će se provjere role, u zavisnosti od funkcionalnosti.

Centralizovana ili decentralizovana autorizacija?

Centralizovana.

ZADATAK 8

Implementacija sigurnosti!

NAPOMENA: U prilogu je uradjen prikaz pogrešne i tačne autorizacije za holiday MS. Analogno se i za ostale MS.

HolidayMS

1. POST - /holiday/holiday/{holidayTypeID}

The screenshot shows a REST client interface for a POST request to `http://localhost:8089/holiday/holiday/1`. The request is sent without authorization. The response is a 403 Forbidden status with the following JSON body:

```
{
  "timestamp": "2021-05-09T13:56:39.256+00:00",
  "status": 403,
  "error": "Forbidden",
  "message": "Access Denied",
  "path": "/holiday/holiday/1"
}
```

Below this, the same endpoint is shown with a successful POST request. The response is a 200 OK status with the following JSON body:

```
{
  "id": 4,
  "startDate": "2021-05-09",
  "endDate": "2021-05-09",
  "employees": [],
  "holidayType": {
    "id": 1,
    "code": "code1",
    "displayName": "Nova Godina",
    "text": "NG",
    "type": "NG"
  }
}
```

2. PATCH - /holiday/holiday/{holidayTypeID}/{employeeID}/{firstAndLastName}

PATCH
http://localhost:8089/holiday/1/1/DalilaCorovic
Params
Send
Save

Key	Value	Description
username	admin	
password	admin	
New key	Value	Description

Authorization
Headers (1)
Body
Pre-request Script
Tests
Code

Type
No Auth

Body
Cookies (1)
Headers (11)
Test Results
Status: 403 Forbidden Time: 228 ms

Pretty
Raw
Preview
JSON

```

1 {
2   "timestamp": "2021-05-13T20:01:23.515+00:00",
3   "status": 403,
4   "error": "Forbidden",
5   "message": "Access Denied",
6   "path": "/holiday/1/1/DalilaCorovic"
7 }

```

http://localhost:8089/holiday/holiday/1/1/Dalilaaa
Save

PATCH
http://localhost:8089/holiday/holiday/1/1/Dalilaaa
Send

Params
Authorization
Headers (9)
Body
Pre-request Script
Tests
Settings
Cookies

Type
Bearer Token

The authorization header will be automatically generated when you send the request.
[Learn more about authorization](#)

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. [Learn more about variables](#)

Token
eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJkYWw5eS!...

Body
Cookies
Headers (11)
Test Results
Status: 200 OK Time: 4.13 s Size: 914 B Save Response

Pretty
Raw
Preview
Visualize
JSON

```

1 {
2   "id": 1,
3   "startDate": "2020-12-31",
4   "endDate": "2021-01-04",
5   "employees": [
6     {
7       "interni_id": 1,
8       "id": 1,
9       "firstNameLastName": "Dalila Corovic"
10    },
11    {
12      "interni_id": 2,
13      "id": 2,
14      "firstNameLastName": "Nudzejma Pozder"
15    },
16    {
17      "interni_id": 3,

```

3. PATCH -/holiday/holiday/{holidayId}

http://localhost:8089/holiday/holiday/1

PATCH http://localhost:8089/holiday/holiday/1 Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Type No Auth

This request does not use any authorization. [Learn more about authorization](#)

Body Cookies Headers (11) Test Results Status: 403 Forbidden Time: 333 ms Size: 485 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "timestamp": "2021-05-13T20:19:52.050+00:00",
3   "status": 403,
4   "error": "Forbidden",
5   "message": "Access Denied",
6   "path": "/holiday/holiday/1"
7 }
```

http://localhost:8089/holiday/holiday/1

PATCH http://localhost:8089/holiday/holiday/1 Send

Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies

Type Bearer Token

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. [Learn more about variables](#)

The authorization header will be automatically generated when you send the request. [Learn more about authorization](#)

Token eyJhbGciOiJIUzI1NiU9.eyJzdWIiOiJhZG1pbil...

Body Cookies Headers (11) Test Results Status: 200 OK Time: 4.39 s Size: 914 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "id": 1,
3   "startDate": "2021-05-09",
4   "endDate": "2021-05-09",
5   "employees": [
6     {
7       "interni_id": 1,
8       "id": 1,
9       "firstNameLastName": "Dalila Corovic"
10    },
11    {
12       "interni_id": 2,
13       "id": 2,

```

4. PATCH - /holiday/holidayupdate/{employeeid}

http://localhost:8089/holiday/holidayupdate/1

PATCH http://localhost:8089/holiday/holidayupdate/1 Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Type No Auth

This request does not use any authorization. [Learn more about authorization](#)

Body Cookies Headers (11) Test Results Status: 403 Forbidden Time: 10 ms Size: 491 B Save Response

Pretty Raw Preview Visualize JSON

```
1  {
2    "timestamp": "2021-05-13T20:21:18.690+00:00",
3    "status": 403,
4    "error": "Forbidden",
5    "message": "Access Denied",
6    "path": "/holiday/holidayupdate/1"
7  }
```

5. DELETE - /holiday/holiday/{holidayId}

http://localhost:8089/holiday/holiday/1

DELETE http://localhost:8089/holiday/holiday/1 Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Type No Auth

This request does not use any authorization. [Learn more about authorization](#)

Body Cookies Headers (11) Test Results Status: 403 Forbidden Time: 12 ms Size: 485 B Save Response

Pretty Raw Preview Visualize JSON

```
1  {
2    "timestamp": "2021-05-13T20:25:45.427+00:00",
3    "status": 403,
4    "error": "Forbidden",
5    "message": "Access Denied",
6    "path": "/holiday/holiday/1"
7  }
```

http://localhost:8089/holiday/holiday/1

DELETE http://localhost:8089/holiday/holiday/1 Send

Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies

Type Bearer Token

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. [Learn more about variables](#)

Token eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJhZG1pbil...

Body Cookies Headers (11) Test Results Status: 200 OK Time: 4.13 s Size: 347 B Save Response

Pretty Raw Preview Visualize JSON

1 1

6. GET - /holiday/getlistofemployees/{holidayTypeId}

http://localhost:8089/holiday/getlistofemployees/1

GET http://localhost:8089/holiday/getlistofemployees/1 Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Type No Auth

This request does not use any authorization. [Learn more about authorization](#)

Body Cookies Headers (11) Test Results Status: 403 Forbidden Time: 14 ms Size: 496 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "timestamp": "2021-05-13T20:29:44.903+00:00",
3   "status": 403,
4   "error": "Forbidden",
5   "message": "Access Denied",
6   "path": "/holiday/getlistofemployees/1"
7 }
```

http://localhost:8089/holiday/getlistofemployees/2

GET http://localhost:8089/holiday/getlistofemployees/2 Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Type Bearer Token

The authorization header will be automatically generated when you send the request. [Learn more about authorization](#)

Token eyJhbGciOiJIUzI1NiU9.eyJzdWwiOiJhZG1pbil...

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. [Learn more about variables](#)

Body Cookies Headers (14) Test Results Status: 200 OK Time: 4.19 s Size: 457 B Save Response

Pretty Raw Preview Visualize JSON

```

1  {
2    "id": [
3      5
4    ],
5    "text": "DP"
6  }

```

7. GET - /holiday/getlistofholidays - dozvoljeno svim rolama
8. GET - /holiday/holiday/{startDate}/{daysNum} - dozvoljeno svim rolama
9. POST - /holiday/holidayType

http://localhost:8089/holiday/holidayType

POST http://localhost:8089/holiday/holidayType Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Type No Auth

This request does not use any authorization. [Learn more about authorization](#)

Body Cookies Headers (11) Test Results Status: 403 Forbidden Time: 12 ms Size: 487 B Save Response

Pretty Raw Preview Visualize JSON

```

1  {
2    "timestamp": "2021-05-13T20:38:51.822+00:00",
3    "status": 403,
4    "error": "Forbidden",
5    "message": "Access Denied",
6    "path": "/holiday/holidayType"
7  }

```

http://localhost:8089/holiday/holidayType

POST http://localhost:8089/holiday/holidayType Send

Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies

Type Bearer Token

The authorization header will be automatically generated when you send the request. [Learn more about authorization](#)

Token eyJhbGciOiJIUzI1NiU9.eyJzdWwiOiJhZG1pbil...

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. [Learn more about variables](#)

Body Cookies Headers (11) Test Results Status: 200 OK Time: 4.13 s Size: 425 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "id": 3,
3   "code": "string",
4   "displayName": "string",
5   "text": "string",
6   "type": "string"
7 }
```

10. PATCH - /holiday/holidayType/{id}

http://localhost:8089/holiday/holidayType/1

PATCH http://localhost:8089/holiday/holidayType/1 Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Type No Auth

This request does not use any authorization. [Learn more about authorization](#)

Body Cookies Headers (11) Test Results Status: 403 Forbidden Time: 9 ms Size: 489 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "timestamp": "2021-05-13T20:38:06.072+00:00",
3   "status": 403,
4   "error": "Forbidden",
5   "message": "Access Denied",
6   "path": "/holiday/holidayType/1"
7 }
```

http://localhost:8089/holiday/holidayType/1

PATCH http://localhost:8089/holiday/holidayType/1 Send

Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies

Type Bearer Token

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. [Learn more about variables](#)

Token eyJhbGciOiJIUzI1NiU9.eyJzdWwiOiJhZG1pbil...

The authorization header will be automatically generated when you send the request. [Learn more about authorization](#)

Body Cookies Headers (11) Test Results Status: 200 OK Time: 4.16 s Size: 425 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "id": 1,
3   "code": "string",
4   "displayName": "string",
5   "text": "string",
6   "type": "string"
7 }
```

11. DELETE - /holiday/holidayType/{id}

http://localhost:8089/holiday/holidayType/3

DELETE http://localhost:8089/holiday/holidayType/3 Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Type No Auth

This request does not use any authorization. [Learn more about authorization](#)

Body Cookies Headers (11) Test Results Status: 403 Forbidden Time: 9 ms Size: 489 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "timestamp": "2021-05-13T20:40:42.854+00:00",
3   "status": 403,
4   "error": "Forbidden",
5   "message": "Access Denied",
6   "path": "/holiday/holidayType/3"
7 }
```

http://localhost:8089/holiday/holidayType/3

DELETE http://localhost:8089/holiday/holidayType/3 Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Type Bearer Token

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. [Learn more about variables](#)

Token eyJhbGciOiJIUzI1NiU9.eyJzdWwiOiJhZG1pbil...

The authorization header will be automatically generated when you send the request. [Learn more about authorization](#)

Body Cookies Headers (11) Test Results Status: 200 OK Time: 4.12 s Size: 347 B Save Response

Pretty Raw Preview Visualize JSON

```
1 3
```

Future work

- Popraviti problem sa Dockerom
- Omogućiti dopisivanje unutar aplikacije, tako da employee ima mogućnost da razgovara sa adminom i obratno
- Omogućiti funkcionalnosti koje će provjeravati koliko zaposlenih po departmentu ima trenutno na odmoru, te u skladu s tim dozvoljavati ili odbijati zahtjeve za odsustvom u preklapajućim vremenskim terminima sukladno obavezama na projektima
- Dodati komponentu kalendar za admina na admin dashboard-u s pregledom nadolazećih praznika i pregledom zauzetih vacation datuma za sve zaposlenike

Osvrt na projekat

Projektni zadaci su bile u skladu s aktuelnim tehnologijama savremenog doba. Omogućili su nam imponzantnu količinu znanja i proširili naše vidike u sektoru web development-a.

Hronološki gledano na projektne zadatke kojim smo prolazili, izdvojit ćemo pristupe koje bismo promijenili u ovom momentu:

- NWT Zadatak 2 → kako je termin JPA, kao i organizacija mikroservisa bio sasvim novi pojam, previše ambiciozno smo započeli kreiranje projekata što je dovelo do koda kojim smo refaktorizacijom izbacili.
- NWT Zadatak 4 → prethodna stavka nas je dovela do testova koje smo u refaktorizaciji izbacili
- NWT Zadatak 6 → pošto je zadatak bio implementacija system-events servisa, isprva njegova svrha iako smo ga implementirali nije bila jasna. U toku te sedmice, na tekućim vježbama asistent je dao upute da se kreira baza za system events, koja je ubrzo implementirana.
- NWT Zadatak 7 → u toku ovog zadatka, s ove tačke gledište promijenili bismo pristup izrade API gateway-a. Naime, najprije smo pokušali odvojenu implementaciju API gateway-a od authentication servera što se ispostavilo nepraktičnom za nastavak projekta. Svakako, zuul proxy i auth server su implementirani nad istim serverom.

Ovom prilikom želimo da uputimo posebne zahvale nastavnom ansamblu, Tim Friends.